

THE VASCULUM

APRIL 1965

Vol XLX No 1

Price 5/per annum, post free

Edited by
J. W. HESLOP HARRISON, D.Sc., F.R.S.
UNIVERSITY OF NEWCASTLE UPON TYNE
and
T. C. DUNN, B.Sc.
THE POPLARS, CHESTER-LE-STREET

BY THE WAY

Secretaries of Societies and other contributors to The Vasculum' should send their notes to the editors before June 20th, 1965.

UPPER TEESDALE.

The threat of a reservoir on the margins of Widdybank Fell, looms larger every day. There is no need for us to repeat the reasons for resisting its construction, for that was gone into quite adequately in our last issue.

What we should do, however, is to impress on every member of the Union the urgent necessity of doing something to help to oppose this undertaking. The Naturalists' Trust of Northumberland and Durham suggests that you write to your M.P. now, and also send a donation to the Upper Teesdale Defence Fund. This fund is being organised by the Botanical Society of the British Isles in order to pay for legal representation at the public inquiry, which now seems certain to be called, in the near future. Send your contributions to the Northumberland and Durham Naturalists' Trust Ltd., at the Hancock Museum, Barras Bridge, Newcastle upon Tyne, 2.

Meanwhile, the Trust has also organised a wardening scheme to safeguard the flora and fauna in the dale from other forms of damage. If you have the time and opportunity, offer to become a trust warden. Many are needed, especially at weekends. You would be doing a real service towards the conservation of a precious bit of our countryside.

TEACHING RESERVES.

The local authorities have in hand an extensive development scheme for cleaning up Durham County. This includes the levelling of slag heaps, the filling in of clay holes and quarries, and the draining of ponds and flashes associated with them. Admittedly,

many of these are eye-sores, and some are even a menace to life and limb, especially where children are concerned. In this respect, the scheme is very commendable.

There are, however, one or two interests which are not so well served by such a policy. First, there are the dangers of imposing a sterile, Teutonic uniformity on our countryside. Children still need places to play children's games. A flat, monotonous recreation ground is a poor place to play Cowboys and Indians.

If we 'develop' all suitable places, we may find ourselves (like several local authorities already) in the position of having to rebuild them artificially as Adventure Parks.

The second snag concerns us more directly as naturalists, and is well illustrated by reference to our ponds. Compared with other places we know, the eastern part of our county contains remarkably few ponds or stretches of fresh water of any kind. If these flashes and quarry ponds are destroyed, there will be few suitable habitats left for fresh water plants and animals.

The teaching of Biology requires that students shall be able to study plants and animals in the wild as well as in the laboratory, and to become familiar with a number of natural communities. It seems anomalous that, at a time when all parties are making great efforts to extend education, particularly in the sciences, such important adjuncts to teaching should be destroyed. It is not enough that a few large, important sites should be preserved. Teesdale and Witton-le-Wear are much too far away for most of the schools. Even a journey of half an hour each way would be much too large a slice out of a double teaching period. What is needed is a large number of small sites covering a variety of habitats, such as a pond, some waste land, a stretch of limestone pasture, etc., so that all schools have something within easy reach. Even schools not using them now may need them in five or ten years time. If we are not farsighted now it will soon be too late. They will have gone for ever.

A committee of the Naturalists' Trust is making a list of suitable sites, with a view to doing something about this problem, but a complete survey of the county is a considerable undertaking, and would take a great deal of time and manpower. Neither is available in sufficient quantity.

We wish to appeal, therefore, to all who know of suitable sites which are being used, or which could be used for teaching purposes, to report them to the editor as soon as possible. They will then be included in the Conservation scheme.

TO SCHOOL AND TRAINING COLLEGE MEMBERS.

It is certain that many school and training college societies have carried out biological surveys as part of their educational studies. The information could well be of value to other naturalists, but is filed away in the institution records. We would be very pleased to publish anything of value in the "**Vasculum**." It is also possible that some more ambitious project

could be sufficiently original to merit a place in the '**Transactions**' Since we hope to publish another volume in the near future, now is a very appropriate time to submit such projects to the editors. Please help if you possibly can.

THE SOCIETIES.

NORTHERN NATURALISTS' UNION.

The Forty-first Annual General Meeting was held, as usual, in the Hancock Museum, on Saturday, March 13th, at 3 p.m. The attendance was one of the largest we have seen for many years. Again we have to thank the Natural History Society of Northumberland, Durham and Newcastle upon Tyne for their kind hospitality.

In the short business meeting that preceded the Presidential lecture, the threat of a reservoir in Upper Teesdale was brought to the notice of members present. The reports from the Secretary and Treasurer were quite short, and then followed the election of officers. Mr. J. Thompson was elected President for 1965-66, and Mr. Alker to the newly created office of Meetings Secretary.

Mr. Alker, the outgoing President, then spoke on "The Changing Face of Lakeland." First of all, he took us into the past, and showed us the geology, and the effects of glaciation in making the present radial structure of the mountain ranges and lakes of the whole area. We then saw a series of slides showing the various habitats, with their plant and animal communities, in different parts of Lakeland. The effects of altitude, slope and drainage were shown to give rise to different groups of plants, particularly in grassland and heathy areas. Bog sequences were then discussed and finally woodland was touched upon. The lecture ended with a vote of thanks, very ably moved by Mr. J. Wilkinson.

Tea was then taken in an adjoining laboratory, where it was very ably served by Mrs. Gibby and the girls of Chester-le-Street Grammar School. Here the exhibits were already displayed. Mr. Cooke had again mounted his beautiful collection of spring flowers, but, as usual, there were some specimens that we had not seen before. Other exhibits included a short survey of Knockinghoe National Nature Reserve, in Hertfordshire, by Mr. M. Mullin, pressed specimens of flowering plants and ferns by Mr. Hird, a live collection of Bryophytes from the Malham, Stainforth area by the senior pupils of Chester-le-Street Grammar School, common woodland plants in March by the junior pupils of the same school, postage stamps of Botanical and Zoological interest by Mrs. Gibby, and two educational exhibits used by the Museum Staff to take out to schools. One of these was of birds' eggs, and the other of seashore plants and animals. Spare copies of the **Vasculum** were given by Professor Heslop Harrison, and the Union had on display, various leaflets concerning Field Study Centres and on Conservation. Lastly, Mr. Alker operated a tape recorder of bird songs, which were first recorded by Tinbergen in the Ravenglass district, at the mouth of the River Esk.

ANNFIELD PLAIN AND STANLEY NATURALISTS' FIELD CLUB.

The twenty-second Annual Meeting and Social Evening was held in the Civic Hall, Stanley, on Saturday, February 13th, when 106 members were present. First of all, a silent tribute was observed to Messrs. C. Kerswell, G. Scorer, S. Wilson, M. Hutchinson, and Basil Sadler, who had passed away since the last meeting.

The President, Miss Renwick, in her welcome to the large audience, said that the various activities of the club had given her great pleasure; she read a poem, expressing delight with the charm of the countryside.

The Secretary, Mr. F. Wade, reported a very successful year, and thanked all who had contributed to making the activities of the club so attractive. The outings and lectures were well attended, and he asked the adult members to give the juniors every encouragement in the field.

The Treasurer, Mr. J. H. Atkinson, reported a good balance on the year's working, and announced a higher membership than ever before. Mr. A. Reay gave a similar report on the finances connected with the outings. A grant was made from the Club funds to the World Wild Life Preservation Society, and another to the Society for the Advancement of Science.

After the officers for 1965 had been elected, a number of interesting rambles were chosen from 35 suggestions. An excellent dinner followed after which Mr. G. Evans judged the competition for the best colour transparency. Groups of colour transparencies of holidays and club outings were also shown by Miss Turnbull and Messrs. Wardle and Wade.

Finally, the new President, Mr. H. Carr, thanked all those who had helped in the organisation of such a successful meeting.

BIRTLEY NATURAL HISTORY SOCIETY.

The 1965 half of the winter programme began with the Annual Dinner at Hall's Cafe, Chester-le-Street, on January 5th, when between 40 and 50 members were present.

The chair was occupied by Mr. T. C. Dunn, who, after thanking various people for the hard work they had put in during the year, introduced the two Guests of Honour, Dr. and Mrs. W. A. dark. Mrs. dark spoke first and drew out attention to the necessity for taking care of our countryside. This theme was developed further by Dr. dark, who went on to talk about Conservation in all its many aspects.

The speeches were followed by Mr. Hall's films, one an old record of the Society's outings some years ago, and the other of his summer holidays in Switzerland.

On January 19th, we once again had the pleasure of listening to Mr. James Alder talking about his birds. Then on March 2nd, Mrs. dark talked about Farming in Roman Britain. This was followed on March 16th by Mrs. Moses talking about badgers. March 30th saw the end of the lecture season when we held the Annual General Meeting. Apart from a few changes in the Committee, all officers were re-elected for another year. After this, a

number of members showed slides of holidays and other special occasions. The evening was concluded by an exhibition of rocks from the Island of Hiero in the Canaries, and of an old earthenware vessel that had been discovered in a very old mine working on Waldrige Fell. Members were asked for their ideas on its possible use in the past, but at the end, the mystery remained unsolved.

The field outings on the first Sunday of the month have proceeded without interruption. Thus in January, a party visited Brasside Ponds, to study the bird life there. Although the ponds were almost completely frozen over, a central patch had been kept open by the birds. Here were a mute swan, several species of gulls, coot and moorhen. In February, we went to Cowshill, the results of which are reported in another section of this journal. In March, a wood near Holmside was investigated, in spite of a thick covering of snow. Our persistence was rewarded by the sighting of a jay and many goldcrests. April saw the Society at Wolsingham, where we spent a very useful afternoon, in beautiful weather, on the shingle beds of the River Wear.

CONSETT AND DISTRICT NATURALISTS' FIELD CLUB.

The Annual Dinner was held on November 11th, 1964, when over 100 members were present. Once again, our old friend, Professor J. W. Heslop Harrison was the Guest of Honour.

After dinner, Mrs. N. Lynn gave her Presidential Address, which was in the unusual form of a poem, relating some of her outstanding memories of the previous season's field outings.

The toast, "Our Guest," was given by Mrs. J. J. Robson, in reply. Professor Heslop Harrison recalled that it was his 16th year at this function, and during the years he had many good friends in the Consett Club.

Other toasts, with accompanying speeches, followed. Then Mr. J. F. Ashworhth concluded the evening with a talk about the White Islands, where he had spent his holidays. This talk, as usual, was aptly illustrated by a magnificent selection of colour slides.

CLEVELAND NATURALISTS' FIELD CLUB.

One of the most outstanding events of our winter programme, was the showing of the R.S.P.B. colour films entitled, "Birds of Strathspey" and a "Place for Birds," in Middlesbrough Little Theatre on Monday, 29th March. Both films had their London Premiere only in late February this year.

"Birds of Strathspey" contained sequences on the bird life of the River Spey, following the course of the river from the high tops in winter to the estuary at the end of the summer. It included many unique shots of birds not featured in "Highland Birds," our film in 1959. In addition to Golden Eagle, Buzzards, Crested Tits and Capercaillie, the film also showed a remarkable sequence of the Osprey. "A Place for Birds" dealt with the birds to be seen in the sanctuary established in the grounds of the new headquarters of the R.S.P.B. at Sandy in Bedfordshire.

NOTES AND RECORDS

NOTES.

A new Willow Bed on Waldrige Fell. Two years ago, vandals set fire to the gorse and heather on part of Waldrige Fell. This fire reached the edge of Wanister Bog, where it burnt the tufts of the Purple Moor-grass, *Molinia caerulea*, and eventually got into the peat. For weeks the peat smouldered away, the Fire Brigade making frequent attacks on it, whenever it flared up anew. Alas! the fire had penetrated too far below the surface, the Fire Brigade had little effect, and a section of the *Molinia* bog had been destroyed for ever.

Last year, the charred remains were covered by a blanket of Rosebay Willow-herb, *Chamaenerion angustifolium*. This was to be expected, for another name for the species is Fireweed.

By way of compensation for the damage, a few days ago, we found dozens of willow seedlings growing up through the bare patches. The hybridity of the willows already on the Fell is well known. We wonder what unusual segregates will come to light in the next year or two? T.C.D.

Polypodium interjectum in Upper Weardale. On one of the outings of the Birtley Natural History Society, a wood near Cowshill was thoroughly searched for a sign of the Royal Fern, *Osmunda regalis*. Alas, it was the wrong time of the year, and not even an old frond could be traced. Nevertheless, during the course of the search, a large healthy specimen of *Polypodium interjectum* was discovered. Although the plant is by no means new to the county, this is a new record and, as far as we know, the most westerly point in Durham so far reported. T.C.D.

The Pine Beauty Moth, Panolis flammea Schiff. Although Mr. F. W. Gardner, who used to live at Riding Mill, says in his notes on the Lepidoptera of Northumberland, that it is common in pinewoods, I have never found the Pine Beauty a common moth in Durham. Four localities, Hesledon Dene, Edder Acres, Wolsingham and Stanhope, are given in Robson's Catalogue. I have encountered it on only one previous occasion, and that was as larvae beaten from pines, in the Dryderdale Estate, during a Northern Naturalists' Union field meeting, some years ago. It was with some surprise and pleasure, therefore, to find a newly emerged male at my mercury vapour lamp on March 29th. Although there are six pines some 100 yards from my house, in another garden, and a small pinewood about half a mile away, it has never appeared before in thirteen years of trapping. T.C.D.

Ergots. In the *Vasculum*, Vol. XLVI, No. 3 and Vol. XLIX, No. 3, Ergots (*Claviceps* spp.) were reported growing on *Glyceria fluitans* and *Lolium perenne* in marshy ground near Pittington, near Bishop Middleham and near West Rainton, by Mr. J. Thompson.

I have since found ergots on the following species of grasses near Budle Bay:—

- i) *Agropyron junceiforme*. The species of ergot had a very large sclerotium (about *i* inch long, 3/16 inch wide), which is nearly as big as the official Ergot of the British Pharmacopoea, *Claviceps purpurea* Tulasne.
- ii) *Arrhenatherum elatius**
- iii) *Agropyron repens*.
- iv) *Elymus arenarius**

These infected grasses were growing on sand or on well-drained roadside verges.

In a marshy part of Waldrige Wood, *Molinia caerulea* plants were found, which were infected with a very small species of ergot. R. Petre.

Bird Notes from Stanley. The following three observations will be of some interest to ornithologists:—

Sedge Warbler: Late date. On September 13th, three birds were still present at the Tanfield Ponds, Stanley.

Linnets: A very large flock, consisting of at least 100 birds, was noted in the Tanfield Ponds area throughout September.

Pied Wagtail: On February 10th, a single bird, was noted in the precincts of Newcastle University in the built up area of the city. It seemed to be in its first winter plumage. R. Marston Palmer.

Butterflies in Newcastle. Further to my note in the Vasculum Vol. XLIX No. 3, I can now report a considerable improvement for 1964. In my garden at Benton, Large Whites, Pieris brassicae, were once again commonly seen, Small Tortoiseshells, Aglais urticae, were present several times in August, and two Painted Ladies, Vanessa cardui, were present on August 17th. These are the first I have seen in the seven years I have lived in my present house. A. Macdonald.

RECORDS.

INSECTS.

LEPIDOPTERA—BUTTERFLIES AND MOTHS

Panolis flammea Schiff. The Pine Beauty.	66
A single male at mercury vapour light in my garden at Chester-le-Street on March 19th. T.C.D.	
Rhizedra lutosa Hubn. The Large Wainscot.	67
Not common at Riding Mill in some seasons.	
Stilbia anomala Haw. The Anomalous.	66
Taken on the moors above Edmundbyers, just over the Border in County Durham.	
Caradrina blanda Schiff. The Rustic.	67
Common at Riding Mill.	
Orthosia advena Schiff. (opima Hubn.) The Northern Drab.	67
Used to occur fairly freely at sallow near Corbridge 25 years ago, then seemed to become very scarce. First seen at Riding Mill in 1956.	
Orthosia gracilis Schiff. The Powdered Quaker.	67
Not rare, but not very often seen at sallow as it emerges later than the other Orthosias.	
Zenobia subtusa Schiff. The Olive.	67
Of regular occurrence at Riding Mill.	
Atethmia xerampelina Esp. The Centre-barred Sallow.	67
Fairly common at Riding Mill.	
Omphaloscelis lunosa Haw. The Lunar Underwing.	67
Occurs only sparingly at Riding Mill.	
Parastichtis suspecta Hubn. The Suspected.	67
Used to be well established in the old birchwood at Prestwick Carr. Once only at Riding Mill.	
Anchoscelis helvola L. The Flounced Rustic.	67
Fairly common round Riding Mill.	
Tiliacea citrago L. The Orange Sallow.	67
Occasional only at Riding Mill.	
Conistra ligula Esp. The Dark Chestnut.	67
Occurs only sparingly at Riding Mill.	
Xylena exsolcta L. The Sword-grass.	67
Rather uncertain in its occurrence. Nearly always in the spring, only occasionally seen in autumn.	
Xylena vetusta Hubn. The Red Sword-grass.	67
Rather more frequent than exsolcta, and like that species generally seen after hibernation. F. W. Gardner.	

FLOWERING PLANTS AND FERNS.

Moenchia erecta (L.) Gaertn. Mey. and Scherb. Upright Chickweed. The Heughs, N. of Craster.	68
Trientalis europaea L. Chickweed wintergreen. Moor near Cottonshope (67). Near Corby's Crags on Ainwick Moor. (68).	67, 68
Valerianella locustra (L.) Betcke. Lamb's Lettuce, Corn Salad. Sand dunes 1 mile S. of Airmouth. Old railway track near Edtingham.	68
Saxifraga granulata L. Meadow saxifrage. On the basalt at Easington Crag. Lilburn Burn near Lilburn Tower.	68
Trifolium scabrum L. Rough Trefoil. The Heugh, Holy Island.	68
Carex maritima Gunn. Curved Sedge. At the eastern end of the Links on Holy Island and also on the Snook.	68
Sedum villosum L. Hairy Stonecrop. Old lime quarry near Carr Shield (67). Flowering on the basalt at Spindlestone on 2/6/62. In Upper Coquetdale near Fulhope and by Buckham's Walls Burn. By a stream running into Henhole, above 2,000 ft. (68).	67, 68
Polypodium vulgare L. Polypody. Attaining approximately 2,300 ft. on Hedgehope.	68
Scabiosa columbaria L. Small scabious. N. bank of S. Tyne near Whitechapel (E. of Bardon Mill).	67
Dianthus deltoides L. Maiden Pink. By the Coquet near Linbrigs and opposite Bygate Hall.	68
Scleranthus annuus L. sensu lato. Annual Knawel. Quarry near Great Ryle.	68
Epipactis helleborine (L.) Crantz. Broad Helleborine. E. bank of S. Tyne at Williamston.	67
Mycelis muralis (L.) Dum. Wall Lettuce. W. bank of S. Tyne near Lintley.	67
Andromeda polifolia L. Marsh Andromeda. Peat Bog between Rashbush Rigg and the Irthing opposite Forster's Hill.	70
Taxus baccata L. Yew. By the Irthing near Cromel Linn.	70
Rubus saxatilis L. Stone Bramble. By the Irthing near Cromel Linn.	70
Asplenium viride Huds. Green Spleenwort. By the Irthing near Cromel Linn.	70
Ruppia maritima L. In brackish pools at Yarrow Slake near Berwick.	68
Scirpus maritimus L. Sea Club-rush. River Lyne near Lynemouth (67). Yarrow Slake near Berwick (68).	67, 68
Lemma trisuica L. Ivy Duckweed. Rothley Lake.	67
Rumex hydrolapathum Huds. Great Water-dock. River Ain near Eslington Hall.	68
Carex pendula Huds. Pendulous Sedge. Swarland Burn near Swarland Fence.	68
Hypericum humifusum L. Trailing St. John's Wort. March Burn near White Hemmels (Riding Mill).	67
Cichorium intybus L. Chicory, Wild Succory. Waste ground near Burnside Cot. (Slaley).	67
Scirpus tabermontani C.G.Gmel. Glaucous Bulrush. We noticed on 14/10/62 that the pond near New Moor (Ashington), where we knew this species, was being filled in by dumping colliery waste into it. However, we found it by the River Lyne at Lynemouth. G. A. & M. Swan.	67

THE VASCULUM

JULY 1965

Vol L No 2

Price 5/per annum, post free

Edited by
J. W. HESLOP HARRISON, D.Sc., F.R.S.
UNIVERSITY OF NEWCASTLE UPON TYNE
and
T. C. DUNN, B.Sc.
THE POPLARS, CHESTER-LE-STREET

BY THE WAY

Secretaries of Societies and other contributors to "The Vasculum" should send their notes to the Editors before 20th September, 1965.

LOCAL FIELD CENTRES.

Since the last war, the centres of the Field Studies Council have become an integral part of the structure of Biological education in Great Britain. They are now so popular that during recent years more centres have had to be opened.

The idea has also caught on with Local Education Authorities. The first to be established in our counties was by the Northumberland County Education Committee, at Ford Castle. Here, expert field workers instruct children in the science of carrying out ecological projects in the field. The foresight of the founders of the centre is without question, as is shown by its great success. There are now terrific demands from schools all over the county for a chance to send pupils on field courses. As a result, other field centres, without permanent staffs, have recently been established for those teachers who can follow the methods that have been taught at Ford. We congratulate Northumberland County Education Committee on their progressive educational planning.

Sunderland Education Committee is another which has seen the value of field courses. For several years children have been finding out for themselves something of the problems of living, encountered by plants and animals, on the fells of the Lake District.

It is surprising that a progressive authority like that of Durham County has been so completely backward in this field. Not a single Field Centre has yet been established, although use has been made, by some schools, of those run by the Field Studies Council. It is pleasing to learn, however, that at last developments are under way. A residential Field Centre is planned at Middleton-in-Teesdale, where biological fieldwork training will take place in

one of the most unique floristic areas in the British Isles. An educational reserve for day excursions is planned at a site near Witton-le-Wear, and another day centre to study marine ecology is to be based on Whitburn Secondary Modern School. With all these aids to the teaching of Biology, we hope to see a steady influx of young naturalists to swell the ranks of the local Natural History Societies and of the Northern Naturalists' Union. Meanwhile, we can assure the Local Education Authorities concerned, that they are, without doubt, doing a really worth while job in spending money on field centres. Even if it is only a few, the provision, for some young people, of the chance to find a lifelong interest in the countryside, is of inestimable value. We hope, also, that one of the results will be a considerable reduction in the amount of vandalism in the countryside in general.

THE ANNUAL REPORT OF THE SUNDERLAND NATURAL HISTORY SOCIETY.

This little booklet is a most outstanding effort for a first attempt at such a publication. It is pointed out in the introduction that one of the aims of the Society is to make records of local plants and animals. This it does for 1963 and 1964.

The results, although very variable in style, are quite remarkable for two years' work. We would suggest, however, that the use of common and Latin names of species, together with author, should follow some uniform pattern. For example, the vertebrate animals are listed by common names only, the Lepidoptera by both common and Latin names but the latter have no authors, whilst the gall-forming insects have everything. When we look at the plant lists we find a mixture of practices. In some cases, common names only are used, whilst in others both kinds appear, with the Latin name in brackets. The authenticity of the names are also in doubt in one or two instances. This is quite a serious affair, for once records appear in print, they are liable to be copied and quoted for many years to come. If they are in any way doubtful, a second opinion or that of an expert, such as those provided by the British Museum, should be sought.

In spite of these teething troubles, we look forward to seeing further editions roll off the Sunderland stocks for many years. If records continue to appear at such a rate then Sunderland will be well and truly documented, as far as its Natural History is concerned, in a very short time. The members of the Sunderland Society are obviously working in the field, and this is more than can be said about some of our constituent societies, judging from the amount of copy sent in to this journal.

THE SOCIETIES.

NORTHERN NATURALISTS' UNION.

About 40 members and friends met on the village green at Great Ayton on 29th May 1965 for the 110th Field Outing. From here we proceeded by cars to Cliff Ridge Quarry, where Mr.

Lawrence, the leader, introduced his team of helpers and gave a short outline of the programme.

The first part of the walk was along a hillside which had been extensively quarried. The terrain alternated between a footpath with hedgerow and the broken ground characteristic of quarries.

The spoil heaps and quarry floors produced a very interesting crop of casuals, among which were the Mouse-ear Chickweeds, **Cerastium holosteoides** Fr. and **C. glomeratum** Thuill., Parsley Piert. **Aphanes arvensis**. Early Hair-grass, **Aira praecox**, Doves-foot Cranesbill, **Geranium molle**, Stork's-bill, **Erodium cicutarium** in the white form. Common Vetch, **Vicia sativa**. Wall Speedwell, **Veronica arvensis**. Yellow and blue Forget-me-not, **Myosotis discolor**, and Henbit, **Lamium amplexicaule**.

The hedgerow showed a fairly characteristic flora, including Lords and Ladies, **Arum maculatum** (unspotted leaves). Bugle, **Ajuga reptans**, and Ground Ivy, **Nepeta hederacea**. The ash trees were just breaking bud and we noticed that most of the immature leaves were blackened by frost. Examination of the oak trees disclosed three galls, **Biorrhiza pallida**, an oak apple gall, **Dryophanta folii**, a leaf pea-gall, and **Neuroterus baccarum**, a small gall of the anthers. Other galls included **Eriophyes padi**, a leaf mite gall on blackthorn and **Oligotrophus capreae**, on both Goat Willow and Grey Sallow.

After leaving the quarries, the party climbed part of the way up Roseberry Topping to examine the exposed plant fossil beds and to admire the view. The most notable find on the return trip was a pigmy flint picked up by Mr. Tinkler in a ploughed field.

Meanwhile, the entomologists had been pursuing a separate and more leisurely route. The oak, birch and wych elm were all assiduously beaten. In this way they obtained many adults of **Adela viridella** Sc., together with the larvae of the November Moth, **Oporinia dilutata** Schiff., the Mottled Umber, **Erannis defolaria** Clerck., the Scarce Umber, **Erannis aurantiaria** Hubn., the Winter Moth, **Oporophtera brumata** L. and the Oak Tortrix, **Tortrix viridana** L. The Nettle Tap Moth, **Simaethis fabriciana** L., was seen in its larval form in large numbers on the stinging nettles. The encased larvae of **Coleophora fuscadinella** Zeil. were found to be quite numerous on silver birch and alder. Curiously enough, the case, which is light brown when the larva is seen on birch, is reddish on alder. The botanists, meanwhile, had discovered a Brimstone Moth, **Opisthograptis luteolate** L. on a fence post during their walk to Roseberry Topping.

Two Junior Meetings have also been held. On May 15th, a very large number, between 80 and 100, of young people assembled at St. Mary's Island, where, in fine weather, Mr. Alker showed them how to search for various seaweeds and animals in the rock pools. The Waldrige Fell outing was again only poorly attended on June 12th, when Mr. Dunn, together with about 12 members met at Chester Moor. They then all proceeded to the Fell to look

at the willows and the other plants and animals of the grassy moorland, Wanister Bog and Wanister Hill.

BIRTLEY NATURAL HISTORY SOCIETY.

The first long distance outing of the season took place at Newton-by-the-Sea on May 30th. We were lucky enough to strike just the right time of the year to see the nesting birds on the pond behind the village. Here we encountered a wheeling, screaming mass of Black-headed Gulls, whose nests were most obvious. The chicks were just breaking through their shells in several nests. In addition, we also saw nests, with eggs, of coot and water-hen. On the island a pair of swans had taken up residence, but their nest was completely surrounded by those of the Black-headed Gulls who continually jostled each other for standing room. Oil the water we saw many Mallard, including several small families, and also a single Shelduck and a few Tufted Ducks.

Afterwards we examined the sand-dunes to the south of the village. Here we saw many coastal plants, notable examples being the Purple Milk-vetch, **Astragalus danicus**. Yellow and blue Forgetme-not, *Mysotis* **discolor**, Burnet Rose, **Rosa spinosissima**. Sand Rue, **Thalictrum minus**, subsp. **arenarium**, and Sea Buckthorn, **Hippophae rhamnoides**

On July 4th we went to Rivaulx Abbey, with Mr. W. E. Gladstone as leader. This excursion was a follow-up of one of the winter lectures on the monastic system.

Although the day was never really bright, the rain held off miraculously whilst we were away from the coach. After providing us with a plan of the buildings, Mr. Gladstone took us slowly round the site. He carefully explained the life of the monastic community, and with the buildings there to help, he built up a vivid picture of what had gone on in those far off days. Many of us were surprised to learn that the monastery was already decadent and very much underpopulated at the Dissolution.

Afterwards, some of the party explored the woods on the opposite side of Rye Dale. Amongst many fine plants encountered, perhaps the most noteworthy were Baneberry, **Actaea spicata** L., the Green Helebore, **Heleborus viridis** L., and the Dogwood, **Thelycrania (Cornus) sanguinea** L.

NOTES AND RECORDS

NOTES.

Early migrant Lepidoptera in 1965. It is seldom that the migrant Lepidoptera reach our north-eastern corner before the middle of July, so the following observations are unusual. In Castle Eden Dene, on 15th May 1965, a Red Admiral Butterfly, **Vanessa atalanta** L. was seen. It was in perfect condition and looked as if it had just emerged from a pupa. The date, however, would be against this, for even if a specimen had managed to hibernate in the dene, its progeny could not have been on the wing as early as May 15th. On the other hand, a hibernated specimen would be unlikely to be in such a perfect condition. On the same day, which was sunny and warm with a gentle westerly wind, another migrant, the Silver Y moth, **Plusia gamma** L., was seen on the coast at the mouth of the dene.

This specimen was badly worn, however, and certainly looked as if it had travelled a long way. R. H. Lowe and N. R. Lowe.

The Corncrake, *Crex crex*. It is well known how the corncrake suddenly became rare in our counties after having been so common everywhere during the 1930's and early 1940's. It is therefore worth recording that one was heard calling (an unmistakable sound) in rough pasture near Thirlwell Castle, Greenhead, early this year. This is the first I have heard for quite a number of years. C. J. Gent.

A Colour variety of the Bird's Eye Primrose, *Primula farinosa*, is much more variable than the coastal form, both in colour and in the appearance of the plant as a whole. Nevertheless, on May 20th this year I was thrilled to find a colony of plants near Langdon Beck in which every individual had yellow eyes and pure white petals. A. Todd.

The Edible Morel, *Morcella esculenta*. This edible fungus only appears at irregular intervals. This year several specimens were found in Cassop Vale. A. Todd.

An unusual Beech Tree. During May this year, the Rt. Rev. J. H. Dickinson, Vicar of Chollerford told me of a beech tree with peculiar leaves in some disused grounds at Barrasford. He also showed me specimens.

I have now been to see it for myself. The original tree appears to have been a "cut-leaved" variety, having mainly lanceolate leaves, but with a proportion of them deeply serrated. Quite a few lateral branches have been cut off where they leave the trunk, and all these have clusters of small twigs with the cut type of leaf. One main branch, and several of the most distal twigs, have leaves which more closely resemble those of the normal beech, but with regular serrations about 2 mm. deep. Transition types of leaf between one form and the other, particularly half lanceolate and half serrate can be found. Mutation appears to be occurring simultaneously in several parts of the tree. The tree is standing as part of a row of trees, between a copper beech and a horse chestnut, in private grounds, and is not accessible to the public.

I am pressing one or two bits, showing the two kinds of leaves growing in close proximity. J. Bradley.

Bird Notes from Stanley. The following observations may be of interest to other ornithologists:—
Greenshank: Spring passage. From May 1st to May 8th, a single bird present at the Tanfield Ponds, Stanley. (Only the second spring record of this species for these ponds.)

Rook: This year the rookery in the Haymarket in the built up area of Newcastle, contained 16 occupied nests, consisting of two distinct colonies of 11 and 5 nests. The rookery was first formed in 1961.

Bullfinch: A pair at Cockle Park, near Morpeth, on April 15th.
Chiff Chaff: On May 4th, a single bird was noted singing in the region of the Tanfield Ponds, Stanley.

Kestrel: During April three different birds were present in the Tanfield valley. R. Marston Palmer.
Decadence of the Eared Sallow, *Salix aurita* L. Forty or fifty years ago the commonest willow on Waldrige Fell was the Eared Sallow, *Salix aurita* L. At present, only three clumps are left in a reasonably pure condition, although several hybrids between it and the Grey Willow, *Salix atrocinerea* Brot. are to be found. Over the years, *S. atrocinerea* has gradually replaced *S. aurita*. Why is it that *S. aurita* is decadent here?

We have noticed a similar state of affairs in other parts of the county where, however, the previous history of the areas are not so well known. Very few specimens of *S. aurita* can be seen in any of our lowland stations in Durham and in each case they appear to be somewhat moribund. Such

examples are to be seen at Urpeth Bottoms, Causey and near Hollinside. T.C.D.

Waldridge Fell Lepidoptera. Fifteen years ago the Small Pearl-bordered Fritillary, *Argynnis seicne* Schiff., was recorded for the first time on Wald- Fell (Vasculum XXXV, No. 1).

I have not seen it in this locality since that time, until June 14th this year, when a single specimen was again in evidence not more than 6 yards from the spot where it was first seen. The butterfly was captured, examined and then immediately liberated again. It was a perfect male with colour and markings identical with those of the first capture. It thus appears probable that the insect is permanently established there, but in such small numbers that it is often missed altogether.

On the same afternoon and in the same area, a single specimen of the Small Argent and Sable, *Epirrhoe tristata* L. was also seen. This is a first record for the area and quite an important one, for, although its foodplant, Heath Bedstraw, is quite common all over the county, the moth does not occur with it in the majority of its stations. T.C.D.

The Common Lizard on Waldridge Fell. Each year I look for the Common Lizard, *Lacerta vivipara*, in June. In most years one or two specimens are seen and sometimes none at all. This year I have already seen the species on 16 separate occasions. This is phenomenal. It may of course, be mere coincidence, but I prefer to think that it is having a particularly favourable time this year.

Apart from Waldridge Fell, the lizard is present on most of the pit heaps round Chester-le-Street and Birtley, but never in very great numbers. T.C.D.

The Status of the Clustered Bellflower in Durham. The Clustered Bell- flower, *Campanula glomerata* is more often seen in flower gardens than growing wild in our counties. We have seen it growing in the lane leading to Bishop Middleham Quarry and we knew it as long ago as 1901 along the old mineral railway between Stella Gill marshalling yard at Pelton Fell and the staithes that used to exist at Fatfield. In both cases there is a distinct possibility of the plant being a garden throwout. Can any of our readers provide any information about authentic wild colonies of this species? J.W.H.H.

The Emperor Moth. For many years we have kept a sharp look out for the Emperor Moth, *Saturnia pavonia* L., on Waldridge Fell, Beamish Moor and other suitable heathery places. In spite of our vigilance, it has never been found in any of these lowland moorland places until this year. On 12th May a pair was found in cop. by the side of the road between Crag- head and Bumhope. They were on a strip of heather measuring no more than 2 yards long and a foot wide. J.W.H.H.

RECORDS.

MAMMALS

Erinaceus europaeus. The Hedgehog. 66
A nest with mother and one young one in Fulwell Quarry. Found during the N.N.U. outing on July 10th 1965. T.C.D.

BIRDS

Crex crex. Corncrake. 67
One heard calling in rough pasture near Thirlwell Castle, Greenhead, early this year. C. J. Gent.

INSECTS.

LEPIDOPTERA—BUTTERFLIES AND MOTHS

Saturnia pavonia L. Emperor Moth. 66

A pair in cop near Craghead. J.W.H.H.

Epirrhoe tristata L. Small Argent and Sable. 66

A single specimen on Waldridge Fell, 14th June 1965.T.C.D.

Pyrrhia umbra Hufn. The Bordered Straw.	67
Larvae plentiful on restharrow on coast sand dunes in Northumberland. A single moth at light at Riding Mill.	
Phytometra viridaria Clerck. The Small Purple Barred.	67
Well distributed in Northumberland.	
Polychrisia moneta F. The Golden Plusia.	67
Of regular occurrence at Riding Mill and getting commoner every year.	
Plusia interTogationis L. The Scarce Silver Y.	67
Distributed on the moors, and taken occasionally in the garden at Riding Mill.	
Ectypa glyphica L. The Burnet Companion.	67
Met with only infrequently in Northumberland.	
Zanclognatha tarsipennalis Treits. Fan-foot.	67
Fairly common round Riding Mill.	
Brephos parthenias L.« The Orange Underwing.	67
Distributed in the Riding Mill district and locally fairly common amongst old established birches.	
Scopula flosactata Haw. Cream Wave.	67
Common at Riding Mill.	
Scopula teroata Schranck. Smoky wave.	67
Common in Dipton Wood.	
Carsia paludata Thunb. Manchester Treble-bar.	67
Fairly common on Muckle Moss.	
Chesias legatella Schiff. The Streak.	67
Common amongst Broom near Riding Mill.	
Xanthorrhoe munitata Hubn. The Red Carpet.	67
Distributed on moors in Northumberland. F. W. Gardner.	

FLOWERING PLANTS AND FERNS.

Botrychium lunularia (L) Sw. Moonwort.	67
A sporing specimen in a field just south of the Military Road on Acomb Fell, just above Fern Hill Farm. J. Bradley.	
Polypodium interjectum Shivas.	67, 68
Chapel Wood near Morpeth. Hareshaw Burn (67). Wall at Ratcleugh (68).	
Lycopodium selago L. Fir Clubmoss.	67
Abundant among the basaltic talus at Winshields.	
Gentianella amarella (L.) Bomer sensu lato. Felwort.	67
Near the mouth of the Chevington Burn.	
Hypericum maculatum Crantz. Imperforate St. John's Wort.	68
Quarry N.E. of Denwick.	
Festuca vivipara (L.) Sm.	68
By the summit cairn on Cheviot.	
Arenaria leptoclados (Reichb.) Guss.	67, 68
Basalt quarries at Knowesgate (67) and Ratcheugh (68). Wooler Mill (68). Determination confirmed by Dr. F. H. Perring.	
Littorella uniflora (L.) Aschers. Shore-weed.	67, 68
In Greenlee and Broomlee Loughs, both Halleypike Loughs, the reservoir at Shield on the Wall (Brown Moor), the reservoir near Hinds Shields, the reservoir at Cowey Sike, the most northerly reservoir at Whittledean, the Colt Crag reservoir, the larger Sweethope Lough and the Catcleugh reservoir (67). In the Swinhoe Lakes (68).	
Bryonia dioica Jacq. White or Red Bryony.	67
By the roadside near Stocksfield Station.	
Galeopsis speciosa Mill. Large-flowered Hemp Nettle.	67, 80
In a field near Whygate on the Warks Burn (67). In a field near Sourhope, at the head of the Bowmont Water (80).	
Arum maculatum L. Lords-and-Ladies, Cuckoo-pint.	68
In the hedge near Proctors Stead near Dunstan.	

Spergularia nibra (L.) J. & C. Presl. Sand-spurrey.	67, 68
Near Hare Law, N. of the Warks Burn (67). Falstone Station (67). Near the Holystone Burn (67). On the banks of the Breamish near its junction with the Reaveley Burn (68). On the N. bank of the Till, W. of the bridge near Akeld Steads (68). Ross Links (68).	
Galium boreale L. Northern Bedstraw.	67
On the N. bank of the Tyne, E. of Wylam. On the banks of the N. Tyne at Countess park Wood, near Tarset, near Falstone, near the junction with the Whickhope Burn, and even as high as Plashetts.	
Silaum silaus (L.) Schinz and Thell. Pepper Saxifrage.	68
By the Long Nanny, near Tughall Mill.	
Schoenoplectus lacustris (L.) Palla. Bulrush.	67, 68, 81,
Wansbeck near Low Angerton (67). Near the mouth of the Ross Low (68). Quarry pond at the Snook, S. of Seahouses (68). Pond near Pallinsburn House (Branxton) (68). Small pond near Fireburnmill, W. of Coldstream (81).	
Hippuris vulgaris L. Mare's-tail.	67, 68
In Greenlee Lough, Crag Lough, and both Halleypike Loughs (67) Prestwick Carr (67). Swinhoe Lakes (68). Small pond, W. of Holburn Moss, in the Kylloe area (68).	
Potamogeton lucens L. Shining Pondweed.	67
In Broomlee Lough.	
Potamogeton X zirii Roth.	67
In Halleypike Loughs, fruiting vigorously.	
Potamogeton graminens L. Various-leaved Pondweed.	67
In Greenlee Lough and in Broomlee Lough. In the lake near Angerton Moor and the larger Sweethope Lough.	
Potamogeton X nitens Weber.	67
In Greenlee Lough.	
Potamogeton alpinus Balb. Reddish Pondweed.	67
In a small pond on Plenmeller Common, near Bridle Green, S. of Haltwhistle. In Crag Lough, Broomlee Lough, Greenlee Lough, the Halleypike Loughs and Shield on the Wall reservoir (Brown Moor). In the Blacka Burn, near Kate's House and the Middle Burn, near Middleton both in the Crookbank area. In the smaller Sweethope Lough.	
Potamogeton praelongus Wulf. Long-stalked Pondweed.	67
In Crag Lough.	
Potamogeton obtusifolius Mert. & Koch. Grassy Pondweed.	67, 68
In Crag Lough (67). In a small pond near Shaftoe (67). In Sir Edward s Lake, Capheaton (67). In the Swinhoe Lakes (68).	
Potamogeton perfoliatus L. Perfoliate Pondweed.	67, 68
In Greenlee Lough, Broomlee Lough and the Shield on the Wall reservoir (Brown Moor) (67). In the lake near Angertonmoor (67). In the Coquet, 1 mile W. of Warkworth (68). Tweed near Horncliffe (68). Whittledene reservoir (67).	
Potamogeton berchtoldii Fieb. Small Pondweed.	67, 68
In the Shield on the Wall reservoir (Brown Moor). (67). Stream running into Little Swinburn reservoir (67). Smaller Sweethope Lough (67). Bolam Lake (67). Small pond and large lake E. of Linnheads, near Ray (67). Pond by the N. Tyne near Plashetts (67). Coquet, 1 m. W. of Warkworth (68). Pond at Howick (68). Breamish, not much below its junction with the Chesters Bum (68). Pond near Goldenhill (lucker) (68). Small pond near Rayheugh and stream at Twizell Mill, both near Warenford (68). Small pond to W. of Kylloe Hills and quarry pond, N.W. of Hetton Steads (68). Quarry pond at the Snook, S. of Seahouses (68).	
Potamogeton pectinatus L. Fennel-leaved Pondweed.	67,68
In Greenlee Lough, Broomlee Lough, Crag Lough and Halleypike Loughs (67). In the large lake, E. of Linnheads, near Ray (67). In the pond on the Foxton Burn, near Burradon (68). In the North Low near Goswick (68). G. A. and M. Swan.	

THE VASCULUM

OCTOBER 1965

Vol L No 3

Price 5/per annum, post free

Edited by
J. W. HESLOP HARRISON, D.Sc., F.R.S.
UNIVERSITY OF NEWCASTLE UPON TYNE
and
T. C. DUNN, B.Sc.
THE POPLARS, CHESTER-LE-STREET

BY THE WAY

Secretaries of Societies and other contributors to "The Vasculum" should send their notes to the Editors before 20th November 1965-

COW GREEN RESERVOIR

Our attention has been drawn to an article in the "Economist" of 28th August 1965, which discusses the proposed reservoir at Cow Green in Upper Teesdale. It is entitled "What price flora and concludes by describing the Gentian as "an expensive flower."

It is, perhaps, understandable that a journal like the "Economist" should talk as though the project was simply a matter of money. While we agree that money is quite an important commodity, we think that many other things are of greater importance, such as people and the way they enjoy their leisure. Every year, there is a pilgrimage to Upper Teesdale, where the plants give pleasure to thousands of people, many of whom are not botanists.

In the article, the Teesdale Violet, the Gentian and "Alpines found nowhere else in Britain," are mentioned. We are prepared to campaign vigorously to save these very plants from unnecessary risks, and consider that they alone add up to a very strong case for conservation. None the less, the Gentian and the Alpines can be found elsewhere, even if it means going abroad to see many of them. Widdybank Fell, part of which would be swallowed up by the reservoir, is, however, quite unique. The peculiar complex of geology, flora and fauna, which it represents, occurs nowhere else in the world. If it is destroyed, it will have gone for ever.

The solution of the ecological problems it presents is of the greatest scientific importance. Many of these problems may appear, at the present time, to be only of academic importance, but it should not be necessary to remind our readers, or those of the "Economist," that the history of science is a history of academic research. Yet it has revolutionised industry and commerce, and

continues to do so today. We suggest that we can ill afford to destroy a single research project which might well be of benefit to what is still the greatest of our national industries, agriculture. It could well be that the destruction of the habitat of the Gentian might be far more expensive than the cost of a reservoir.

MIGRANT LEPIDOPTERA, 1965.

On the whole, this has been a poor year for the Lepidopterist specially interested in migrants. Only two early records were received, of a single Red Admiral butterfly and a single Silver Y moth. These were reported in our last issue. From that time until the middle of September the silence about arrivals was depressing. The Silver Y moth has turned up at light quite regularly during the second half of September and early October. This is quite usual for this species, however, and although several have been noted, the numbers are below average. The best news has been about the Humming-bird Hawk moth, *Macroglossum stellatarum* L., which seems to have arrived in greater numbers than usual. Mr. E. G. Nesbitt, of the Consett Naturalists Field Club, has recently informed us of three seen on the same evening at Blackhill. This was on June 25th, a warm summer evening after rain somewhat earlier, which made the scent of his garden pinks very strong. The moths were observed feeding at these flowers. More recently, in September in fact, a specimen was seen feeding at the flowers in the gardens of the Hancock Museum in Newcastle, and within a few days of this, another was observed in a garden at Chester-le-Street. It seems probable that these hawk moths have been quite widespread in our two counties.

BOOK REVIEW.

GRASSHOPPERS, CRICKETS AND COCKROACHES OF THE
BRITISH ISLES, by David R. Ragge, published by Warne, price 42/-.

We have read this book with the greatest of pleasure. It is full of interest throughout, and marks another milestone of excellence in Warne's Wayside and Woodland Series.

There has been a departure from the usual size and style, which, we think, is a great improvement. The paper and binding are of a very high quality, such as one only expects to find these days, in American publications. The coloured plates, however, are the most outstanding feature of the book. They are beautiful, so that, with the equally clear line-drawings, the veriest beginner should have no difficulty with the identification of any specimen of the British Orthoptera.

In the introduction, the author gives details of the ecology and habits of the group, their collection, preservation, method of breeding indoors, and finishes with some notes about the arrangement of the book, with special reference to his distribution maps. The main body of the book follows. This consists of the fullest description of every British species, including all recent introductions.

This is where the coloured plates and line-drawing are especially useful. Each description is accompanied by a distribution map showing our present knowledge of these insects. It is here that there are many obvious gaps. These are no fault of the author, and we think they should provide the stimulus for increased interest amongst our entomologists. Dare we hope for some information from our younger members for publication in our "Notes and Records" section? The descriptions are accompanied by complete keys for identification, even down to colour varieties. The author has made a special study of the songs of the grasshoppers and crickets, and has endeavoured to produce song diagrams of the species. In addition, he has made a gramophone record of them in collaboration with the B.B.C. Natural History recording unit. This can, and indeed is meant to be bought with the book, a novel and very pleasing idea. The record is an excellent reproduction in every way.

The book concludes with special chapters on casual introductions and migrants, on how to look for the insects, and an extremely important one on the zoogeographic distribution and history of the British Orthoptera.

These chapters are followed by three very useful appendices and a glossary. Altogether there is full value for money.

There has been no account of British Orthoptera for over 40 years, so that the author has filled a real gap in our entomological literature. He has done it so very well that we most certainly recommend it to all interested in Natural History.

THE SOCIETIES.

NORTHERN NATURALISTS' UNION.

The 111th Field Meeting of the Union took place at Fulwell Quarry on July 10th, 1965. Some fifty enthusiasts were welcomed by the President, Mr. J. Thompson, who talked a little about the special plants of this Magnesian Limestone area. Mr. G. Stansfield then said a little about the geology.

We then moved off, the geologists to investigate the peculiar cannon-ball formations in the Permian rocks, and the coal fossils in waste material from the local mines. Unfortunately, the quarry will soon be filled up by this waste material.

Meanwhile the botanists investigated the plants, whilst the entomologists ranged over the quarry heaps looking for any insects there might be.

Some of the more notable plants to be admired were the swarms of orchids. One, however, the Bee Orchid, **Ophrys apifera** Huds. will soon be largely exterminated. The main colonies are only a few inches away from the ever advancing coal-mine waste with which the quarries are being filled. Other orchids seen were **Orchis fuchsii** (Druce) Vermeui, the Common Spotted Orchid, **Orchis purpurella** Vermeui, the Northern Fen Orchid, and **Listera ovata** R.Br., the Twayblade. Mixed with the orchids were such species as Yellow-wort, **Blackstonia perfoliata** Huds., Wild Parsnip,

Pastinaca sativa, L., Felwort, **Gentianella amarella** Borner, and Slender St. John's Wort, **Hypericum pulchrum** L. In one place, where there were remains of ruined buildings, we found Winter Heliatropé, **Petasites fragrans**. Meadow Rue, **Thalictrum flavum**, a **Smilax** species, and Alpine Lady's Mantle, **Alchemilla alpina**, all together. The general conclusion was that they represented the remains of a flower garden of some former habitation.

Almost immediately after leaving the entry to the quarry, the entomologists stumbled across a hedgehog's nest with young. Later, we saw an occupied badger sett and evidence of the presence of foxes in the quarry. Meanwhile, such insects as the Large White Butterfly, **Pieris brassicae** L., Meadow Brown, **Maniola jurtina** L., Common Blue, **Polyommatus icarus** Rott. Narrow-bordered Fivespot Burnet, **Zygaena lonicerae** Scheven, Six-spot Burnet, **Zygaena fillipendulae** L., Yellow Shell, **Euphyia bilineata** L., the Mottled Rustic, **Caradrina morpheus** Hufn., and several micros were turned up. A single specimen of the Violet Ground Beetle, **Carabus violaceus** L. was seen wandering about over a bare patch of ground, and the bumble-bees, **Bombus lapidarius** L., **Bombus agrorum** Fab. and **Bombus muscorum** L. were seen at the flowers.

Mr. Gent reported the following birds. Skylark, Rook, Meadow Pipit, Starling, Linnet (including a nest in a gorse bush). Yellowhammer, and House Sparrow.

Altogether this meeting was very enjoyable, and at the same time a new group of Bee Orchids were discovered in a place which might just escape the tipping process.

About 30 members gathered at Riding Mill Station for the 112th Field Meeting on September 18th, 1965.

In the absence of Mr. Little, Mr. Gent very kindly agreed to lead the party. Before entering the woods along the river banks, we noted that the walls of the station had an interesting flora which included the Black Spleenwort, **Asplenium adiantum-nigrum** L., Wall Rue, **Asplenium ruta-muraria** L., Ivy-leaved Toadflax, **Cymbalaria muralis** G., M. & S., and Thyme-leaved Sandwort, **Arenaria serpyllifolia** L.

In the woods we found a number of galls. Ground Ivy, **Glechoma hederacea**, carried the gall, **Oligotrophus bursarius** Bremi, and Alder was found with the leaf galls, **Eriophyes nalepai** Focken, and **Eriophyes laevis** Nal. The oaks, as usual, produced a whole collection of galls, the most prominent of which were the Leaf Spangle Gall, **Neuroterus lenticularis** and the Artichoke Gall, **Andricus fecundatus**. The Tar-spot Fungus, **Rhytisma acerina**, was common on the leaves of sycamore, as was the Crimson Nail Gall, **Eriophyes macrorhynchus** Nal.

Along the river bank we were very interested to find a hybrid willow, whose parentage we thought to be **Salix viminalis** X **Salix caprea**. Closer examination of the leaves revealed the presence of

Perrisia marginempunctatus, thus confirming one of the parents, for with us, this gall is restricted to **Salix viminalis**.

Other notable plants were the Himalayan Balsam, **Impatiens glandulifera**, Figwort, **Serophularia nodosa**. Yellow Loosestrife, **Lysimachia vulgaris** and Golden Rod, **Solidago virgaurea**.

The following Fungi were identified although many more were seen :— Jew's Ear, **Hirneola auricula-judae Berk**, **Inonotus hispidus**, and **Oudemansiella radicata**.

Mr. Gent reported that bird life generally was not greatly in evidence. Swallows and House Martins were still flying over the village, the only song heard being the autumn melody of the Robin. Some members of the party came across a mixed flock of tits which included the Great, Blue, Long-tailed and Coal Tit and also a Tree Creeper. A Kingfisher was seen flying like a blue dart over the river.

Other birds recorded were Mallard, Kestrel, Lesser Blackbacked Gull, Black-headed Gull, Wood Pigeon, Greater-spotted Woodpecker, Rook, Jackdaw, Wren, Blackbird, Meadow Pipit, Pied Wagtail, Starling and House Sparrow.

The entomologists had a very poor day. Despite assiduous beating during the whole afternoon, not a single caterpillar came "down." A few micros were disturbed, including **Acleris variegana**, **Acleris emargana** and **Epinotia paykulliana**, but these were the common species to be expected at this time of the year. Several species of Homoptera were taken for identification.

BIRTLEY NATURAL HISTORY SOCIETY.

On 12th September 1965, the Society went to Budle Bay, part of which is now a National Nature Reserve. The coach took us via Bamburgh to Stag Rock. Here the party enjoyed a very pleasant picnic lunch sitting on slabs of Whin Sill. Afterwards we walked northwards along the coast to Budle Bay, where the bird watchers had a very busy time. Meanwhile one or two keen botanists and entomologists kept to the cliff sides and sand dunes to investigate the plants and insects. Some particularly fine flushes under outcrops of Whin Sill produced a fine assortment of plants such as Grass of Parnassus, **Parnassia palustris**, Butterwort, **Pinguicula vulgaris**, and Common Centaury, **Centaureum erythraea**. In the bay itself, we were interested to see the large clumps of the Cord-grass, **Spartina townsendii**, which is now very well established and spreading.

During the afternoon the following birds were identified:— Oyster Catcher, Eider Duck, Turnstone, Gannet (immature). Greenshank, Redshank, Black-headed Gull (in winter plumage). Ringed Plover, Heron, Mute Swan, Fulmar, Dunlin, Lapwing, Curlew, Rook, Wheatear and later, as the tide was nearing high water, a number of Sandwich Terns.

We picked up the coach again near Waren Mill after a very interesting day.

NOTES AND RECORDS

NOTES.

Bird Notes from Stanley. The following ornithological observations which I recently recorded may be of interest to some of our readers:—

Little Stint: Autumn passage. A single bird was inland at the Tanfield ponds, Stanley, on July 31st and August 1st. Grey Plover: Four birds on Cowpen Marsh, Teesmouth, on September 18th.

Wood Sandpiper: Autumn passage. Tanfield ponds. Present on most days from July 30th to August 28th, with a maximum of 4 birds on August 15th, and a flock of 13 birds on August 25th. (During this period it was estimated that at least 20 birds had passed through these ponds.)

Green Sandpiper: Autumn passage. Tanfield Ponds. Present from July 11th to September 6th, with a maximum of 5 birds on August 8th. (During this period it was estimated that 15 different birds had passed through the ponds.)

Curlew-sandpiper: A single bird on August 18th, and two birds on August 22nd, were noted inland at the Tanfield Ponds.

Purple Sandpiper: On September 18th, a single bird was at the North Gare, Teesmouth.

Common Sandpiper: Autumn passage. Tanfield Ponds. Present from July 16th to August 28th, with a maximum of 8 birds on July 19th, and 7 birds on August 22nd. (During this period it was estimated that at least 21 different birds had passed through the ponds.)

Ruff: Autumn passage. Tanfield Ponds. From July 31st to August 28th, up to 6 birds were frequently present. On September 12th a single bird turned up at these ponds. Dorman's Pond, Teesmouth, September 18th, a party of 7 birds. On the same day a single bird flew south over the sea at Hartlepool.

Greenshank : Autumn passage. Tanfield Ponds. Present from August 3rd to August 28th, with a maximum of 7 birds on August 22nd, and 6 birds on August 28th.

Ringed Plover: Inland at Tanfield Ponds. From August 22nd to August 25th, a single immature bird.

Dunlin : Autumn passage. Tanfield Ponds. July 16th, three; August 15th, three; August 18th, four; August 25th, one.

Jack Snipe: A single bird at the Tanfield ponds on August 25th.

Black Tern : On September 18th, two birds were hawking for insects over the Reclamation Pond, Teesmouth.

Mute Swan: A pair nested on the Tanfield ponds, and were successful in rearing one young.

Red Throated Diver: A single bird on the sea at Hartlepool on September 18th.

Arctic Skua: Four birds at Hartlepool on September 18th.

Gannet : On September 18th, at least 40 birds were fishing off Hartlepool.

Starling: From July 16th to July 30th, a single cream-coloured bird with a yellow bill frequented the area of the Tanfield ponds.

Marsh Tit: On September 12th, three birds noted at Shield Row, Stanley, R. Marston Palmer.

A Hybrid Willow. When on a local outing with Birtley Natural History Society, to Salter's Gate, a clump of willows was discovered in the corner of an old derelict garden. On close inspection, the plants proved to be rather difficult to determine, but eventually it was decided that they were hybrids between *Salix viminalis* and *Salix caprea*.

Hybrids of this same parentage have been noted in several localities in Durham County (v.c. 66). Thus they have been seen, and most probably still occur, along the Vigo Railway near Birtley, at several places along the burn between Bewick Main and Beamish, alongside another burn between Bewick Main and Lamesley, near Craghead, at Causey, Witton ie Wear,

Bishop Middleham and Aycliffe quarries, both above and below Winlaton Mill, along the banks of the Derwent, on pit heaps near Kelloe, and intermittently along the River Wear all the way from Wolsingham to the head of the dale. It used to occur in quite large numbers at Billingham Bottoms also, but of course these have all gone in recent years.

Can any of our readers add any more localities? J.W.H.H.

A colour variety of the Creeping Thistle. Along the old railway from Salter's Gate to Tow Law grow many patches of the Creeping Thistle, **Cirsium arvense**. When we were there recently with the Birtley Natural History Society, a single patch having pale pink flowers was discovered. This was most striking against the normal deeper red colour of other thistle flowers nearby. J.W.H.H.

Some observations from the Isolation Hospital, Chester-le-Street. During a few sunny days from September 14th to 19th, a number of birds were more active than usual in the sycamore at the end of my garden. These included the Coal Tit, Blue Tit, Greenfinch, Chaffinch and Willow Warbler. At the same time Woodcock and House Martins were seen flying overhead. On one of these afternoons, a pair of weasels were seen fighting quite viciously on the lawn in front of my house. R. Harris.

About a Hedgehog. At the Isolation Hospital, Chester-le-Street, a hedgehog has been noted crossing the drive from the hospital grounds to a nearby cornfield, at about the same time each evening. This has been going on for most of the past summer. On 12th October, a hedgehog was found in hibernation behind some sheets of armoured glass propped against a fence in my garden. This is most probably the same animal as has been such a constant visitor all during the summer. R.Harris.

The Juniper in County Durham. In the July number of the *Vasculum* (Vol. L. No. 2.), we discussed the disappearance of the Eared Willow, **Salix aurita**, from many of its old haunts. Something of the same sort of thing seems to be happening in the case of the Juniper, **Juniperus communis**.

This plant, which is one of our three native conifers, has rather special habitat preferences, and has never been anything like so widely distributed as **Salix aurita**. Nevertheless, there are several places where it still flourishes. It used to occur in the alder, willow, birch wood along the South Burn on Waldrige Fell, but it disappeared from here in the 1920's. It lingered on in Wanister Bog, however, until much later. Indeed, the last survivor held out until the severe winter in the early months of 1947. It was then that the severe frosts finally killed off the one remaining bush that had lingered there for over 20 years. The plant must have been very common on the Fell at one time, because the insects associated with Juniper were all there right up to its final demise.

Other groups of junipers that have dwindled of late are those along the Waskerley Beck, north west of Tunstall Reservoir, and along the Hisehope Burn, south west of Birkhot Farm. The latter colony was very extensive at one time, so that this part of the Hisehope valley is still often called Juniper Valley. There are still many plants, but all are very old and dying. No new plants are in evidence. A similar situation has developed in the woods between Buttfield and Tow Law, where only occasional plants are now to be seen.

Of course, there are some places in the county where it still flourishes. Thus it occurs along most of the burns from Bolihope to Stanhope. There are still flourishing colonies at the head of the Wear valley and on Widdvbank Fell.

A rather different habitat for it is on the sea cliffs, where the Magnesian Limestone outcrops. It used to occur at the mouth of Easington Dene, but it has either gone altogether or is dying out here, for we could not find it the last time we were there. It is still in Castle Eden Dene, and the prostrate form clings to the cliff faces in small but consistent numbers, all the way from Crimdon Dene right up to the Blackhalls. Much has disappeared here, during recent years, due to trampling by holiday makers and picnickers in the Crimdon Dene area. However, the remaining plants seem quite healthy and are even spreading in some places.

Experiments are at present being carried out in the Upper Teesdale Nature Reserve, by the Nature Conservancy, on regeneration of Juniper. These are with special reference to the tremendous thickets along the Yorkshire side of the Tees, on Holwick Fell and Cronkley Fell. It is possible that these experiments may provide a clue to the reasons behind its gradual disappearance. T.C.D.

RECORDS.

INSECTS.

LEPIDOPTERA—BUTTERFLIES AND MOTHS

Xanthorhoe spadicearia Schiff. The Red Twin-spot Carpet. Occurs on the moors in Northumberland.	67
Xanthorhoe designata Hufn. The Flame Carpet. Common everywhere round Riding Mill.	67
Colostygia olivata Schiff. Very occasional near Riding Mill. Last seen in 1953.	67
Colostygia safcata Hubn. Beech Green Carpet. Occurs on moors in the Riding Mill district and has been take in the garden.	67
Larentia clavaria Haw. The Mallow. Occurs sparingly near Riding Mill.	67
Vernisia cambrica Curt. Welsh Wave. Well distributed in the Riding Mill district. F. W. Gardner.	67

FLOWERING PLANTS AND FERNS.

Saxifraga granulata L. Meadow saxifrage. By the Coquet, opposite Sharperton (67), at Barrowburn (68) and Blindburn (68). By the Brearnish between Linhope and Ainhammoor (68). Spindlestone Crags (68). E. bank of the Till near Tiptoe (68). Boathouse plantation, near Coldstream (68).	67, 68
Polygonum bistorta L. Snake-root, Easter-ledges, "Bistort." In Allendale at Plankey and also near Ridley.	67
Apium inundatum (L.) Rchb. f. Reservoir near Hinds Shield, N. of Haydon Bridge (67). Marshy ground by the Swinhoe Burn, S. of Seahouses (68).	67, 68
Dianthus deltoides L. Maiden Pink. By the Coquet opposite Sharperton (67) and near Barrowburn (68). On a basaltic outcrop by the side of the road between Barnburgh and Budle. (68).	67, 68
Parapholis strigosa (Dum.) C. E. Hubbard. Sea Hard Grass. Salt-marsh on the S. bank of the Blyth, near Cowpen (67). Saltmarsh near the mouth of the Swinhoe Burn, S. of Seahouses (68). Salt-marsh near the mouth of the Ross Low (68). Salt-marsh around the mouth of the Black Low, near Fenham (68).	67, 68
Puccinillia distans (L.) Parl. Reflexed Poa. Salt-marsh on the S. bank of the Blyth, near Cowpen (67). Around Elm Bush, S. of Amble (67). Salt-marsh around the mouth of the Long Nanny (68). Salt-marsh near the mouth of the Swinhoe Burn, S. of Seahouses (68). Around the mouth of the North Low, near Goswick (68). Salt-marsh near the mouth of the Ross Low (68).	67, 68
Listera cordata (L.) R.Br. Lesser Twatblade. On the moor by the Whitfield-Alston road, near Willyshaw Rigg, at about 1550 ft.	67
Nuphar lutea (L.) Sm. Yellow Water-lily, Brandy-bottle. Greenlee Lough (67). Bolam Lake (67). Kimmer Lough (68). Pond at Howick (68). Swinhoe Lakes (68).	67, 68
Gentianella amarella (L.) H.Sm. On the links at Bamburgh. Near an old quarry pond between Hetton Steads and Hetton North Farm, S. of Lowick.	68
Gentianella campestris (L.) Sm. Near the junction of the Lewis Burn with the Akenshaw Burn, in Kielder Forest. G. A. and M. Swan	67

THE VASCULUM

DECEMBER 1965

Vol L No 4

Price 5/per annum, post free

Edited by
J. W. HESLOP HARRISON, D.Sc., F.R.S.
UNIVERSITY OF NEWCASTLE UPON TYNE
and
T. C. DUNN, B.Sc.
THE POPLARS, CHESTER-LE-STREET

BY THE WAY

Secretaries of Societies and other contributors to "The Vasculum" should send their notes to the Editors before 20th March. 1966.

LATEST TEESDALE NEWS.

The Tees Valley and Cleveland Water Board have decided to seek permission to construct a dam at Cauldron Snout, for the formation of a reservoir in the Cow Green area. This is in spite of objections from the Northumberland and Durham Naturalists' Trust, the Botanical Society of the British Isles, The Nature Conservancy, the Ramblers' Association, and many other bodies. So the fight is on. The Hon. Samuel C. Silkin, Q.C., has been retained to present the case of naturalists, whilst many leading scientists and engineers have offered to act as witnesses at the public enquiry, which is now certain to take place. All this will require much money. If you wish to continue to see your Upper Teesdale with its natural attractions unchanged by the hand of man, and you have not yet given anything towards the Upper Teesdale Defence Fund, please do so now. Send your donations to The Treasurer, B.S.B.I., c/o British Museum (Nat. Hist.), Cromwell Road, South Kensington, London, S.W.7.

BIRDS OF PREY ENQUIRY.

In his report to the British Trust for Ornithology, "An enquiry into the recent breeding status of some of the smaller birds of prey and crows in Britain," (Bird Study Volume 12, pp. 196-221), Mr. Ian Prestt of the Nature Conservancy, states that information submitted would indicate that the Sparrow Hawk and Barn Owl have decreased widely, the Buzzard and Kestrel less so, and the Tawny Owl only locally, whilst the crows generally have increased.

The decreases in the birds of prey were most evident in eastern England, and the majority of the contributors attributed this, in

the main, to the increased use of toxic chemicals, except in the case of the Buzzard and Merlin, which were connected with myxomatosis and loss of habitat respectively. The increase in the number of the crows is considered to be part of a long-term trend caused by a decrease in the activities connected with game preservation.

The enquiry into the status of the Sparrow Hawk is being continued on a permanent basis, whilst a National Survey of the Kestrel is expected to be repeated in 1967.

Reports of the breeding or occurrence of either of these species in Northumberland and Durham would be welcomed by:—

Mr. C. J. Gent,
30, Berkeley Square,
Gosforth,
Newcastle upon Tyne, 3.

THE SOCIETIES.

NORTHERN NATURALISTS' UNION.

The 1965 Autumn Meeting was held in Darlington by the kind invitation of the Darlington and Teesdale Naturalists' Field Club, in the college of Further Education, on October 16th.

Some 60-70 members and friends were welcomed by the President, who explained the general arrangements and commented on his exhibit. This consisted of two galls on Black Poplar twigs from Waldrige Fell. They were those of **Pemphigus bursarius** L. and **Pemphigus spiratheca** Pass. Mrs. Chapman then explained an exhibit produced as a result of a pilot survey, sponsored by Bowes Museum, of farming methods in Middle Teesdale. Miss Radford, of the Darlington Teachers' Training College, had placed on exhibition several old and valuable books from the library of the Darlington and Teesdale Naturalists' Field Club, and also specimens of flowers, seaweeds and molluscs, gathered by one of her student teachers. The President of the Darlington Club said a few words about a map of a pond survey recently carried out by the club members. Finally, Dr. M. E. Bradshaw spoke about the Naturalists' Trust with special reference to Upper Teesdale and the reservoir threat. Other exhibits were postage stamps with pictures of plants and animals by Mrs. Gibby, fresh Fungi by Mrs. Moses, recent Roman finds at Catterick by Miss Riley and some very good colour transparencies of natural history subjects by Dr. Todd.

Tea followed in the same room, and then we all adjourned to the lecture room to see three films made by Mr. J. S. C. Monro of the Darlington Society.

The first film was made in the winter of 1963. It began with pictures of autumn berries in woodland and hedgerow, with birds like the thrush, waxwing, blackbird, etc. eating them. This was followed by some beautiful snow scenes with the birds feeding round a barley stack.

The second film was taken at Witton le Wear Nature Reserve. It showed some unique sequences of the Little Ringed Plover. Three birds apparently owned one nest between them, with rather strange results when one of the eggs hatched. In this same nature reserve, some very fine pictures of insects and flowers had also been taken.

The last film was mainly about birds at such well known places as Teesmouth, Seaton Sluice and the Solway. Here too, were some shots of the Grey Seals on the Fame Islands.

The proceedings ended with thanks to the members of the Darlington Club for their kindness and hospitality. These were moved by our President, Mr. J. Thompson, and seconded by Mr. E. Burns. Finally, Mr. Dunn took the opportunity to appeal to the members present for copy for "The Vasculum."

BIRTLEY NATURAL HISTORY SOCIETY.

The winter programme of indoor meetings began on September 15th, when Mr. L. Hird showed many colour transparencies of wild flowers. This was followed by Miss M. Gates, who talked about a June holiday in the Gavarnie district of the Pyrenees. The many slides of flowers, mostly Alpines, were indeed beautiful. On October 19th. Dr. Gibby talked about Pembrokeshire, its people, buildings and scenery, then on November 2nd we had a very interesting lecture from Mr. D. Hall on lichens, with many specimens to illustrate the points made. On November 16th, Mr. G. Stansfield gave his impressions of the U.S.A., with particular reference to its museums and nature reserves.

Meanwhile, outdoor meetings have continued on the first Sunday of the month. A very enjoyable outing to Salter's Gate and the Waskerley Valley took place in October, in beautiful weather. Some of the results have been reported in the previous part of this journal. The outing to Edmundbyers in November did not strike such pleasant weather but a few enthusiasts turned up for a very enjoyable expedition by motor car.

NOTES AND RECORDS

NOTES.

Bird Migration, 1965. A Chiffchaff was in song near Mitford (v.c. 67) on April 3rd during the warm spell at the beginning of the month. Colder weather followed and it was not until the 24th that another was heard in Gosforth Park (v.c. 67) where a Willow Warbler was also singing.

Several Whitethroats were in song in the Riding Mill (v.c. 67) area on May 1st when Willow Warblers were heard only in sheltered spots. A Cuckoo was heard and single Swallows were seen at Riding Mill and Wylam. Willow Warblers were present in numbers in Gosforth Park on May 5th, when four Sedge Warblers were singing in the reedbeds. Two Swallows and four Sand Martins were flying over the lake, and a Common Sandpiper was seen. Swifts (20) were circling over their breeding site in Gosforth on the 10th.

Swifts were last heard near Gosforth breeding site on August Swallows were still well distributed in South Northumberland on 25th, but the majority had departed by the following weekend (none were observed, apart from a couple in the Stamfordham area.

On October 10th, shortly after midday, six Fieldfares were seen flying south near Bolam (v.c. 67), and later in the afternoon a party of 12 Redwings and 2 Fieldfares were observed flying south-west near Todburn (v.c. 67), a small party of Fieldfares being subsequently disturbed from some low trees. On the afternoon of the 17th, two flocks of Fieldfares (150+ and 200+) came in from the sea and passed to the south of Holy Island. A Waxwing was seen on the Beal shore.

From the following records there would seem to have been an immigration of Kestrels into the area this Autumn:—

One-Bebside, August 8th.
One -Felling, September 5th.
One -Riding Mill, September 18th.
Two-Wylam, September 18th.
Two -Seaton Burn, September 19th.
One -St. John's Chapel, September 26th
One -Westerhope, October 3rd.

Some Butterfly Notes of Sixty Years ago. Recently I came across some butterfly notes that were probably written in 1905 or 1906. Here are the observations recorded about our three fritillaries:—

“**Clossiana selene** Schiff., Small Pearl-bordered Fritillary.

Abundant in a restricted area a mile or two from Birtley, less abundant near Urpeth and in south-west Northumberland. In the first locality, the larvae are readily found. Hibernated larvae were just moving on April 20th, 1902. Full grown larvae June 19th and 27th, and a larva which produced ichneumonids 2nd week in July. Larvae full grown last week of June 1903, June 25th 1905.

Imagines—June 20th 1902, July 6th 1903, June 30th 1904, we did not look for the imagines in 1905.

Buckler states that this larva does not feed in the sun. This is not the case as it does so very freely both when young and when full grown. It prefers early morning sunshine. It is not so readily found as the larva of the next species as it is more difficult to see.

Clossiana euphrosyne L., Large Pearl-bordered Fritillary.

Equally abundant with **C. selene** at the first locality above named and the last, but not at Urpeth. The larva hibernates in a later instar than **C. selene**. Larvae have been found in abundance in Easter week every year since 1901. The larvae feed in the early morning and rest exposed until 3 o'clock in the afternoon, when they retire into the crinkled dead leaves. I found larvae crawling over snow in April 1905. I found a pupa attached to a bramble stem at the junction of a leaf and the stem in June 1901. Imagines—June 6th-20th, 1902, June 19th-30th, 1903, June 5th-30th, 1904. Only belated females last week in June 1905. I have counted 60 of these insects together in one nook and have seen a collector with 7 in his net at once.

Argynnis aglaia L., Dark Green Fritillary.

Occurs fairly freely with the above and also at Satley, Stanhope and one or two other places. I have had some 60 of the larvae of this insect at once. (I liberated a number of the resulting imagines). The larva feeds in a ravenous manner early in the day and may be found lying exposed later. It is also to be beaten from bracken, which it ascends to bask on, in the afternoon. The larvae found a mile or two from Birtley are not normal as they lack the yellow dorsal stripes. They are of a fine velvety black colour with red dots along the spiracular line. In this they resemble a Spanish form described by Dr. Chapman in the Entomologists' Record. The pupae are to be found in a tent which the larvae spin on the food plant.

I got larvae (small) June 10th, 1902 and also (in penultimate instar) in 1st week in July 1902. Also in July 1903. The early growth of the undergrowth prevented the search for larvae in 1904 and 1905.

Imagines every year from last week in July to end of August."

All three butterflies are rare in Durham now. Even where they still exist, and some of the old colonies recorded above are still active, one would be delighted now to see 10 butterflies together. It must have been an entomologist's paradise to see 60 at once. *A. aglaia* seems to have no regular, settled colonies in the county now. I have seen odd specimens here and there but never more than 3 or 4 in one day. Can any of our butterfly workers supply any more hopeful, up-to-date records? T.C.D. and J.W.H.H.

"**Guide to Durham.**" The following list of plants was recorded at some time between 1850 and 1860 by J. R. Boyle, F.S.A. of Chester-le-Street. The page is hand-written, of course, and entitled "Guide to Durham." It seems to be merely the first page of a much more lengthy document. Botanists will note several differences between the position then and what it is now. At the same time, we wish to point out that we consider it quite remarkable that such an erudite naturalist, as Mr. Boyle appears to have been, should have lived in Chester-le-Street 100 years ago, and have died without leaving any other trace of his activities. Here are some of his records:—

Helleborus foetidus	Stinking Hellebore	Houghton-le-Spring.
Berberis vulgaris	Barberry	Pictree, Chester-le-Street.
Lepidium latifolium	Broad-leaved Pepperwort	nr. Durham Cathedral.
Nasturtium sylvestris	Creeping Yellowcress.	nr. Finchale.
Hesperis matronalis	Dame's Violet.	Chester-le-Street.
Silene noctiflora	Night-flowering Catchfly	Gateshead and Bishop Middleham
Spergularia rubra	Lesser Sea Sandwort. Spurrey	Gateshead Fell. Durham
Stellaria nemorum	Wood Stitchwort.	Ravensworth
Geranium phleum	Dusky Cranesbill.	Lumley Woods..
Trifolium arvense	Haresfoot Trefoil	Gateshead. Fulwell..
Ornithopus perpusillus.	Common Bird's foot	Very rare . Urpeth.
Rosa inodora.	Scentless Rose.	Ravensworth Woods.
Ribes alpinum.	Tasteless Mountain Currant	Chester-le-Street.
Oenanthe phellandrium.	Fine-leaved Water Dropwort	Cocken.
Solanum nigrum*	Black Nighshade.	Chester-le-Street.
Limosella aquatica.	Common Mudwort.	nr. Cocken.
Verbena officinalis	Vlrvain	Chester-le-Street.
Carex pendula.	Great Pendulous Sedge.	Beamish and Urpeth Woods.
Lastrea spinulosa	Narrow Shield Fern.	RARE . Waldrige Fell
Thalictrum flavum	Yellow Meadow Rue..	Lamesley

The Editors would be most pleased to receive comments. T.C.D.

Do Sparrows love their Neighbours? While walking to my garden on November 25th 1965, I saw the following birds: 6 Waxwings, 2 Bullfinches: 8 Reed Buntings and 1 Redwing. These were all near the River Derwent at Swalwell. We do not see waxwings so low down at Swalwell unless it is an invasion year.

While watching the first two waxwings, from the "Keelmen's Bridge" near Swalwell main street, I noticed a large number of sparrows mobbing and screaming on the side of a garage. On investigating the matter more closely, I found one of the sparrows trapped between two pieces of loose tin sheeting on top of the garage. I released the bird and I am satisfied that these sparrows were trying to help the trapped bird, by giving it advice and screaming to attract other birds to help them. L. P. Hird.

Waxwings on Holy Island. I was on a field study outing (birds) on 23rd October on Holy Island, and saw the usual Redshanks, Dunlin, Sanderlings, Mute Swans and many Shelducks. We heard a waxwing but did not see it at first. Later, a flock was spotted in the hawthorn hedge, and although there were about 40 of us, they gave a delightful display. There were 22 birds and they flew around so that the camera and cine enthusiasts had a real field day. They are not at all shy, and although an R.A.F. rescue helicopter flew over, they were quite unperturbed and simply moved to another bush. This is the largest number I have been fortunate enough to see at one time. Hilda Johnson.

Is this a Waxwing Year? According to Mr. Hird's comment above, this is a year of abundance for waxwings. This is supported by Miss Johnson's observation, and by several other verbal reports that have come to me during the past few weeks.

Thus I had news from Mr. R. Lowe of Waxwings at Sunderland on November 8th, and again of several flocks of up to 20 birds in the same town on November 13th and 14th. Mr. E. Burns noted one on a hedge at Maiden Law on November 21st, whilst two of my sixth form boys, D. Reay and P. Hopson, reported six in gardens in the Council Estate at Chester-le-Street on November 24th.

It would appear that Mr. Hird's contention is fully justified. T.C.D.

RECORDS.

INSECTS.

LEPIDOPTERA—BUTTERFLIES AND MOTHS

Oporinia filigrammaria H-S. The Small Autumnal Moth.	66, 67, 68
To the north on the Cheviots (68), where it is locally plentiful. To the south just across the Durham border (66) but only taken sparingly. Oporinias come to light in the garden in August (67) and I think they are this species, though they can scarcely have fed on heather. They lack the white ground colour of the moorland type.	
Oporinia autumnata Borkh. Large Autumnal Carpet.	67
Common at Riding Mill.	
Oporinia christyi Prout. Christy's Carpet.	67
Present round Riding Mill, but probably not common.	
Oporinia dilutata Schiff. November Carpet.	67
Very common all round Riding Mill.	
Asthenia albulata Hufn. White Waved Carpet.	67
Met with only occasionally round Riding Mill.	
Hydrelia flammeolaria Hufn. Yellow Waved Carpet.	67
Occurs sparingly at Riding Mill.	
Entephria cacsiaata Schiff. Grey Mountain Carpet.	67
Common wherever heather occurs.	
Epirrhoe rivata Hubn. Wood Carpet.	67
Several at Riding Mill in 1936. Only occasional since.	
Epirrhoe alternata Mull. Common Bedstraw Carpet.	67
Common at Riding Mill.	
Epirrhoe tristata L. Small Argem-and-sable.	67
Common at Riding Mill.	
Mesolauca albicillata L. Beautiful Carpet.	67
Fairly common at Riding Mill	
Lyncometra ocellata L. Purple Barred Carpet.	67
Fairly common at Riding Mill.	
Plemyria bicolorata Hufn. Blue-bordered Carpet.	67
Infrequent at Riding Mill F. W. Gardner.	

BIRDS

- Streptopelia decaocto.** Collared Turtle Dove. 67
 One visited my garden at Gosforth on October 3rd.
- Athene noctua.** Little Owl. 67
 Two near Berwick Hill July 16th. Mr. R. Clementson informs me it is present at Bebside where he suspects it bred this year.
- Tyto alba.** Barn Owl. 67
 Mr. R. Clementson has a report on one frequenting the Bedlington area.
 C. J. Gent.

FLOWERING PLANTS AND FERNS.

- Juniperus communis** L. Juniper. 67
 By roadside near Harlow Bower (Whitfield). E. bank of the E. Alien near Old Town. Frequent along the Rowley Burn in Hexhamshire. On the lower, northern slopes of Tosson Hill, near Wolfershiel. Very abundant by the lower part of the Holystone Burn. Old quarry by Oakeydean Burn, E. Allendale.
- Adoxa moschatellina** L. Moschatel, Townhall Clock 68
 At approximately 700 ft. by the Breamish below Linhope, together with **Circaea lutetiana***
- Valerianella locusta** (L.) Betcke. Lamb's Lettuce, Corn Salad. 68
 Scremerston Shore. Very common around Waren Mill.
- Eupatorium cannabinum** L. Hemp Agrimony. 67, 68
 By the Wansbeck near Stakeford (67). Waren Mill (68). Newham Bog (68).
- Schoenus nigricans** L. Black Bog-rush. 68
 Newham Bog.
- Eicocharis pauciflora.** (Lightf.) Link. Few-flowered Spike-rush. 67, 68
 By the edge of Broomlee Lough (67). Links at Bamburgh (68). Newham Bog (68).
- Koeleria gracilis** Pers. Crested Hair-grass. 68
 The Snook, S. of Seahouses. Around Goswick.
- Anthriscus neglecta** Boiss and Rent. Bur Chervil. 68
 By roadside near the Snook, S. of Seahouses.
- Neottia nidus-avis** (L.) L. C. Rich. Bird's-nest Orchid. 67
 Woods on E. bank of the E. Allen near Old Town.
- Phalaris canariensis** L. Canary Grass. 68
 In an old quarry by the side of the Ainwick-Rothbury road, a short distance out of Ainwick.
- Saponaria officinalis** L. Soapwort, Bouncing Bett. 67
 On waste ground at Cowpen.
- Trientalis europaea** L. Chickweed Winter-green. 67, 68
 Near Blackaburn Lough (67). Near Kimmer Lough (68).
- Melampyrum pratense** L. Common Cow-wheat. 67
 Old quarry by Oakeydean Burn, E. Allendale. In a wood near High Carritheth, S. of Tarsel.
- Lycopodium clavatum** L. Stag's-horn Moss, Common Clubmoss. 67
 Rather abundant by the upper part of the Rowley Burn, and the lower part of Linn Burn, in Hexhamshire. By the Beldon Burn, not far from Beldon Shields. Old quarry by Oakeydean Burn, E. Allendale. Stiddlehill Common, N. of Great Wanney Crag.
- Lycopodium selago** L. Fir Clubmoss. 66, 67, 68
 On Dead Stones and also on the col between the latter and Bumhope Seat (66). Rather abundant on Sewingshields Crags and on the crags at Crag Lough (67). Echo Crags above Catcleugh (67). Stiddlehill Common, N. of Wanney Crag (67). In Henhole at approximately 2100 ft. (68).

Asplenium adiantum-nigrum L. Black Spleenwort.	68
On the railway bridge near Whinney Hill (Rock). On a wall near Easington (Belford). On a wall by the road between Wooler and Humbleton Buildings.	
Vaccinium uliginosum L. Bog Whortleberry.	67
Stiddlehill Common, N. of Great Wanney Crag.	
Aethusa cynapium L. Fool's Parsley.	68
Waste ground near Warkwarth Station	
Epipactis heleborine (L.) Crantz. Broad Heleborine.	67, 68
Banks of the Alien at Staward (67). Wood near Langley (67). Near old lead workings, S. of Acomb Fell (67). Wood at Woolsington (67). Wood near Bridge of Ain station (68). Wood by the Brunton Burn, near Fallosen (68).	
Mentha rotundifolia (L.) Huds. Apple-scented Mint.	68
By the side of the road over Ainwick Moor, near Oxen Wood. Waste ground at Alnmouth station.	
Phyllitis scolopendrium (L.) Newm. Hart's Tongue Fern.	67, 68
Stated by Baker and Tate to be "Very rare in Cheviotland." By the Alien near Staward and, in great quantity, in Moralee Wood (67). By the Honeycrook Burn, near Mill House, W. of Haydon Bridge (67). By the Wansbeck at Chapel Wood (67). In an old mine shaft, S. of Hareshaw Head, on Corsenside Common (67). On walls near Netherwitton Hall (67). On a limestone outcrop on the Splaw Burn, S. of Simonside (67). On a wall in Cragside grounds (68). By a stream formed by the union of the Grange Burn and the Tyelaw Burn, near Warkworth station (68). On a wall near Adderstone Hall (Lucker) (68). On the railway bridge near Whinney Hill Rock (68). On a wall near Proctors Stead (Dunstan) (68). On a wall at Fleetham (68). In a sandstone quarry at Scremerston (68). At Roughinglinn (68). In an old quarry near Guyzance (68).	
Artemisia maritima L. Sea Wormwood.	68
Salt-marsh near the mouth of the Brunton Burn, N. of Newton.	
Chrysosplenium alternifolium L. Alternate-leaved Golden Saxifrage.	67,68, 80
Woods near Whitfield weir (67). Woods on the N. bank of the S. Tyne near Allerwash House (67). Woods on the S. side of the Coquet near Pauperhaugh (67). Rugley Wood near Ainwick (68). Woods by the Ain near Little Ryle (68). Wood S.E. of Powburn (68). On the banks of the Till near Chillingham (68). By the stream just below Sourhope (80).	
Carex curta L. White Sedge.	68
In Hen Hole, at approximately 2350 ft., with C. rostrata , both fruiting.	
Stellaria nemorum L. Wood Stitchwort, Wood Chickweed.	67, 68
Woods in E. Allendale near Old Town and in Allendale at Staward and Plankey (67). By the Tyne near Stocksfield, Eitringham, Ovington, and Wylam (67). By the Coquet, 1 mile W. of Warkworth (68). By the Tweec at Boathouse Plantation, near Coldstream (68).	
Sparganium simplex Huds. Unbranched Bur-reed.	67, 68
In Crag Lough and in a stream entering the N.E. corner of Greenlec Lough (67). The larger Sweethope Lough (67). Small pond, S. of Linn heads, near Ray (67). In the Wansbeck at Chapel Wood (67). Quarry pond between Hetton Steads and Hetton North Farm, S. of Lowick (68).	
Sparganium minimum (Hartm.) Fr. Small Bur-reed.	67, 68
In the reservoir near Hinds Shield, N. of Haydon Bridge (67). Swinhoe Lakes G.A. and M.Swan	