

THE VASCULUM

APRIL 1970

Vol. LV. No. 1.

Price 7/6 per annum, post free.

Edited by
T. C. DUNN, B.Sc.
THE POPLARS, CHESTER-LE-STREET

BY THE WAY

Secretaries of Societies and other contributors to "The Vasculum" are invited to send their notes to the Editor before 15th June, 1970.

HARRISON MEMORIAL LECTURE

Will all members please note that the Memorial Lecture will again coincide with the autumn meeting on October 24th. It will be given by Dr. Eggeling of the Nature Conservancy for Scotland. This year it will be at Darlington, with the Darlington and Teesdale Naturalists' Field Club kindly acting as host. Please keep this date clear. There must be a good turn out, for the lecturer is coming a long distance.

POLLUTION

With the establishment of the Royal Commission on Environmental Pollution under the direction of that eminent ecologist Sir Eric Ashby, the Government has taken a step in the right direction. What is more, this is a standing commission, not one of the usual kind which reports and then goes out of existence. What can we hope from it?

As far as we can judge, the commission forms the teeth of the anti-pollution machinery. It will be able to initiate research into limiting levels of pollution, to report on bad practices and even make statements on its own views. All this looks very impressive to naturalists who have been airing their views on such things for decades without seeing very much happen. If the Government is sincere in its intentions then we should see something to the betterment of our countryside very quickly. Not that we have not noticed some changes for the better over the last 25 years. With

the spread of smokeless fuels and the electrification of many coal burning factories, we have seen some improvement in Northumberland and Durham in the state of the atmosphere. The River Wear above Fatfield has been cleaned up to some extent. We remember only recently when very few fish could be seen in the river below Witton-le-Wear. Now the Chester-le-Street Angling Club is a flourishing society which uses that part of the river which was completely sterile at one time. The rapid closure of many of the western collieries has helped with the clean-up. The River Tyne, however, remains as much a stinking disgrace as ever it did.

But what of the other side of the penny? The cement works in Upper Weardale is a terrible blot. No one who remembers that part of the dale only a few years ago can possibly fail to recognise that in its siting a terrible mistake was made. The surface pollution surrounding it and the suppression of the vegetation under a pall of grey dust was never envisaged. Thermal pollution of our rivers is also on the increase. Although there are regulations against turning raw sewage and chemical effluent into streams and these seem to have some effect, there does not seem to be such strict control of hot water. This can be just as bad, for aquatic organisms usually have a very narrow range of tolerance to temperature variations.

One of the areas which must be looked into very much more closely by the commission is the pollution of the soil. The dangers of pesticides have long been known to naturalists but modern farming methods have demanded them. As a result some species have disappeared altogether whilst others are on the way out. The excuses up to now have been for progress and the nation's economy. Similar motives are said to be behind the more intensive use of chemical fertilisers. The secondary effects of loss of soil crumb and excessive amounts of chemicals in the water draining off farm land were never foreseen. These mistakes must be rectified. We look to Sir Eric Ashby's committee to act quickly and responsibly.

EUROPEAN CONSERVATION YEAR

Just in case you have not noticed the publicity, this is European Conservation Year—E.C.Y. 1970 for short. Its aim is to bring the conservation movement to the notice of everyone, town and country dweller alike. For this purpose, bodies connected with conservation and the countryside have organised activities of various kinds throughout the year.

A very attractive programme of events to take place in the north-east has been produced by the Naturalists' Trust of Northumberland and Durham. This opens with an exhibition in the Hancock Muesum in March and goes on to list lectures, symposia, teach-ins, and organised country walks throughout the rest of the

year. Anyone interested will be able to obtain further information from the Hancock Museum.

A second programme and calendar of events comes from the Countryside Commission, 1, Cambridge Gate, Regent's Park, London N.W.1. It covers activities over the whole country and will provide something extra of interest on your holidays.

What can we, as naturalists, do locally? It has been suggested that we could make this a special year for cameras instead of collecting equipment. Put away your net or your polythene bag for the whole of this year. Use your camera wherever possible and bring the results along to the October meeting of the Northern Naturalists' Union at Darlington. This is, as yet, only a suggestion but we would be most pleased to hear from any member who would be prepared to support such an idea and contribute to the showing of transparencies after the main lecture. Are you able and willing?

THE SOCIETIES

NORTHERN NATURALISTS' UNION

The 46th Annual Meeting of the Union was held in the Hancock Museum on 21st March 1970.

Dr. J. L. Crosby, the president was in the Chair and opened the meeting by asking Mrs. Gibby to read the minutes of the last Annual General Meeting. This was followed by reports from the Treasurer, Field Secretary and General Secretary, all of which were accepted. In her report, Mrs. Gibby announced her intention of retiring at the end of the current year because of medical advice. Will members please note that nominations for a new secretary to take her place can be received at any time from now onwards.

At this point, Dr. W. A. Clark having been elected President for 1970-71, took the Chair and continued with the business meeting. The remaining officers were elected. Under any other business, the increased representation, by one extra member on Council, of all constituent societies of the Union was proposed by the Consett Club and eventually accepted. A letter from Miss J. Scurfield of the Northumberland and Durham Naturalists' Trust was read out. She asked for information and help concerning exceptionally floristic and faunistic roadside verges in Durham County. Will any member with such information please notify the Editor, who will form the necessary link with Miss Scurfield. The object is to try to conserve important stretches by limiting mowing, spraying and other harmful practices carried out by the County Surveyor's Department.

Dr. Crosby then gave his lecture entitled "A Naturalist in Sierra Leone," illustrated throughout by an excellent series of

slides. The striking thing on arrival in Freetown is the brilliance of the colours of the peoples' dress, the buildings and the cultivated flowers such as Hibiscus, Bougainvillea and Spider Lily. By contrast the natural rain forest vegetation is rather dull.

The mangrove swamps are unpleasant places occupying much of the mud flats along the rivers, two species of mangrove were noted, *Laguna* and *Rhizophora racemosa*, the latter occurring in at least two main forms with many hybrids. Next we saw a series of slides dealing with the plants producing foodstuffs. These were such species as the Coconut Palm, Oil Palm (with dozens of weaver birds' nests). Mangos, Bananas, Pomegranates and Monkey Nuts. The birds photographed were a grey swallow, cattle egret and vulture (here protected because of its very useful scavenging habits). These were all seen in the villages and a number of slides of the human activities in the villages and in Freetown were also shown. Lastly, the countryside was seen, first in panoramic view, then in close up views of the tropical forest. Agriculture is primitive. Part of the forest is burnt off and then kasava planted between the stumps. When it is harvested the land is abandoned to revert to forest whilst another part is treated in the same fashion. Thus all the forest is really secondary growth as a follow up to kasava farming. The only industry seen was digging for diamonds. Here again, the methods were by no means sophisticated. The surface soil was simply dug off until the underlying gravel was reached. This was then sieved in water by hand and the diamonds picked out.

After a graceful vote of thanks from Mrs. P. Moses we adjourned to the nearby laboratory for tea served by Miss Vincent and the girls of Chester-le-Street Grammar School. Here also were the exhibits, consisting in the main of Mr. Cooke's spring flowers. Mr. Hird showed a varied collection of pressed flowers whilst Mrs. Gibby put out a collection of postage stamps showing pictures of butterflies and moths, together with literature from the B.S.B.L, on conservation, field studies centres etc.

BIRTLEY AND CHESTER-LE-STREET NATURAL HISTORY SOCIETY

The lecture programme was continued throughout the winter with great success. The titles were very varied but always of interest. The Annual Dinner was held in the Lambton Arms on February 3rd, when a very pleasant evening was enjoyed by all. Indeed, the gossip about things natural history and things not so natural went on for some considerable time afterwards. The season finished on March 10th with the Annual General Meeting and Conversazione. Once more the treasurer reported that the funds were in a healthy state and the forthcoming summer outings were discussed. After the election of officers a number of members' slides were shown, each member commenting on his own. There was tremendous

variety, a very high standard of photography and many questions concerning the identity and distribution of the many species of plants and animals.

The monthly outings since Christmas have mainly been concerned with Brasside Ponds, where some vandalism and illegal shooting have been observed. The Society intends to make itself more active in the district and liaise with the Naturalists' Trust in wardening the area which is a site of special scientific interest.

DARLINGTON AND TEESDALE NATURALISTS' FIELD CLUB

The Annual Report for 1969 shows that the total number of meetings during the year was 70, surely an ambitious programme for any society. Twenty nine of these were indoor lectures during the winter, nine were local winter walks and the remainder were summer outings. A few favourite places were re-visited such as Ridge Lane, Lastingham, Dyance Wood and Gunnerside, whilst new ones explored for the first time were Bass Rock, Rosedale and White Kirkley.

The winter programme consisted of a wide variety of talks and lectures. The Annual Conversazione was held on 8th March when Mr. Vernon Adkin of Burley in Wharfedale showed colourful slides of "Birds and Flowers of the Northumberland Coast." Many of these were outstanding photographs of the wild life on the Bass Rock, which is, of course, some distance from Northumberland. On October 14th, we had the pleasure of meeting Major S. Langton, Eastern Region Organiser for the World Wildlife Fund. He appealed for the formation, in Darlington, of a local supporters' group of voluntary workers to organise fund-raising events. Two films were shown. On this occasion many in the audience made purchases of W.W.F. gifts and a collection was taken for the fund. The following month, on 25th November, the club joined, for the first time, with the Royal Society for the Protection of Birds, to show a programme of three films at the College of Technology. The films, introduced by Mr. T. F. Gunton of the R.S.P.B. were "Sea Eagles for Fair Isle", "Puffins Come Home", and "Where the Curlew Calls." The audience numbered 430, a tremendous success.

NOTES AND RECORDS

A further note about the hibernating Red Admiral. The butterfly found in Gosforth and reported in Vol. LIV, No. 4, which was brought into the Hancock Museum on 8th November 1969, was kept alive in a room lacking artificial heat and examined periodically. It died in the week ending 6th December 1969, after a spell of cold weather. The specimen was a female. There are not many authentic records of complete overwintering of this species in Britain A. G. Long.

Notes from Stanley. The Tanfield Ponds are now almost completely filled in with refuse and slag from a nearby pit-heap. Local bird records will shortly cease for this area.

Grey Wagtail: On October 16th, a single bird was observed in the Leazes Park, in the built up area of the centre of Newcastle.

Redwing: On October 13th, a party of 14 birds flew over the School of Agriculture building at Newcastle University.

Carrion Crow: Up to three birds frequented the Leazes Park, in the centre of Newcastle, during October.

Roe Deer: On January 9th, one was seen by the roadside at the Causey Arch Inn, near Stanley. Again on November 21st, three ran across the Stanley to Newcastle road at the same place. R. Marston Palmer.

More Painted Ladies in August. Regarding the note in the Vasculum, Vol. LIV, No. 3, about painted ladies in August, I saw several on August 8th (of the order of a dozen), at the head of Cross Gill (N.B. of Cross Fell) at about 1700 ft. There had been, and still were, strong winds. (I also found, in the same locality, a red balloon released in a competition from Manchester but failed to receive a prize after having returned the label!). Angus Lunn.

Bird Notes from Chester-le-Street During the winter months, on and around the River Wear at Chester-le-Street, there has been a considerable increase from the previous years, of the following birds :— Mute Swans, Mallards, Coots, Little Grebes, Wood Pigeons, Blackbirds and wrens.

On December 20th 1969, an all white bird which looked like an albino meadow pipit, was observed feeding on the river bank. E. Hall.

The Two Gold Spot moths, *Plusia festucae* L. and *P. graciis* Lempke. I notice in Vasculum Vol. LIII, 22, that Mr. Gent records for Kielder the Gold Spot, *Plusia festucae* L. Could this be the recently discovered *Plusia gracilis* Lempke? The "species" needs re-investigating. I took both in Berwickshire but *gracilis* was the more common, liking marshes inland, whereas I only got true *festucae* at the coast A. G. Long.

P. festucae L. is a common moth at Chester-le-Street, breeding, we believe, on semi-aquatic vegetation on the banks of the River Wear. We have never encountered *P. gracilis* Lem. Ed.

The Herald Moth *Scoliotperis x libatrix* L. About 50 specimens were seen in early February 1970, hibernating on the walls and roof of a cave at Moking Hurth, north-east of Langdon Beck Youth Hostel, Forest-in-Teesdale. Two specimens were sent to the Hancock Museum by Miss M. W. Whitley of Durham. The moths were from 20-300 feet in from the cave mouth and at the time had drops of condensed water on them. A. G. Long.

This is without doubt, one of the most interesting and important observations sent to us for many years. The Herald is well known for its habit of hibernating in the adult stage but where it carries out its hibernation has always been somewhat of a mystery. Here we have something concrete at last. Ed

RECORDS LEPIDOPTERA-BUTTERFLIES AND MOTHS

Correction:— *Crambus ericellus* Hubn. recorded for Spithope Burn 10th June 1967 (Vasculum LII, 21) proved to be the dark brown form of *Crambus pratellus* L. This correction I owe to Mr. E. C. Pelham-Clinton, Royal Scottish Museum. A. G. Long.
Hydraecia oculate L. Common Ear.

66

Hydraecia crinanensis Burr. Crinan Ear. 66
 Both the above species were taken in the light trap of the University Zoology Department's Field Station, Hollingside Lane, Durham. They were determined by examination of the genitalia. The status of *H. crinanensis* in Durham is unknown: South does not include Durham in its distribution. G. S. Robinson
 This is a first record for the county, the first we have had for many years. Ed.

HEMIPTERA-HETEROPTERA-WATER BUGS

Velia caprai Tarn. Water Cricket. 66, 67
 Immature specimens common in a slow moving stream near Beamish Hall (Grid. Ref. 45/25); immature specimens in small numbers the Kyo Burn, near Harperley (Grid. Ref. 45/15); two specimens taken in a woodland stream on 24th January 1970. This is a very early date for this species, no doubt brought out of hibernation by the warm weather at the time; Chopwell Wood: (66). Two specimens found in a water filled cart track at night; Cold Law Wood (Grid. Ref. 45/18); one sp. in cart track, Dipton Wood (Grid. Ref. 35/96); one sp. in ditch at the edge of a heather moor, Longhorsley Moor (Grid. Ref. 45/19); one sp. in ditch, Lordenshaw (Grid Ref. 45/09); very common in streams in Gosforth Park (Grid Ref. 45/27) (67).
Microvelia reticulata Bur. Minute Water-cricket. 67.
 Throckley ponds (Grid Ref. 45/16), two males and two females found at the edge of a pond. This species can easily be overlooked due to its small size, 2.0-2.5 mm in length.
Gerris thoracicus Schum. 67
 Throckley ponds (Grid Ref. 45/16) a single specimen; Dipton Wood (Grid Ref. 35/96) a single specimen in a cart track filled with water.
Gerris costal H. S. Moorland Pondskater. 67
 Dipton Wood (Grid Ref. 35/96), four specimens in a small pool.
Gerris odontogaster Zett. Toothed pondskater. 67
 Throckley Ponds (Grid Ref. 45/16), five specimens in a slow moving stream. Also at the edge of a pond Dipton Wood (Grid Ref. 35/96), a single specimen.
Nepa cinerea L. Water Scorpion. 67
 Throckley Ponds (Grid Ref. 45/16), one adult and two immature specimens on weed just below the surface of the water H. Eales.

MOLLUSCA — SNAILS AND SLUGS

Hydrobia ventrosa Mont. 66
 Teesmouth saltmarsh, 1968.
Potamopyrgus jenkinsi Smith. 66
 Witton-le-Wear Nature Reserve, 1968.
Carychium minimum Mull. 66
 Hawthorn Dene, 1968.
Phylia myosotis Drap. 66
 River Wear, North Hylton, 1968.
Lymnea truncatula Mull. 66
 Wolsingham reservoir: Beacon Hill, Easington, 1968
Lymnaea stagnalis L. 66
 Stillington, 1968.
Lymnaea auricularia L. 66
 Wynyard Park, 1968

<i>Lymnaea pereger</i> Mull.	66
Wynyard Park; Witton-le-Wear Nature Reserve; Stillington; Wolsingham reservoir, 1968.	
<i>Planorbis albus</i> Mull.	66
Wynyard Park, 1968.	
<i>Planorbis crista</i> L.	66
Witton-le-Wear Nature Reserve, 1968.	
<i>Cochlicopa lubrica</i> Mull.	66
Marsden Old Quarry; Teesmouth Saltmarsh; Bishop Middleham Quarry; Woodlands near Wolsingham reservoir, 1968.	
<i>Cochlicopa lubricella</i> Porro.	66
Marsden Old Quarry; Hawthorn Dene, 1968.	
<i>Columella edentula</i> Drap.	66
Hawthorn Dene; Castle Eden Dene, 1968.	
<i>Lauria cylindracea</i> da Costa.	66
Old Wingate Quarry, 1968.	
<i>Lauria anglica</i> da Costa.	66
Hawthorn Dene, 1968.	
<i>Pupilla muscorum</i> L.	66
Hawthorn Dene, 1968.	

R. H. Lowe.

FLOWERING PLANTS AND FERNS

Correction:— *Arctostaphylos uva-ursi* L., Bearbury, recorded for Wainhope Linn, 22nd August 1969, (Vasculum LIV, 23) proved to be a large-leaved specimen; of *Vaccinium vitis-idaea* L., Cowberry. The error became apparent after Dr. G. A. Swan failed to re-locate the species at that site.

A. G. Long.

<i>Corydalis claviculata</i> (L.) DC. White Climbing Fumitory.	68
Colour Heugh (Belford Moor).	
<i>Coronopus squamatus</i> (Forsk.) Aschers. Swine-cress, Wart-cress.	68
Ross Links.	
<i>Rorippa sylvestris</i> (L.) Bess. Creeping Yellow-cress.	67
Derwent, above the Sneap.	
<i>Sisymbrium orientale</i> L. Eastern Rocket.	68
On the spit, S. E. of Warkworth.	
<i>Viola hirta</i> L. Hairy Violet.	68
On the basalt between Bradford and Goldenhill.	
<i>Hypericum humifusum</i> L. Trailing St. John's Wort.	67, 68
Roadside near Swin Hope (Edlingham) (68). Kingswood Burn; roadside near Windyslap (Ridley); forestry road above Spithope Head (Redesdale) (67).	
<i>Cerastium semMecandrum</i> L. Little Mouse-ear Chickweed.	67
Walltown Crag; basalt at Colwell.	
<i>Moenchia erecta</i> (L.) Gaertn., Mey and Scherb. Upright Chickweed.	68
On the basalt at Budle and W. of Chesterhill.	
<i>Sagina maritima</i> Don. Sea Pearlwort.	68
Dunstanburgh; links at Goswick.	
<i>Spergularia rubra</i> (L.) J. and C. Prest. Sand-spurrey.	67, 68
Near Holburn (68). Forestry roads near Bellingburn Head and on Hawkhope Moor (N. Tyne), and on Black Fell (Trthing) (67).	

G. A and M Swan.

THE VASCULUM

JULY 1970

Vol. LV. No. 2.

Price 7/6 per annum, post free.

Edited by
T. C. DUNN, B.Sc.
THE POPLARS, CHESTER-LE-STREET

BY THE WAY

Secretaries of Societies and other contributors to "The Vasculum" are invited to send their notes to the Editor before 15th Sept, 1970.

We have been asked, recently, about the advisability of liberating bred insects. In all cases the eggs were not from parents captured locally.

In some cases there is no harm in augmenting local populations of insects where these are present already and there are no racial differences between the bred specimens and the wild ones. The trouble occurs when the act of putting down constitutes a new introduction of that species. The study of the distribution of species is a complex but very interesting one. The evidence provided by biography and taxonomy, together with the known history of climatic changes that have occurred since the onset of the Ice Ages, all lead to conclusions concerning the ways in which the animals have arrived in the British Islands and their subsequent histories. Such conclusions are often controversial since the evidence is frequently capable of interpretation in several ways. Only the most probable hypotheses can be suggested. Obviously, if the evidence is altered by artificial introductions, it is going to be made even more difficult to interpret the distributional data. Reconstructions of origins will be completely invalidated.

It is necessary, therefore, to be very careful about liberating insects without first consulting some local expert. If instructions are contemplated for some special scientific reason the experiment should be made public in the fullest possible way by publishing all details in some well-known scientific journal.

EDITORIAL NOTICES.

May we remind our readers once again, about the Harrison Memorial Lecture in October at Darlington. More details will be available from Mrs. Gibby and Mrs. Moses nearer the time. After the lecture we suggested a projection programme of slides of plants and animals taken during the E.C.Y. F970. Are you busy with your camera? The weather has been most co-operative so that we envisage a record number of first class pictures. There has been no suggestion so far, for a successor to Mrs. Gibby. We would be most grateful for any ideas you might have.

THE SOCIETIES

NORTHERN NATURALISTS' UNION.

The 125th Field Meeting was held at Tunstall Hill, Sunderland, on May 16th, 1970. After some days of sunny weather it was disappointingly wet.

About twenty enthusiasts set out in spite of the threat of rain. On the hill we noted *Sesleria caerulea* (L.) Ard., *Plantago media* L. *Thymus drucei* Ronn. and several other associated plants. After sheltering for a while from a slight shower, we pushed on to another part of the hill covered with much typical magnesian limestone vegetation. Here we saw such things as the Hairy Violet, *Viola hirta* L., Cowslip, *Primula veris* L., Salad Burnet, *Poterium sanguisorba* L. and Greater Knapweed, *Centaurea scobiosa* L. By this time it was raining quite steadily and presently began to pour with such force that no further work was possible. It was a wet and bedraggled group that returned to the cars but enough had been seen to wet the appetite for a further visit in drier weather.

Mr. Gent had been wise enough to return to his car, but before he did so the following birds were recorded : — Willow Warbler, Blackbird, Song Thrush, Skylark, Dunnock, Linnet House Sparrow.

The Junior Excursion to St. Mary's Island was held on May 23rd, somewhat later in the year than usual, due to tides. With the better weather, this was the best attended meeting for several years. Having examined the main sedimentary strata with their overlying layer of boulder clay and 'skin' of windblown sand, we proceeded to cover the main sea-shore zones, identifying the main species of seaweeds and their general distribution. *Fucus vesiculosus* and *F. serratus* were the commonest brown seaweeds although *Ascophyllum nodosum*, *Halidrys siliquosa* and *Himantalia elongata* were also found, the last particularly in the lower zones just above the oar weeds, *Laminaria saccharina* and *L. digitata*.

In the upper zones, green weeds were very noticeable, e.g.

Enteromorpha, *Ulva* and *Cladophora*. The rock pools and their margins, a particular feature of the coast-line here, yielded the red algae *Corallina*, *Lithothamnion*, *Ceramium* and *Chondrus crispus*. *Rhodymenia* and *Polysiphonia* were also found attached to *Ascophyllum* stalks.

We failed to find any Rough Periwinkles, *Littorina saxatilis*, but the other periwinkles were there in abundance. One mollusc in particular caused great interest, a sea slug with its 'gills' covering the whole of its dorsal surface, *Aolidia* species. There seemed to be fewer whelks than in previous years. The Common Starfish, *Asterias rubens* and a red starfish, tentatively identified from Collins Guide to the Seashore as *Henricia sanguinolenta* were both discovered, but this year the encroaching tide caused us to discontinue our search for both the Sea Urchin and the Plumose Anemone.

Carcinus maenas, the Shore Crab, *Cancer pagurus*, the Edible Crab and *Eupagurus bernhardi*, the Hermit Crab were all found but this year we added to our list a small Spider Crab (species unknown). This was extremely interesting because of the red seaweeds and sponges growing over its carapace.

BIRTLEY AND CHESTER-LE-STREET NATURAL HISTORY SOCIETY

The only outing so far this year has been to the moors behind the Moorcock Inn at Blackpool Hill.

The moors were looking lovely on May 3rd, a hot sunny afternoon when we left the cars by the roadside. On the way down to the Hisehope Burn we looked at the moorland plants. The Crowberry was in full flower, giving off such huge showers of pollen when disturbed, that walking through it was like creating a miniature dust trail. Along the stream feeding into the Hisehope, we saw and disturbed a Ring Ouzel and a pair of Golden Plovers.

At the Hisehope Burn we were struck by the moribund appearance of the junipers. Several are at present dead or dying, whilst no new plants seem to be growing up to take their places. After walking up the burn for some distance we returned over the moor to the reservoir. On the way we stumbled across a curlew's nest with eggs. During the course of the afternoon, several Small Tortoiseshell Butterflies were seen on the wing together with an occasional Fox Moth, the latter being rather too fast on the wings to see many details. A single specimen of the Many-lined Moth, *Colostygia multistrigaria* Haw. was seen just below the reservoir dam.

ANNFIELD PLAIN AND STANLEY NATURALIST'S CLUB

The usual series of summer outings have started with great enthusiasm, not less than fifty members being present on each

occasion. The first, to Redcar and the coast south of that town, was essentially a beach walk. On the way however, the Permian fossils which are such a feature of the foreshore here, were examined with great interest. The sea birds too came in for a lot of attention, the most interesting being a large flock of Dunlin.

On April 25th a coachload of enthusiasts disembarked at Esh for the start of a very pleasant walk by field paths and woodlands to Hamsteels, Low Row, Cornsay and finally Satley. Unfortunately the late spring continued to hold back the spring plants but several interesting bird observations were made.

The outing on May 9th from Allenheads to Blanchland, turned out to be more of an adventure than had been intended. Thick mist obscured all views and would have made the walk rather hazardous had it not been for the experienced hill walkers in the party with their compasses. In spite of this, the bird life was much in evidence and nests, with eggs, of Peewit, Curlew and Snipe were seen.

May 23rd. saw another group walking the Roman Wall in ideal conditions. Apart from the long distance views to Cheviot, Cross Fell and the Solway, the spring plants were now in full flower and the birds very active. Long lists of both groups were recorded.

Under the leadership of Miss Turnbull and Mr. Brunskill, over fifty members went to Bowes on June 6th, where the castle, church and Dotheboys Hall were visited. The bus then proceeded to Rutherford Bridge for the start of a six mile walk by the River Greta and Brignall Banks to Greta Bridge. The weather was very good and the spring flowers in fine condition. Yellow Pimpernell, Brooklime, Ivy-leaved Toadflax were some of them. Birds seen included the Dipper, Chaffinch with young and a Pheasant sitting eggs.

NOTES AND RECORDS

NOTES

Bird migration, spring 1970. Cold weather persisted until April 15th when it became milder and damp. On the evening of 18th there were 20 sand martins and two swallows flying over Gosforth Park lake and two willow warblers were heard in song. On the 19th a long walk in northwest Durham failed to reveal any migrants but a party of 20 golden plover were observed near Hunstanworth.

A spell of cold winds followed and it was not until May 5th that swallows were seen in small numbers at Morpeth, Netherwitton and Long Witton in mid-Northumberland; 35 to 40 were observed at Bolam Lake. A cuckoo was heard near Cambo.

On May 3rd a chiffchaff was in song at Shotley Bridge, and several tree pipits were singing in the nature reserve at Witton-le-Wear where a common sandpiper was also heard.

Swifts were late in arriving and it was not until May 15th that two were seen near their breeding site in Gosforth. C, J. Gent.

A rare bird near Beal I have seen a Little Egret at Fenham, Northumberland. The farm worker told me that a white bird like a heron had been there since May 6th. I went down yesterday (May 8th) but there was a thick mist, but I saw it today through a telescope and there is no doubt about the diagnosis. They are very rare in England W.W.

Bird Notes from Stanley. The following ornithological observations may be of interest to readers:—

Kittiwake : the colony situated on the old warehouse on the quayside in Newcastle, consisted this year, of 23 occupied nests on May 12th, with two other pairs prospecting for nesting sites. Up to 37 birds at any one time were sitting on the ledges of the building.

Rook : The rookery in Newcastle Haymarket, consisted of 23 occupied nests during May.

Fieldfare : An almost completely white bird, except for some black along the front edge of each wing, frequented the Shield Row area of Stanley, from December 21st to January 4th. It was not seen to keep the company of other fieldfares.

Last date :— on April 10th, a party of 12 Fieldfares were noted flying eastwards over Cockle Park in South Northumberland. There was still some snow on the ground at the time.

Grey Wagtail: A single bird at Shield Row, on January 11th.

Swift: First noted this year at Shield Row on May 15th, when four birds were observed. R. Marston Palmer.

Caddis flies from Chester-le-Street The list of caddis from the light trap for 1969 has just arrived from Dr. I. Crichton of Reading University. It is similar to that for 1968, with common and widely distributed species except for *Polycentropus irroratus* Curt. This species is more local and so far only one other specimen has turned up during the survey, from Rowardennan in 1968. T.C.D.

White Flowered Sweet Violet. The white-flowered form of the Sweet Violet, *Viola odorata* L. was found growing in a fairly large patch beneath a thick hedge on the right hand side of the road between Rothbury and Thropton. Miss J. Wade.

Claytonia at Haltwhistle. A patch of *Montia sibirica* (L.) Howell (*Claytonia sibirica* L.) was found on May 23rd 1970, in the valley of the Haltwhistle Burn, half a mile downstream from the military road. Miss R. Wade.

Plants on Holy Island. While on holiday in Holy Island recently I listed over 200 plants. The most exciting find was the Coral-root Orchid, *Corallorhiza trifida* Chatel, which is a new record for Holy Island. Other interesting plants were Henbane, *Hyoscyamus niger* L., Slender Speedwell, *Veronica filiformis* Sm., Meadow Saxifrage, *Saxifraga granulata* L., Ivy-leaved Speedwell, *Veronica hederifolia* L., Common Speedwell, *V. officinalis* L., Purple Milk-vetch, *Astragalus danicus* Retz., Hairy vetch, *Vicia hirsuta* (L.) S. F. Gray, Narrow-leaved vetch, *Vicia sativa* L. Ssp. *angustifolia* (L.) Gaud., Bog Bean, *Menyanthes trifoliata* L., Celery-leaved Buttercup, *Ranunculus sceleratus* L., Common Rock Rose, *Helianthemum chamaecistus* Mill., and Blue-eyed Mary, *Omphalodes verna* Moench. This has been an exceptional season. L. P. Hird.

An extract from J. H. Fabre. The following quotation from J. H. Fabre appears to be wonderfully in advance of his time. I am most struck by the words "upset the order of the Universe" which I have underlined and would appear to be only true today :— From J. H. Fabre's "Life of the Grasshopper" Chapter XVII, The Locusts, Their Function.

Discussing the locusts in France feeding on coarse grass he says "To measure the importance of things by the foot rule of one's own turnip

patch is a horrible method, which makes us forget the essential for the sake of a trivial detail. The short-sighted man would upset the order of the universe rather than sacrifice a dozen plums. If he thinks of the insect at all, it is only to speak of its extermination." A. Todd.

A caterpillar plague in the Lake District. The Bird-Cherry trees, *Prunus padus* L., near Pooley Bridge were literally festooned with silk from caterpillar spinnings on June 21st. Whole bushes and trees, in certain places, were quite covered in a grey canopy and completely defoliated. In some places the covering had extended for a long distance along the top of an iron rail fence, some of the trees affected were above 20 feet tall. Altogether it is estimated that there must have been millions of larvae. These were the caterpillars of the Tineid moth *Yponomeuta evonymella* L. E. Howard

ECORDS

HEMIPTERA-HETEROPTERA — WATER BUGS

<i>Notonecta glauca</i> L. Common Water-boatman.	66, 67
Kyton Willows, one specimen (66). Plashetts Pond, Throckley Ponds Bolam Lake, Prestwick Carr, Woodside Farm pond, Ponteland, Woosington Hall pond (67). A very common species and to be found in most ponds in both counties. '	
<i>Callicorixa praeusta</i> Fieber.	66,67
Ryton Willows (66). Woosington and Prestwick Carr (67).	
<i>Corixa punctata</i> Illiger. Common corixid.	67
Two in Bolam Lake. v	
<i>Hesperocorixa linnei</i> Fieber.	66,67
Ryton v Willows (66). Throckley Pond and Prestwick Carr (67).	
<i>Hesperocorixa castanea</i> Thompson	66, 67
These are new county records. Ryton Willows, two males on 6.2.70, (66) Woosington Hall pond. one male on 6.2.70 (67).	
<i>Sigara dorsalis</i> Leach.	66,67
Ryton Willows (66). Throckly Pond, Bolam Lake, Woosington (67)	
<i>Sigara (Subsigara) fossarum</i> Leach.	67
Bolam Lake. '	
<i>Sigara (Subsigara) falleni</i> Fieber.	67,68
Bolam Lake, Woosington, Blackburn pond (68).	
<i>Sigara (Subsigara) distincta</i> Fieber.	67
Bolam Lake and Prestwick	
<i>Sigara (Vermicorixa) nigrolineata</i> Fieber.	68
Blackburn pond.	
<i>Sigara (Vermicorixa) concinna</i> Fieber.	67
Prestwick Carr. '	
<i>Sigara (Hallicorixa) stagnalis</i> Leach.	67
Prestwick Carr.	
<i>Sigara (Hallicorixa) selecta</i> Fieber	67,68
Prestwick Carr (67), Blackburn Pond (68)	

H. Eales

TRICHOPTERA – Caddis Flies

<i>Plectrocnemia conspersa</i> Curt	66
Chester-le-Street.	
<i>Polycentropus irroratus</i> Curt	66]
Chester-le-Street.	
<i>Psychomyia pusilla</i> F.	66
Chester-le-Street.	

<i>Limnephilus marmoratus</i> Curt.	66
Chester-le-Street.	
<i>L. luridus</i> Curt.	66
Chester-le-Street.	
<i>L. auricula</i> Curt.	66
Chester-he-Street.	
<i>Anabolia nervosa</i> Curt.	66
Chester-le-Street.	
<i>Potamophylax cingulatus</i> Steph.	66
Chester-le-Street.	
<i>Lepidostoma hirtum</i> F.	66
Chester-le-Street.	

MOLLUSCA – SNAILS AND SLUGS

<i>Vallonia costata</i> Mull.	66
Old Wingate quarry.	
<i>Ena obscura</i> Mull.	66
Old Wingate quarry.	
<i>Marpessa laminate</i> Montagu.	66
Wynyard Park.	
<i>Clausilia bidentata</i> Strm.	66
Hawthorn Dene, Castle Eden Dene.	
<i>Arianta arbustorum</i> Linn.	66
Wynyard Park, Old Wyngate Quarry.	
<i>Helix nemoralis</i> Linn.	66
Wynyard Park, Old Wingate Quarry.	
<i>Helix aspersa</i> Mull.	66
Wynyard Park, Bishop Middleham Quarry	
<i>Hygromia hispida</i> Linn.	66
Wynyard Park, Bishop Middleham Quarry	
<i>Monacha cantiana</i> Mull.	66
Blackhall Rocks S.S.S.I.	
<i>Helicella caperata</i> Mont.	66
Bishop Middleham Quarry.	
<i>Helicella itala</i> Linn.	66
Bishop Middleham Quarry.	
<i>Vitriina pellucida</i> Mull.	66
Wynyard Park.	
<i>Euconulus fulvus</i> Mull.	66
Castle Eden Dene, Old Wingate Quarry	
R.H.Lowe	

AVES-BIRDS

<i>Alcedo atthis</i> Linn. Kingfisher.	66
Mr. A. Dobbinson informs me that a Kingfisher was observed flying Over the River Derwent near Shotley Bridge on January 18 th . C. J. Gent	

FLOWERING PLANTS AND FERNS

<i>Corallorhiza trifida</i> Chatel, Coral-root.	68
Holy Island.	
<i>Veronica filiformis</i> Sm., Slender Speedwell.	68
Common on Holy Island. L. P. Hird.	

<i>Montia sibirica</i> (L.) Howell	67
W. Dipton Burn, E. of Dipton mill.	
<i>Geranium pyrenaicum</i> Burm. f. Mountain Cranesbill.	67
Roadside near Cocklaw (N. Tyne).	
<i>Geranium columbinum</i> L. Long-stalked Cranesbill.	68
On the basalt at Spindlestone.	
<i>Geranium pusillum</i> L. Small-flowered Cranesbill.	68
E. of Warkworth.	
<i>Geranium lucidum</i> L. Shining Cranesbill.	67
On the basalt and in the old lime quarry at Gunnerton.	
<i>Genista tinctora</i> L. Dyer's Greenweed.	67
On the basalt at Colwell.	
<i>Genista anglica</i> L. Needle furze. Petty Whin.	67
Barrow Burn (Harbottle).	
<i>Trifolium arvense</i> L. Hare's-foot.	68
Dunstanburgh Castle; on the basalt at Spingleton.	
<i>Trifolium striatum</i> L. Soft Trefoil.	68
Dunstanburgh Castle.	
<i>Vicia sylvatica</i> L. Wood Vetch.	
Kingswood Burn.	
<i>Vicia lathroides</i> L. Spring Vetch.	67
Spit S.E. of Warkworth, on the basalt at Budle, and on Chapel Hill (Belford).	
<i>Filipendula vulgaris</i> Moench. Dropwort.	
On the basalt between Bradford and Goldenhill.	
<i>Potentilla tabernaemontani</i> Aschers. Spring Cinquefoil.	68
A second colony detected on the basalt in N. Northumberland	
<i>Saxifraga granulata</i> L. Meadow saxifrage.	67,68
On the basalt W. of <u>Chesterhill</u> (68), and at Gunnerton (67).	
<i>Chrysosplenium alternifolium</i> L. Alternate-leaved Golden Saxifrage	67, 68
Waren Burn, near Spindlestone Mill (68). Wood to W. of Burnfoot (S.W. of Warden): Capon Cleugh (67).	
<i>Lythrum salicaria</i> L. Purple Loosestrife.	68
Marshy ground nr. Hazelrigg.	
<i>Epilobium nerterioides</i> Cunn.	67, 68
S.W. of Black Lough; N. Bank of Coquet, nr. Angryhaugh; stream just below mouth of Hen Hole (68). Near Bellingham Head and on Hawkhope Moor (N. Tyne); Ridge End Burn (Kielder), Gelt Burn above Knar and near Highshield Crags (S. Tyne), White Kielder (67).	
<i>Myriophyllum alterniflorum</i> DC. Alternate-flowered Water-Jmilfoil	67
Pond near Sidwood (Tarsset Burn).	
<i>Hippuris vulgaris</i> L. Mare's-tail	67,68
Holbum Moss (68). Pond near Sidwood (Tarsset Burn) (67),	
<i>Torilis nodosa</i> (L.) Gaertn. Knotted Hedge-parsley	.68
Dunstanburgh Castle.	
<i>Aethusa cynapium</i> Fool's-parsley.	68
Roadside S. of Greensfield Moorhouse (S. of Alnwick)	
<i>Silaum silaus</i> (L.) Schinz and Thell. Pepper Saxifrage.	67
Roadside near Millknock Quarry, near Birtley (N. Tyne)	
<i>Heracleum mantegazzianum</i> Somm and Levier.	68
Ellingham; on the sand dunes at Holy Island	

G.A. and M. Swan

THE VASCULUM

OCTOBER 1970

Vol. LV. No. 3.

Price 7/6 per annum, post free.

Edited by
T. C. DUNN, B.Sc.
THE POPLARS, CHESTER-LE-STREET

BY THE WAY

Secretaries of Societies and other contributors to "The Vasculum" are invited to send their notes to the Editor before 15th November, 1970.

We would remind Secretaries of Societies that their submissions have been very irregular of late. In some cases it is a long time since we heard anything at all. Part of this journal is especially for news from the societies. Surely the chance of some free publicity should prove quite useful. There is still no volunteer or nomination for the post of Honorary Secretary of the N.N.U. The post will be vacant in March when Mrs. Gibby retires. Please send your suggestions to Mrs Gibby at Prebends' Gate. Quarry Heads Lane. Durham City.

TIPPING

The seemingly insoluble problem of tipping in quarries and ponds was again brought home to us recently during the N.N.U outing to Bishop Middleham quarry. Here is a huge hole in the ground, left by the excavators of dolomite, which is rapidly becoming vegetated and exploited by animals. From a scientific point of view the present succession is not only interesting but an ideal place for biological research. Already there are seven rarities that any Naturalists' Trust would be proud to have in one of their reserves. In addition, the Nature Conservancy has scheduled it as a site of Special Scientific Interest.

Approaches to the owners have already been made by the Naturalists' Trust of Northumberland and Durham. The quarry has, however, been earmarked by local councils as a place for getting rid of their refuse. Already tipping operations have started.

Two tips, one at the Bishop Middleham end and the other in the N.W. section have started to grow. Worse still, applications from local authorities, for the use of the whole quarry as a tipping area have been made. It is feared that they will be accepted and we shall have lost another site where wild life could have flourished.

Waldridge Fell is another instance, but in this case the culprits are not the same. This area has recently become an educational nature reserve where tipping is not allowed. Notices have been erected by the County Council to this effect, but what happens? The notices are demolished and spurious tipping in a particularly untidy and filthy manner continues. It is high time the authorities took some positive action in this case.

SHOOTING AT BRASSIDE

The area known as Brasside Ponds has been well known to naturalists for many years as a favourite place for birds, insects and wild flowers. Part of it is looked after by the Naturalists' Trust as a nature reserve and part is privately owned. For years, vandalism has gone on there and fishing by unauthorised people— poaching if you like—has taken place regularly although the results have not been too serious.

Recently, a more serious form of behaviour has become increasingly prevalent. This is shooting the birds. What goes on is not just airgun vandalism by a few local teenagers, but organised shoots by older people who arrive in their motors fully equipped for slaughter. This is in spite of the notices put up by the owner. Last year two of our friends witnessed four men in inflatable rubber dinghies shoot up the main pond with their shot guns. Everything was knocked down including such birds as water hens, coots and dabchicks. Obviously they were not shooting for the pot but just to satisfy a lust to kill. Many times during the past two years, cartridge cases and even empty cartridge boxes have been picked up from lockout points round the pond. In spite of this, the birds continue to frequent the place and we even saw a kingfisher in the area this year. What a wonderful place it could be if the vandalism and poaching were to be stopped.

Here is another case for vigilance on the part of local interested naturalists. What they should do is to report any illegal practices to the police as quickly as possible.

FLOODLIGHTING AT NIGHT

Street lights have often been used in the past by insect collectors to capture specimens. With the arrival of more powerful mercury vapour lamps the numbers of moths attracted to the lights was increased tremendously so that many of us had fears for their continued existence. With the arrival of the orange lights which are so much better for the motorist during foggy weather, the position has again changed. These lamps do not have such a strong attraction for the night flying insects, although we have

seen a few around them in areas where the insect population is normally very high.

There is little doubt that all lighting systems will have some adverse effect on the populations of night flying creatures, but just how much is largely a matter of conjecture. As far as insects are concerned, they are diverted from their normal pursuits of mating and food gathering and in this the result must be some reduction of numbers. What is the position in the case of disturbance to birds, or interference with the activities of nocturnal mammals? Little seems to be known, for a recent enquiry from a research organisation produced no information at all.

We would be interested to hear from any member who may have any observations about the effects of artificial light on any living organism.

PROFESSOR J. HESLOP HARRISON

It is with the greatest pleasure that we have read the announcement of the appointment of Professor J. Heslop Harrison to the post of Director of Kew Gardens as from June 1971. As a former member of the N.N.U. and a local product we feel very proud indeed. We wish him well in this new venture.

THE SOCIETIES

NORTHERN NATURALISTS' UNION

The 126th Field Meeting was held at Muckle Moss and Grindon Lough on Saturday, 11th July, 1970. Some 30 members and friends gathered on the road beside Muckle Moss to be led by the President, Dr. W. A. Clark.

After some difficulty concerning a wall, we all gathered on a little heather covered hillock overlooking the bog, whilst Dr. Clark gave a preliminary talk on its main features, its origin and history. We then proceeded to look at the edge of the bog where a little Alder-Willow carr produced *Salix pentandra* L., *S. caprea* L., *S. aurita* L. and *S. repens* L. as well as alder. On the moss itself we found Cranberry, *Vaccinium oxycoccos* L., Marsh Andromeda, *Andromeda polifolia* L., Cross-leaved Heath, *Erica tetralix* L., Round-leaved Sundew, *Drosera rotundifolia* L., Moorland Spotted Orchid, *Dactylorhiza maculata* (L.) Vermeul. ssp. *ericetorum* (E. F. Linton) Vermuel, and the White Sedge, *Carex curta* Good, together with many of the more usual bog flora. The mosses were very prominent with *Polytrichum commune* and several *Sphagnum* species everywhere. On the heather, larvae of the Northern Eggar Moth, *Lasiocampa quercus* L., subsp. *callunae* Pal. and the Emperor Moth, *Saturnia pavonia* L. were quite exposed. The Common Blue butterfly, *Polyommatus icarus* Rott., was found resting on a flower and suffered the indignity of much photography without moving. The shoot tips of *Salix repens* L.

and *Andromeda polifolia* L., were spun together by larvae, so many were collected. These later yielded the two microlepidopterons, *Acleris hastiana* L. and *Depressaria conterminella* Zeil.

After a picnic tea the party moved along the road a short distance, then entered a field gate leading to Grindon Lough. Here, the chief attraction was the birds on the open water. They included Mallard, Teal, Redshank, Swans and Snipe. The water was surrounded by a large stretch of marsh vegetation which consisted mainly of the Bottle Sedge, *Carex rostrata* Stokes and the Water Horsetail, *Equisetum fluviatile* L. (*E. limosum* L.), together with Mare's-tail, *Hippuns vulgaris* L., Marsh Cinquefoil, *Potentilla palustris* (L.) Scop., Water Forget-me-not, *Myosotis scorpioides* L., and Meadow Sweet *Filipendula ulmaria* (L.) Maxim. Surprisingly, no insects were found on this marsh.

The 127th Field Meeting was held at Bishop Middleham quarries on 12th September 1970, when about 20 members were led round the quarries by Mr. A. Silverside, who was very kindly deputising for Dr. D. Bellamy.

There are two quarries, and these were looked at in turn. Both have, until recently, been worked for dolomite, but are now abandoned and being used for dumping all kinds of human rubbish. This is a great pity for the quarries proved to be quite interesting places. Several Sallows were present, e.g. *Salix caprea* L., *Salix atrocinerea* Brot., *Salix nigricans* Sm, *Salix phylicifolia* L., and *Salix repens* L. The St. John's Wort proved to be of considerable interest. The rare Mountain St. John's Wort, *Hypericum montanum* L., proved to be quite common here together with the Common St. John's Wort, *H. perforatum* L. and the Imperforate St. John's Wort, *H. maculatum* Crantz. Quite a surprise was the discovery of many hybrids between the last two, *H. X desetangsii* Lamotte. Other plants seen included the Blue Fleabane, *Erigeron acer* L., Mouse-ear Hawkweed, *Hieracium pilosella* L. and several other species of *Hieracium*. On the floor of the S.E. quarry were two young plants of *Cotoneaster frigidus* Wall ex Landi. And one of *Cotoneaster horizontalis* Decaisne. All were undoubtedly garden escapes but whether they had been brought in by humans or by birds was not certain. They were young plants and looked to have grown from seed, in which case they may have been transported by birds. Another alien was *Acaena anserinifolia* (J. R. and G. Forst.) Druce, the New Zealand Burweed, at present only a single patch about 12 inches across, but one which will undoubtedly spread. This plant has proved such a nuisance on Holy Island that we were almost tempted to root it out there and then. During the course of the afternoon Mr. Lowe worked hard on his Mollusca and there was plenty for him to do. Snails abounded everywhere. A complete list will no doubt be forthcoming when he has worked out all his material.

Insects were scarce and only three, the Treble Bar, *Anaitis plagiata* L., whose caterpillar feeds on the St. John's Wort, the micro *Acleris aspersana* Hubn. and the Small Heath Butterfly, *Coenonympha pamphilus* L., were seen.

Mr. A. Silverside noted the following fungi: — The locally frequent bright orange toadstool proved to be *Hygrophorus quetus* Kunner, a rather uncommon species of calcareous grassland two other interesting finds were *Hygrophorus strangulatus* P.D. Orton, and *Volvariella taylori* (Berk and Br.) Singer. More common species found were *Hygrophorus puniceus* (Fr.) Fr. *Hygrophorus langei* (Kuhn) Pearson, *Leptonia incana* (Fr. Gillet, and *Lacrymaria velutina* (Pers. ex Fr.) Konrad and Maubl.

BIRTLEY AND CHESTER-LE-STREET NATURAL HISTORY SOCIETY

On 5th July, 1970, the Society walked along the bank of the Tees from Middleton-in-Teesdale to Winch Bridge. Almost immediately, the plague of caterpillars that has this year completely defoliated the Bird Cherry trees, *Prunus padus* L., was seen. This is all due to the Tineid moth *Yponoment evonymella* L. The trees were bare, clothed in a thin pall of silvery silk which made them look like ghosts in the surrounding leaf-covered trees and bushes. Several typical Teesdale plants were seen *en route* like *Viviparous Bistort*, *Polygonum viviparum* L., Globeflower, *Trollius europae* L., Saw-wort, *Serratula tinctoria* L., Northern Bedstraw, *Galium boreale* L., Melancholy Thistle, *Cirsium heterophyllum* (L.) Hill etc., but what most members will remember was a field containing hundreds of plants (all in full flower) of the Butterfly Orchid, *Platanthera chlorantha* (Curt) Rchb.

Our first Sunday of the month outing in September (on 6th) was to Brasside Ponds. Although the afternoon was somewhat marred by finding dozens of shot-gun cartridge-cases and two empty boxes of cartridges, around the borders of the large pond, we were later compensated by sighting a kingfisher. This was seen flying over the small pond to the north and is the first record of the bird for this area.

NOTES AND RECORDS

NOTES

Bird notes from Stanley. The following ornithological observations may be of interest to members :—

Chiffchaff: During June and July one was heard singing frequently in Beamish Park.

Common Wheatear : During the late summer a pair with two juveniles frequented a pit heap at East Tanfield.

Yellow Wagtail : A gathering of 21 birds was noted in the fields near Shield Row, Stanley, on August 2nd.

Swallow: A pair nested this summer inside the roof of a bus shelter near Morpeth. The nest was situated on a beam about 6 feet from the ground. It was soon robbed and the birds deserted

Swift : Late date. A party of at least 30 birds flew south over Durham City, on August 26th, about 2 weeks after they had disappeared from the North West Durham area. R. Marston Palmer.

Immigrant Lepidoptera. This has been a very poor year for immigrants The season started very early, on 20th May, with a sudden influx of the Diamond-backed Moth, *Plutella maculipennis* Curt., and we thought this was a good sign. Contrary to usual practice, however, the moth never reached very large numbers and their movement only lasted about 5 days before they completely disappeared again. Nothing more was seen until late August when a single Painted Lady was seen by Mr. R Harris in the grounds of the Highfield Hospital at Chester-le-Street and another singleton at Sunderland on August 26th, by Mr. R. Lowe. The Red Admiral was just as scarce, again a single specimen appeared in the grounds of Highfield Hospital and another was seen by Mr. Marston Palmer on August 23rd in the park at Stanley. Even the Silver Y Moth, *Plusia gamma* L. was much less common than usual, only 8 moths having turned up in the light trap at Chester-le-Street during the last few days of September T.C.D.

A rare bird on Cross Fell. On June 13th, 1970, during an outing of the Consett Field Club, from Garrigill to Kirkland, a Dotterel's nest (*Charadrius morinellus*) was found 300 yards from the Ordnance Survey point on the summit of Cross Fell and on the Garrigill side. On the approach of the party the bird left its nest, but after a short run, quickly returned and seated herself on the nest, which contained three eggs. She continued to sit there while several members took close-up photographs of her. At first we thought the bird was a Golden Plover, but there was something different about her which made us consult the books, leading to her identification as Dotterel. One member thinks that the last record of a Dotterel nesting in this part of the Pennines was in 1922, but I do not know if this is correct. Fred Wade.

We remember hearing of a nest in 1936. Does any other member know the date of the last record for the Dotterel on Cross Fell? Ed.

Plant records for Holy Island. I should like to report three plants that I found on Holy Island this year which are not on the official list for the island. Two are common on the mainland, *Linaria vulgaris* Mill., Common Toadflax and *Thlaspi arvense*, L., Common Pennycress but the third is very rare. *Epipactis dumensis* (T. and T. A. Steph.) Godf., the Dune Helleborine. I also found another site for the Coralroot Orchid, *Corallorhiza trifida* Chatel., 600 yards from the site where Mr. L. P. Hird found the plant this year and reported in the July Vasculum. W.W.

Spread of the 5 Spot Burnet Moth. *Zygaena lonicerae* Scheven, the 5 Spot Burnet Moth has been the subject of close observation during the past three years, because of a request from a research worker at the British Museum, for information about its distribution in our Northern counties. In July this year two such moths were brought to me for identification. They had been captured on the railway embankment in Chester-le-Street. Further examination of the locality showed quite a strong though not too numerous colony stretching some distance towards Durham. Information from Dr. J. C. Coulson of the Dept. of Zoology at Durham University also shows that the moth is spreading. Again the colonisation is along a railway embankment to the south of Durham City and he has known of its existence for about 3 years. These new localities lead me to believe that the moth is considerably more widespread than I had imagined and is probably established elsewhere in the county.

I would be most grateful for any further information about other colonies but please beware. The 6-spot Burnet is almost identical with the

5-spot and much more common. If you are not a trained observer, then I must have specimens please. T.C.D.

Spread of Large Skipper Butterfly. In the Vasculum of October 1946, Mr. T. W. Jefferson records a Durham Colony of the Large Skipper, *Ochlodes venata* Br. and Grey. It was such a rarity at that time that he refrained from naming the precise locality. The position now is vastly different. There are few grassy places in the county from which the butterfly is absent and one expresses no surprise when it appears either on the coast, in the central parts of the county or even on high ground up the dates. This summer, I have seen it all along our grassy coastal cliffs, near Darlington, at Witton-le-Wear, on Waldrige Fell, near Birtley and in Weardale, at Hamsterley and Stanhope. In none of the colonies, however, is it in the large numbers one expects in the case of the Pierids, the Blues or the Satyrids. Indeed, the reverse is the case. If one sees half a dozen specimens in any one habitat then it is looked upon as a thriving colony. T.C.D.

A second brood *Coenonympha pamphilus* L. The Small Heath Brown Butterfly was observed in Bishop Middleham quarry during the N.N.U. outing on 12th September and I had noticed it commonly enough the previous week on 5th and 9th September. These were obviously examples of a second brood, something which does not often occur in our counties. T.C.D.

The Himalayam Balsam, *Impatiens glandulifera* Royle. The Himalayan Balsam or Policeman's Helmet as it is called in Clapham, Tutin and Warburg., continues to spread and flourish along all our river and stream banks. At Chester-le-Street it is in massive numbers alongside the River Wear. A close look at them a few weeks ago revealed quite a large range of variation in the colour of the flowers. Generally speaking, however, these colour variants fall into three main groups, the very pale pinkish whites, the deep reds and the intermediate pink with white centre to the lie part of the corolla. A rough count indicated that the pale ones and deep red ones were rarer than the pink ones. These last exceeded the others by about four to one. The numbers of deep red and pale pink ones: were about equal.

More recently a walk through Jesmond Dene in Newcastle enabled me to see the results of extensive colonisation along the stream there just as at Chester-le-Street. Once again the same variations in flower colour were in evidence.

This looks to me like an example of genetic segregation in which incomplete dominance occurs. Can any of our University friends provide any confirmation of this? Perhaps some breeding work on this plant has already been carried out. If not it would seem to afford an easy little investigation for some keen sixth former studying biology T.C.D.

RECORDS

LEPIDOPTERA — BUTTERFLIES AND MOTHS

Hydraecia crinanis Bur. Crinan Ear. 67

A (nx)th from Kielder August 30th was submitted Dr. A. G. Long and identified as a male of the species. Known from a few localities in Berwickshire, but this is the first record from Northumberland. C. J. Gent.

HYMENOPTERA — BEES, WASPS, ANTS ETC

Vespa norvegica Fab. Norwegian Wasp. 66

A nest of this species in a privet hedge at Jarrow.

C. J. Gent.

MOLLUSCA – SLUGS AND SNAILS

Limax maximus L. 66

Old Wyngate Quarry and Wynyard Park in 1968.

<i>Vitred contracta</i> , Westerland.	66
Hawthorn Dene, 1968.	
<i>Oxychilus draparnaldi</i> Beck.	66
Bishop Middleham Quarry and Roker Promenade, 1968.	
<i>Sphaerium lacustre</i> Mull.	66
Stillington (subsidence lake) and farm pond in the same area.	
<i>Pisidium casertanum</i> Poli.	66
Witton-le-Wear Nature Reserve, 1968.	
<i>Pisidium personatum</i> Malm.	66
Cold Hesledon, 1968.	
<i>Pisidium obtusale</i> Lamark.	66
Cold Hesledon, 1968.	
<i>Pisidium milium</i> Held.	66
Stillington, 1968.	
<i>Pisidium nitidum</i> Jenyns.	66
Stillington, 1968.	
<i>Pisidium subtruncatum</i> Malm.	66
Stillington, 1968.	

R. H. Lowe.

AVES — BIRDS

<i>Alcedo atthis</i> . Kingfisher,	66
A single bird flying over the smaller of the two Brasside Ponds, 6 th September, 1970. T.C.D.	

FLOWERING PLANTS AND FERNS

<i>Polygonum bistorta</i> L. Snake-root, Easter-ledges, Bistort.	67
Field S. of Whitfield Toll House.	
<i>Humulus lupulus</i> L. Hop	68
On the sand dunes at Bamburgh.	
<i>Andromeda polyfolia</i> L. Marsh Andromeda.	67
Blaxter Lough; Plenmeller Common, N.E. of Boghead.	
<i>Primula veris</i> x <i>vulgaris</i> Huds. Common Oxlip.	67
By the Hart Burn above Garden House.	
<i>Centaureum erythraea</i> Rafn. Common Centaury.	67
Kingswood Burn; nr. Crooked Oak.	
<i>Gentianella amarella</i> (L.) Borner <i>sensu lato</i> . Felwort.	67, 68
On coast, S. of Newton-by-the-Sea (68). Nr. disused colliery, N. of Hareshaw Ho. (Bellingham). (67).	
<i>Pentaglottis sempervirens</i> (L) Tausch. Alkanet	67, 68
Roadsides. 1 m. W. of Belford (68). and between Wylam and Ovingham. and nr. Shepherd's Dene (March Burn) (67).	
<i>Echium vulgare</i> L. Viper's Bugloss.	67
Harbottle Castle.	
<i>Scrophularia umbrosa</i> Dumort.	68
At the foot of the cliff, N. of the pier at Berwick; at the mouth of small stream at N. end of Cheswick Sands.	
<i>Veronica catenata</i> Pennell.	68
Holy Island Lough.	
<i>Melampyrum pratense</i> L. Common Cow-wheat.	67
Stocksfield Burn, nr. Old Ridley; woods nr. mouth of Kingswood Burn; Ridge End Burn (Kielder); Tarslet Burn above Burnmouth.	

<i>Lathraea squamaria</i> L. Toothwort.	67
Woods to W. of Burnfoot (S. of Warden).	
<i>Lamium amplexicaule</i> L. Henbit	68
E. of Warkworth.	
<i>Lamium moluccellifolium</i> Fr. Intermediate Dead-nettle.	68
Nr. Chesterhill (Belford) G.A. and M. Swan	

THE VASCULUM

DECEMBER 1970

Vol. LV. No. 4.

Price 7/6 per annum, post free.

Edited by
T. C. DUNN, B.Sc.
THE POPLARS, CHESTER-LE-STREET

BY THE WAY

Secretaries of Societies and other contributors to "The Vasculum" are invited to send their notes to the Editor before 15th March, 1971.

NEW WORKERS REQUIRED.

Some years ago the editor of this journal commented on the increased interest in natural history shown by young people in this area (Vol. XXXVI, No. 2). This he ascribed to the development of biological teaching in the schools. Indeed, at that time, it was not unusual to find as many as 150 young people attending the N.N.U. junior expeditions.

In those days we suspect that the interest was, to some extent, due to the requirements of the Durham University Examining Board. The regulations required the submission of evidence of outdoor work for the G.C.E. examination. There came a time, unfortunately, when the Board had difficulty with its finances, so that it had to give up. Other examining boards are now used, but none have the stringent requirements of outdoor work that applied formerly. The result has been somewhat disastrous. The number of young people showing genuine interest in our flora and fauna is now very small indeed and the number carrying out some serious work on one of the groups is smaller still. New recruits to the ranks of fieldworkers are urgently required.

Even in the more popular groups of ferns and flowering plants, there is little evidence of interest whilst in the Bryophytes, Lichens, Fungi etc. the position is deplorable. It is the same with respect to our fauna. Bird watching appears to be the only department in which our youngsters are really keen. Yet this is the most

well-worked group. We would like to see them taking an interest in the more unusual plants and animals, so as to take the place of older workers who are gradually retiring from the field.

Once again we would remind readers that the north-east has, for a long time, had a reputation for producing really expert field workers. We would be very disappointed to see that position lost.

A PROPOSAL FOR SECTIONAL EVENING MEETINGS.

During 1971 it is proposed to hold a number of evening meetings devoted entirely to recording the flora of particular areas in County Durham. For two reasons it has become apparent that the few Saturday meetings of the N.N.U. are not suitable for intensive recording. First of all, there must be others as well as the author of this article who find it difficult to attend week-end meetings and secondly: in a large party composed of naturalists with very wide sympathies it is often impossible for individuals with a more restricted and specialised approach to make detailed recordings without breaking away from, or lagging behind, the main party.

The aim of our evening excursions will be to record fully the vegetation of a particular area, not to hunt specifically for rare plants, though it is surprising how often quite rare things do turn up when an area that has previously looked unproductive is visited for the first time. Indeed, it is stimulating, or sobering, to realise that fresh records can be made when an old site is visited for the tenth time.

If you wish to know your grasses or your critical plants better, if you want to start on mosses or lichens, now is the time. Students or amateurs of any age will be welcome. No previous knowledge is essential. If you are a good 'spotter' you will be very welcome on the principle that five pairs of keen eyes are better than one pair of informed eyes (provided the informed eyes are present!):

We may walk three miles, we may only cover three hundred yards if the area is rich in plant species. A list of dates and meeting places will be published in the next issue of "The Vasculum". If you are interested, particularly if you know the geography of your own area, then before next March, please telephone, write or call on Rev. G. G. Graham, The Vicarage, Hunwick, Crook Tel. Bishop Auckland 4456.

THE SOCIETIES

NORTHERN NATURALISTS' UNION

The third Heslop Harrison Memorial Lecture was given on October 24th at Darlington College of Education, by kind invitation of the Darlington and Teesdale Naturalists' Field Club.

Thanks are due to the officers of the Society for quickly overcoming the inconvenience caused by a workers' strike, which put the original lecture hall out of use. Dr. W. J. Eggeling, Director of the Nature Conservancy for Scotland, spoke on "Some Problems of Conservation."

The lecturer developed the idea that Conservation, in his view, was management for sustained yield of a living organism or organisms. In order to do this he emphasised the necessity of always leaving a viable reservoir and only taking off the surplus. The argument was illustrated by referring to various examples where the principles are in general use. For example on a well managed grouse moor, only small areas are burnt off in any one year, so that there is always enough young heather in growth to continue to feed the grouse. Sometimes, if the area is small, a rotation of land use has to be resorted to, such as a grouse moor passing to forest which is eventually felled and harvested. This is followed by rough grazing with a gradual return to grouse moor again. At all times and in all habitats, he pointed out, the Conservationists are trying to maintain something especially attractive to man, but which all the time is trying to change to something else. The management plans were especially difficult where monocultures were concerned for the slightest upset in the natural balance of organisms in the habitat could ruin the whole idea, and upsets such as this are difficult to prevent because of the continual succession. Thus diversity in the habitat leads more easily to stability. This, of course, is not always desirable when a monoculture is necessary to maintain a particularly attractive fauna.

The talk was followed by a series of slides illustrating some of the points made. These dealt particularly with the way the balance of a particular habitat could be upset, such as the way the gulls have destroyed the vegetation on the Isle of May, how sheep can cause excessive erosion, how some birds can be pests, and finally how even nature trails can bring about unpredictable changes in the habitat.

After tea in the college students' union restaurant, served by members of the Darlington Club, we returned to the meeting room for an informal show of colour transparencies, brought along by members themselves, to show what had been done in E.C.Y. 1970. Mrs. Burnip had a single slide of a new plant record from N.Yorkshire, Mr.R. Harris slides of various animals (mostly insects), Mr. T.W. Jefferson some really superlative photographs of butterflies. Dr. Taylor plants peculiar to Jersey taken during his summer holiday there. Dr. A.Todd a mixed bag of insects and plants, Mr.L. Woodhouse some photographs of a recent archeological excavation of Roman remains at Piercebridge, and Mr. E. Hinton-Clifton shots of a Naturalists' Trust Reserve in

Lincolnshire. Altogether this was a very attractive show and everyone thoroughly enjoyed it.

A new outing for junior members was tried out this year on September 19th. This was a Fungus Foray in Houghall Woods, Durham, ably led by Mr. Dennis Hall. The Fungi were found in great quantities and much variety although the area covered was only very small by most outing standards. Only six junior members turned up, but with four very keen senior members and a dog, in addition to the leader, the following long list was compiled : — *Boletus scaber*, *chryseran*, *satanus*; *Telephora terrestris*; *Stereum rugosum*; *Amanita phalloides*, *rubescens*, *citrina*, *fulva*; *Lactarius subdulcis*, *quietus*, *glyciasmus*; *Collybia butyracea*, *peronata*, *confluens*, *dryophila*; *Panaeolus subballiatus*, *papillion aceus*; *Russula atropurpurea*, *mairei*, *cyanoxantha*, *ochroleuca*; *Clitocybe clavipes*; *Mycena alcalina*, *galapus*; *Laccaria amethystina*; *Hygrophorus chrysaepis*; *Oudemansiella radicata*; *Paxillus involutus*; *Hypholoma jasciculare*; *Phallus impudicus*; *Lycoperdon echinatum*, *depressum*; *Trametes versicolor*; *Piptoporus betulinus*; *Nectria cinnabarina* (Coral Spot).

ANNFIELD PLAIN AND STANLEY NATURALISTS' FIELD CLUB.

Since the last report on the activities of the club, further outings have been held. On June 20th, 1970 we followed the River Coquet from Weldon Bridge to Felton. The river bank provided interest in birds, fish and a profusion of flowers including Leopard's Bane, Honesty, Creeping Cinquefoil, Wood Sanicle, Alkanet, Fumitory and Bugle. A long walk was enjoyed on July 4th from Percy's Cross via Berwick to Eglington. In poor weather conditions over 50 members ventured forth on July 25th to Lakeland. At Threlkeld half of the members elected to continue with the planned walk in the mountains to the north, whilst the rest stayed with the bus and spent the afternoon in Keswick. On August 8th the club went by bus to Holwick in Teesdale, where they disembarked to walk back to Middleton. The club members again split up on August 22nd, some walking quite some distance in Kielder Forest, whilst the rest spent much time in the Kielder Craft Museum, before taking a gentle walk to meet the other party. Members saw forest life at its best with many signs of deer. Flowers included Corydalis, Bridewort, Golden Rod, Wild Thyme and Sneezewort. Further outings to the, Hexham area on September 5th, the Irthing Gorge on September 19th and finally to Penshaw Monument on October 5th, were just as impressive. On this last, the riverside walk was particularly interesting through brambles in fruit, where the flowers noted included snowberry, tansy and barberry in all its glory with bright red berries.

BIRTLEY AND CHESTER-LE-STREET NATURAL HISTORY SOCIETY.

The winter session of indoor meetings began on September 22nd when Dr. J. Franklin talked about a botanical expedition to Norway. He followed a route which was specially designed for the possibility of seeing arctic alpine and northern species of plants. His photographs were lovely. On October 6th there was a very interesting programme of films, then on October 20th we saw some more beautiful slides of plants when Dr. G. A. Swan talked about his botanical explorations in the Alps. Mr. G. Evans an old friend from the Consett Club, gave us a geological slant on the landscapes of the Isle of Skye on November 3rd. The arranged lecturer was unable to be present on November 17th, but our own member, Mr. E. Hall, stepped into the breach with some of his own films which once again proved to be quite marvellous.

The outing on the first Sunday of October took place on a lesser known part of Waldrige Fell and Broomyholme Marsh. The fungi were in great quantity but we were unfortunate in not having a fungus expert with us. In addition we saw once again the Crack Willow, Aspen Wood, a most unusual arrangement in our area. The flowers had all died back but we were able to recognise the plants of the Skull-cap, *Scutellaria galericulata* L.

NOTES AND RECORDS

NOTES

A Waxwing Year. The following reports have been received from the authors named:—

On October 27th, I noted a single bird at Shield Row, Stanley, and suggested that readers should be on the look out for Waxwings, as there seems to be quite a substantial invasion.

True to my expectations they duly appeared. From October 29th until the time of writing (November 13th), a large gathering of over 300 Waxwings frequented the parks and gardens in the centre of the built up area of Newcastle. On November 11th, the following counts were recorded within the city, Eldon Square, 101 birds; Barrack Road and Leazes Park, 105; Exhibition Park area, 102 birds. Some of the Waxwings were noted "flycatching" from the tops of trees and on one occasion an adult was observed feeding berries to an immature bird. Several birds were also noted to be sunbathing on the top of Sutton Flats. Each evening the Waxwings fly off to roost just like Starlings, but so far the roost has not been traced. R. Marston Palmer.

On Sunday, November 15th, we had an invasion of waxwings in Swalwell allotment gardens, which are on the River Derwent. On that date only two appeared and they were so tired that they moved only reluctantly when I was as near as four yards from them. They must just have crossed, the North Sea. The birds increased daily until by Friday 20th there were over 30 in the area. They are feeding almost entirely on hawthorn and elder berries. In this they have considerable competition from fieldfares and redwings which are also moderately abundant. By the end of the week they had completely stripped the bushes between them By

now the waxwings are very wary and move away at the mere sight of human beings. L. P. Hird.

A dead waxwing, found by a pupil in the main street of Chester-le-Street, was brought into the Deanery Secondary School on December 2nd. T.C.D.

Bird Notes from Stanley. The following observations may be of some interest to readers.

Siskin: On September 29th, a single bird flew from the east into Leazes Park in Newcastle.

Garden Warbler: Late date. From October 22nd to October 26th, an individual frequented the Beamish Woods.

Redwing: A gathering of between 100 and 150 birds was present in Stanley Park on October 31st.

Fieldfare: First noted on October 9th, when a single bird occurred in Leazes Park, Newcastle. Later, on November 2nd, at least 50 birds were present in Exhibition Park also in Newcastle. R. Marston Palmer.

An unusual habitat for *Spartina townsendii*. In June I took a party of students to the dunes between Seaton Sluice and Blyth, and near the former, I found a patch of *Spartina townsendii* H. and J. Groves, which I had found there in the same spot, about 8 years previously. It is high on the dunes, spreading under the loose sand, with rhizomes which are not very deep, so that the plant is easy to pull up. Surely this is an unusual place to find this plant

D. Hall.

Yes, very unusual. We only know it from mud flats and tidal estuaries in such places as Warkworth, Budle Bay and between Holy Island and the Mainland, always where it has a generous covering of salt water at high tide. Editor.

The Five-Spot Burnet Moth. In a recent issue of "The Vasculum" you asked for more records of the 5-spot Burnet Moth. I found one, in July, at Boldon Colliery, on heathland near the pit heaps. My son has it in his collection and it is definitely the 5-spot, not the 6-spot D. Hall.

Larvae of the Nut-tree Tussock Moth, *Calocasia coryli* L. During the last week in August 1970, in the Belford West ten kilometre square, in the vicinity of Belford, Kylee, and in the next square west in the vicinity of Ford, larvae of the Nut-tree Tussock were found quite commonly on hawthorn, sallow and hazel. Although not a record for the area, the insect was much more abundant than is usually the case. I. D. Wallace.

The Herald Moth, *Scolopteryx libatrix* L. This year (1970), I have found this common species coming freely to sugar from the middle of August onwards. The moth has been thus found, sometimes three in a night, in a number of squares in Northumberland. My associates tell me that they have not often taken this insect in the autumn. Certainly I have never taken it at the actinic BL lights and only find one or two each spring or early summer. One wonders if these August emergees can really survive until hibernation. I hope to take part in a short experiment to see if some of these moths will survive until hibernation or will lay eggs before, and subsequently die. I. D. Wallace.

RECORDS

ORTHOPTERA — GRASSHOPPERS, CRICKETS AND COCKROACHES.

Tetrix undulata Sowerby. Common Ground Hopper. 68

According to Ragge, this insect has not been recorded from V.C. 68. One adult was taken from under heather in the Kylee area on 30th August, 1970. I. D. Wallace.

LEPIDOPTERA — BUTTERFLIES AND MOTHS.

<i>Metzneria metzneriella</i> Staint.	66
Chester-le-Street, common.	
<i>Epithectisi mouffetella</i> Schiiff,	66
Walldridge, Chester-le-Street, not common	
<i>Xenolechia aethiops</i> Westw.	68
On heather, Alwinton.	
<i>Telphusa notella</i> Hubn.	66
Chester-le-Street, not common.	
<i>Telphusa proximella</i> Hubn.	66
Walldridge, abundant; Chester-le-Street.	
<i>Telphusa fugitivella</i> Zeil.	66
Chester-le-Street, very common.	
<i>Telphusa luculella</i> Hubn.	66
Chester-le-Street, rare.	
<i>Mniophaga similis</i> Staint. (<i>confinis</i> Staint.)	65
Not common Linthorpe, Kildale.	
<i>Mniophaga senectella</i> Zeil	.65,66
Not common Linthorpe, Kildale (65); Hart (66).	
<i>Bryotropha desertella</i> Dougl	.65,66
Taken occasionally at Kildale (65), and Upper Teesdale (66).	
<i>Bryotropha terrella</i> Schiff.	66
Fairly common Chester-le-Street, Walldridge, Sherburn.	
<i>Teleiopsis diffinis</i> Haw.	66
In small numbers, Chester-le-Street.	
<i>Mirificarna mulinella</i> Zeil.	66
Bred easily and abundantly from Gorse and Broom flowers and Chester-le-Street, Walldridge.	
<i>Neofaculta betulea</i> Haw.	66
In clouds on <i>Calluna</i> in May, Chester-le-Street, Walldridge.	
<i>Gelechia rhombella</i> Schiff.	66
Walldridge, Chester-le-Street, occasionally. T.C.D.	

MOLLUSCA — SNAILS AND SLUGS.

<i>Potamopyrgus jenkinsi</i> Mont.	66, 67
Reservoir, Fulwell pumping station; pond, Ryton Willows; old brick: ponds, Coxhoe; marsh, East Rainton (very common); old gravel ponds, Page Bank; R. Wear, Ebchester; brick pond, Birtley (66); small pond, Ovingham; riverside, Embleton (67).	
<i>Carychium minimum</i> Mull.	66, 67
Among dead leaves, Bollihope; common, Finchdale woodlands (66); under bark, Acomb (67)	
<i>Limnaea fruncatula</i> Mull.	66, 67
Upland pasture stream, Bollihope (66); by the side of a pond, Ovingham (67).	
<i>Limnaea stagnalis</i> L.	66
Moorland Pond, Walldridge Fell; brick pond, Birtley.	
<i>Planorbis albus</i> Mull.	66
Old gravel ponds, Page Bank; brick pond Birtley.	
<i>Planorbis laevis</i> Alder.	66
Old gravel pits (one specimen). Page Bank.	
<i>Planorbis contortus</i> L.	66
Pond, Ryton Willows.	
<i>Planorbis crista</i> L.	66
Old gravel pits, Page Bank.	
<i>Cochlicopa lubrica</i> Mull. 66, 67	
Among dead leaves, Finchdale (66); among dead leaves, Acomb; under stones, Craster (67).	
<i>Cochlicopa lubricella</i> Porro.	66
Under old bricks, Fulwell.	

R. H. Lowe.

FLOWERING PLANTS AND FERNS.

<i>Potentilla tabernaemontani</i> Aschers. Spring Cinquefoil.	66
Hart Warren, a new county reoord. (CONF. Donald Grose) G. G. Graham.	
<i>Juncus filiformis</i> L.	66
In very large quantities on alluvial mud at the inflow of Tunstall Reservoir, This has been determined by Prof. T. G. Tutin who notes that it is probably introduced by birds. This Durham colony must have been there for years and overlooked. There are 60-80 clumps of it.	
	Mrs. S. Burnip.
<i>Meconopsis cambrica</i> (L.) Vig. Welsh Poppy.	68
Several plants on a bank on the top of the Rothbury Hills, miles from any habitation.	
<i>Cirsium palustre</i> (L.) Scop. Marsh. Thistle.	68
In the same locality as the previous species; all of the white variety.	
<i>Pentaglottis sempervirens</i> (L.) Tausch. Alkanet.	68
Plentiful on the roadside near Callerly Castle grounds.	
	D. B. Blackburn.
<i>Galium boreale</i> L. Northern Bedstraw,	67
W. bank of N. Tyne nr. Green.	
<i>Galium mollugo</i> L. subsp. <i>erectus</i> Syme. Erect Hedge Bedstraw	67
Wolf Cleugh, On the Knar Burn (S. Tyne).	
<i>Valerianella locusta</i> (L.) Betke. Lamb's Lettuce, Corn Salad.	67, 68
Roadside, half m. W. of Belford (68), N. Bank of Tyne, between Wylam and Ovingham. (67)	
<i>Dipsacus fullonum</i> L. Teasel.	67
Sand dunes N. of Amble.	
<i>Scabiosa columbaria</i> L. Small Scabious.	67
Nr. Broomlee Lough; nr. Moss Kennels; old lime quarry at Gunnerton.	
<i>Senecto squallidus</i> L. Oxford Ragwort.68	
Goswick Station.	
<i>Doronicum pardalianches</i> L. Great Leopard's Bane.	67
Hart Burn, above Garden House.	
<i>Pullicaria dysenterica</i> (L.) Bernh. Fleabane.	68
Holy Island Links.	
<i>Filago germanica</i> (L.) L. Cudweed.	67
Thirlwall Quarry; forestry road on Hawkhope Moor (Falstone).	
<i>Antennaria dioica</i> (L.) Gaertn. Cat's-foot.	68
On the basalt nr. Waren Mill.	
<i>Erigeron acer</i> L. Blue Fleabane.	68
Sand dunes S. of Bamburgh; Holy Island Links.	
<i>Carlina vulgaris</i> L. Carline Thistle.	68
Links at Goswick: spit S.E. of Warkworth.	
<i>Centaurea scabiosa</i> L. Greater Knapweed.	67
Old Lime quarry at Gunnerton.	
<i>Crepis mollis</i> (Jacq.) Aschers. Soft Hawk's-beard.	67
Hay meadow at Heathyburn, and higher up the Beldon Burn to 1,250 ft.	
<i>Ornithogalum umbellatum</i> L. Star-of-Bethlehem.	68
On the spit, S.E. of Warkworth.	
<i>Paris quadrifolia</i> L. Herb Paris.	67
Dene below Aydon Castle; by the Hart, above Garden House.	
<i>Allium vineale</i> L. Crow Garlic.	67
Gunnerton Crag.	
<i>Allium schoenoprasum</i> L. Chives.	67
Basalt at Walltown.	
<i>Listera cordata</i> (L.) R. Br. Lesser Twayblade	
Buck Burn (Akenshaw Burn): nr. Buck Lake (S. of Monkside); stream coming down to White Kielder from between Limestone Knowe and Grey Mares Knowe,	
	G. A. and M. Swan.