

CLEVELAND NATURALISTS'

FIELD CLUB



RECORD OF PROCEEDINGS

Volume 6 Part 1

Spring 1995

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Membership Details

Any person interested in joining the Cleveland Naturalists Field Club should send their subscription to the Membership Secretary. Potential members are welcome to our field meetings listed at the back of this issue. Annual subscriptions are due on 1st January each year. (Adult £5.00. Students under 18 years £1.00) Members are entitled to attend meetings of:
Yorkshire Naturalists' Union,
Northern Naturalists' Union,
Cleveland Wildlife Trust.



Editorial

This is the fifth issue of the new Cleveland Naturalists Field Club Proceedings. The site chosen for special attention in this issue is Caydale near Helmsley. This is rather further away from Teesside than sites in previous issues, but reflects the title of the publication. The Proceedings are intended to be a report on the activities and studies of Club members, rather than an attempt at comprehensive site surveys, and this year members have spent some time looking at this particular site.

A survey of all the local holdings of the old Proceedings has been carried out which revealed a very patchy distribution, with only the Dorman Museum having a complete set. A summary of local holdings of botanical interest has also been carried out and is presented here.

New information on any of the previous sites covered (Eston Moor, South Gare, Guisborough Walkway, and Charltons Pond) is always welcome for inclusion in the Proceedings. A field meeting at Eston has been arranged for 1995.

All Members of the Field Club are encouraged to contribute notable records for inclusion in the Proceedings; particularly from field meetings. There is always some space available for small pieces of art work. These reproduce best if in the form of black and white drawings. Many thanks to all the contributors to the current issue.

Malcolm Birtle

Acknowledgements to Contributors

Many thanks to the following contributors- Pat Wood (Old Proceedings and botanical holdings survey), Darroll Fryer (Guisbrough Branch Walkway, Highlights), John Blackburn (Bryophyte recording, Caydale), Vincent Jones (Highlights, Caydale), Ian Lawrence (Vegetation, Caydale), Tony Wardhaugh (Mollusc recording and miscellaneous at Caydale and Helix), Maurice Hallam (Birds and Mammals), Eric Gendle (Drawings). Special thanks to Don Smith (Ryedale Nat. Hist. Soc.) who has given us the results from a Cleveland example of the very many northern churchyards he has visited as part of the national lichen survey of churchyards. Many thanks to all who contributed to this issue.

News

The Club will be hosting the Heslop-Harrison Memorial Lecture on Saturday, November 4th, 1995, at 2.30 p.m. in Stockton Library. The speaker will be Hugh Ellis and the provisional title is 'Butterflies of the North-east'.

A Comma (*Polygona c-album*) was reported on 13th March 1995 at Saltburn in a garden.

Highlights of the 1994 Field Meetings

Saturday 23rd April, Saltburn Woods and Gill, led by Maurice Ward.

Particular botanical interest centered around examination of the violets. There were many plants of both Early Dog-violet (*Viola reichenbachiana*) and Common Dog-violet (*Viola riviniana*) and also, as it is thought, of their hybrid *Viola x bavarica*. We were pleased to see that the colony of Few Flowered-garlic (*Allium paradoxum*) in Saltburn woods was flourishing and spreading in the locality.

Wednesday 11th May, Poole Hospital Grounds, led by Vincent Jones.

Further records of the flora of the grounds were noted for a detailed account to be produced in the future. *Helix aspersa* was found amongst old cold frames. Whitethroat was also noted.

Sunday 15th May, Ashdale, Helmsley, led by Norman Thompson.

Owing to heavy rain the day's outing had to be curtailed but we were able to investigate Carlton Quarry and its environs. There was much of botanical interest in the the quarry; in particular there were many established garden escapes. These included: Elephant Ears (*Bergenia crassifolia*), Greater Celandine (*Chelidonium majus*), Dame's Violet (*Hesperis matronalis*), Spotted Dead-nettle (*Lamium maculatum*), Honesty (*Lunaria annua*), Musk-mallow (*Malva moschata*), Green Alkanet (*Pentaglottis sempervirens*), Garden Solomon's-seal (*Polygonatum x hybridum*), Black Currant (*Ribes nigrum*), Feverfew (*Tanacetum parthenium*). Other interesting finds were: Scarlet pimpernel (*Anagallis arvensis*), Common Centaury (*Centaureum erythraea*), Common Cudweed (*Filago vulgaris*), Changing Forget-me-not (*Myosotis discolor*), Burnet-saxifrage (*Pimpinella saxifraga*), Field Madder (*Sherardia arvensis*), Hairy Violet (*Viola hirta*). In the woodland near the edge of the quarry were Columbine (*Aquilegia vulgaris*), Giant Campanula (*Campanula latifolia*), and Tuberous Comfrey (*Symphytum tuberosum*). Field Penny-cress (*Thalapsi arvense*) was common in an arable field as we returned to Helmsley. A wasp beetle (*Clytus* sp.) was also noted.

Wednesday 18th May, Hagg Wood, Moorsholm, led by John Blackburn.

The differences between the Hard Shield-fern (*Polystichum aculeatum*) and the Soft Shield-fern (*Polystichum setiferum*) were examined. It is pleasing to note that these ferns were growing in close proximity; we may find their hybrid one day! Intermediate Avens (*Geum x intermedium*) and Toothwort (*Lathrea squamaria*) were also found in the wood.

Wednesday 25th May, Great Ayton and Easby, led by Kath Dilworth.

White Ramping-fumitory (*Fumaria capreolata*) occurred on a road-side verge near Great Ayton. By the River Leven between Great Ayton and Easby were Large Bittercress (*Cardamine amara*), Leopard's Bane (*Doronicum pardalianches*) and Greater Chickweed (*Stellaria neglecta*). In grassland close to the river, one of our rarer, lowland Lady's Mantles, Hairy Lady's Mantle (*Alchemilla filicaulis ssp. vestita*) was found.

Sunday 15th June and Sunday 31st August, Caydale, led by Ian Lawrence.

The records of animals and plants noted during these two visits is set out fully in another part of this edition of "Proceedings".

Wednesday 8th June, Hilton Woods, Brewsdale, led by Christopher Lowe.

'Brewsdale' denotes part of the Leven Valley Complex leased as a Reserve to the Cleveland Wildlife Trust, though in fact half of the site lies over the County boundary in North Yorkshire. 16 CNFC members gathered in rather gloomy weather. The single-file, 'circular' walk took us through varied scrub, secondary woodland, at times dense and more open, grass-dominated spaces. In one of the latter, Adder's-tongue Fern (*Ophioglossum vulgatum*) was found. This was the evening's floral highlight. A representative sample of more usual trees, herbs and grasses of such habitats was also evident and damper patches afforded additional species such as Lesser Pond-sedge (*Carex acutiformis*) and Brown sedge (*Carex disticha*). The following moths were noted- Green Carpet (*Colostygia pectinataria*), Common Swift (*Hepialus lupulinus*) and The Rivulet (*Perizoma affinitata*). Whitethroat was recorded.

Wednesday 18th June, Lockwood Beck Reservoir, led by John Blackburn.

There were several sedges growing in marshy areas at the reservoir edge. These included Green-ribbed Sedge (*Carex binervis*), Common Sedge (*Carex nigra*), Carnation Sedge (*Carex panicea*), Bottle Sedge (*Carex rostrata*), and Yellow Sedge (*Carex viridula ssp. oedocarpa*). Other plants in these areas were Common Spike-rush (*Eleocharis palustris*), Fen Bedstraw (*Galium uliginosum*), Marsh Pennywort (*Hydrocotyle vulgaris*), Marsh cinquefoil (*Potentilla palustris*) and Creeping Willow (*Salix repens*). Submerged plants included Toad Rush (*Juncus bufonius var. fluitans*), Shoreweed (*Litorella uniflora*), Broad-leaved Pondweed (*Potamogeton natans*) and Perfoliate Pondweed (*Potamogeton perfoliatus*). Great Crested Grebe and Sandpipers were the most interesting birds seen. The following lichens were observed on a concrete block- *Hypogymnia physodes*, *Phaeophyscia orbicularia*, *Xanthoria parietina*, *Physcia adscendens*, *Lecanora campestris*, *Lecanora dispersa*, *Tephpomela atra*, and *Lecanora muralis*. An unusual duck was observed in the middle of the reservoir which was probably a single Scaup.

Saturday 18th June, Arkengarthdale, led by Joan Bradbury.

The inclement weather prevented us from appreciating the botanical richness of the riverside meadows. However, many fine plants were admired. On walls and in rock-crevices were Shining Crane's-bill (*Geranium lucidum*), Rue-leaved saxifrage (*Saxifraga tridactylis*) and the ferns, Wall-rue (*Asplenium ruta-muraria*), Green Spleenwort (*Asplenium trichomanes-ramosum*), Maidenhair Spleenwort (*Asplenium trichomanes ssp. quadrivalens*) and Brittle Bladder-fern (*Cystopteris fragilis*). Plants in the herb-rich meadows included Northern Marsh-orchid (*Dactylorhiza purpurella*), Wood Crane's-bill (*Geranium sylvaticum*), Lousewort (*Pedicularis sylvatica*), Common Bisort (*Persicaria bistorta*), Common Milkwort (*Polygala vulgaris*), Yellow Rattle (*Rhinanthus minor*), Globeflower (*Trollius europaeus*) and Mountain Pansy (*Viola lutea*). We were delighted, very late in the day, to find several very small plants of Moonwort (*Botrychium lunaria*).

Wednesday 22nd June, North Gare, led by Maurice Hallam.

It was a pleasure to find so many orchids in fine bloom. There were many plants of Common Spotted-orchid (*Dactylorhiza fuchsii*), and a bewildering array of marsh orchids and their many hybrids. True species of Early Marsh-orchid (*Dactylorhiza incarnata*), and Northern Marsh-orchid (*Dactylorhiza purpurella*), were found but no convincing specimen of Southern Marsh-orchid (*Dactylorhiza pratermissa*), though it was thought that this species was hybridising, particularly with *D. fuchsii* and *D. purpurella*. We were delighted, at the end of the evening, to see a fine plant of the Teesmouth speciality (*D. purpurella var. atrata*). Other interesting plants seen were Distant Sedge (*Carex distans*), Field Mouse-ear (*Cerastium arvense*), Leafy Spurge (*Euphorbia esula*), Saltmarsh Rush (*Juncus gerardii*), Ivy-leaved Duckweed (*Lemna trisulca*), Brackish Water-crowfoot (*Ranunculus baudotii*) and Pink Water-speedwell (*Veronica catenata*). There were many plants of the Common Hawkweed (*Hieracium vulgatum*) and a few stands, not yet in flower, of *Hieracium eboracense*.

Sunday 26th June, Blackhall Rocks, led by Maurice Hallam.

The walk took us along the foreshore and along the cliff path. We began with a short detour to visit the site of Sea Spleenwort (*Asplenium marinum*). It was pleasing to see that a few plants were still flourishing. Plants of note along the stony beach at the foot of the cliffs included Sea Rocket (*Cakile maritima*) and Red Goosefoot (*Chenopodium rubrum*). On the cliffs were Purple Milk-vetch (*Astragalus danicus*), Spring Sedge (*Carex caryophyllea*), Bloody Crane's-bill (*Geranium sanguineum*), Common Rock-rose (*Helianthemum nummularia*), Downy Oat-grass (*Helicotrichon pubescens*), Burnet Rose (*Rosa pimpinellifolia*), Saw-wort (*Serratula tinctoria*), Lesser Meadow-rue (*Thalictrum minus*) and the particular speciality Round-leaved Wintergreen (*Pyrola rotundifolia ssp. rotundifolia*). The following lepidoptera were noted- Tortoiseshell (*Aglais urticae*), Large Skipper (*Ochlodes venata*), Small Heath (*Coenonympha pamphilus*), White Ermine (*Spilosoma lubricipeda*), Ghost Swift

(*Hepialus humuli*), and Silver Y (*Autographa gamma*). Green Tiger Beetles were also seen.

Wednesday 29th June, Eaglescliffe Ponds, led by Vincent Jones.

Small Ponds have been created at the Eliff's Mill allotments. Introduced plants, seen on the visit, were Yellow Iris (*Iris pseudacorus*), Lesser Spearwort (*Ranunculus flammula*), Greater Spearwort (*Ranunculus lingua*) and Water-soldier (*Stratiotes aloides*).

Sunday 3rd July, Kirby Stephen, led by Eric Gendle.

Two Cumbrian nature reserves at Waitby Greenrigs and Smardale Gill, both near Kirby Stephen were visited. The day proved a real botanical delight; it is a pity that only six members were able to attend. No less than eleven species of orchid were seen. These included both the Lesser and the Greater Butterfly-orchids (*Platanthera bifolia*) and (*P. chloranthera*), Frog Orchid (*Coeloglossum viride*) and Marsh Helleborine (*Epipactis palustris*). There were several species of hawkweed of which the most interesting were *Hieracium anglicum* and its much rarer relative *H. ampliatum*, det. D.J. McCosh, both sporting the large, showy heads of the *Cerinthoidea* section of the genus. There were many other plants of interest, of which the most notable were Hairy Rock-cress (*Arabis hirsuta*), Moonwort (*Botrychium lunaria*), Bird's-foot Sedge (*Carex ornithipoda*), Jacob's Ladder (*Polemonium caeruleum*), Bird's-eye Primrose (*Primula farinosa*), Common Wintergreen (*Pyrola minor*), Lesser Clubmoss (*Selaginella selaginoides*) and Globeflower (*Trollius europeus*).

Wednesday 6th July, Hargreaves Quarry, led by Christopher Lowe.

Thundery rain affected this meeting. Nonetheless, ten CNFC members visited this highly artificial Site of Nature Conservation Interest on reclaimed North Tees marshland. The varied flora colonizing recent slag-deposits included such lime-loving species as Fairy Flax (*Linum catharticum*) and Yellow-wort (*Blackstonia perfoliata*); typical of such environments in Cleveland. Wetter habitats supported Distant Sedge (*Carex distans*), Marsh Arrowgrass (*Triglochin palustris*), and taller vegetation, mostly stands of Reed Mace (*Typha latifolia*) and Sea Club-rush (*Scirpus maritimus*). The following moths were seen- Yellowshell (*Camptogramma bilineata*), Shaded Broad-bar (*Scotopteryx chenopodiata*), Latticed Heath (*Semiothisa clathrata*), Common White Wave (*Cabera pusaria*), Clouded Border (*Lomaspilis marginata*) with Common Blue (*Polyommatus icarus*) and Meadow Browns (*Maniola jurtina*). Four Greenshank were also seen flying high.

Postscript : This area is unfortunately destined for further tipping. Rubbish has to go somewhere, I suppose. Provisional planning consent for such an operation was granted before the 'SNCI' system was set up; so protection for the site cannot be effectively exercised. Many young newts were found amongst the debris of the quarry.

Saturday 9th July. Hole of Horcum, led by Colin Chatto.

The classic site for Dwarf Cornel (*Cornus suecica*) was visited; there were many plants but no flowers or fruits were found. In the stream at the bottom of the Hole of Horcum, Pale Forget-me-not (*Myosotis stolonifera*) was seen. This was a very hot sunny day typical of high summer. Small Heath (*Coenonympha pamphilus*), Small Copper (*Lycaena phlaeas*), Silver Ground Carpet (*Xanthorhoe montanata*), Common White Wave (*Cabera pusaria*), Common Heath (*Ematurga atomaria*), and Silver Y (*Autographa gamma*) were noted. The lichen *Porpidia tuberosa* was found on a sandstone block. Whinchats were seen near Dundale Pond together with Common Damselfly (*Enallagma cyathigerum*), and Golden Ringed Dragonfly (*Cordulegaster boltonii*) at the pond itself. Common Blue (*Polyommatus icarus*) and Small Copper (*Lycaena phlaeas*) were also noted here.

Saturday 13th July, Upleatham and Errington Woods, led by Darroll Fryer.

The most interesting plants were in the wasteland near Upleatham village. These were Giant Scabious (*Cephalaria gigantea*), Canary-grass (*Phalaris canariensis*) and White Mustard (*Sinapis alba*).

Saturday 16th July, Whisperdale, led by Eric Gendle.

In the woodland were Hairy Wood-rush (*Luzula pilosa*), Common Cow-wheat (*Melampyrum pratense*), Goldenrod (*Solidago virgaurea*) and Wood Vetch (*Vicia sylvatica*). A limestone quarry was visited on the edge of Haggland Wood. Here we noticed typical calcicoles, Common Rock-rose (*Helianthemum nummularia*), Hoary Plantain (*Plantago media*) and Common Milkwort (*Polygala vulgaris*). Some members made a return visit to this quarry in late August and were pleased to see several plants of Autumn Gentian (*Gentianella amarella* ssp. *amarella*). Behind the quarry was a stony field that was ablaze with colour. Plants particularly notable were Musk Thistle (*Carduus nutans*), Wild Basil (*Clinopodium vulgare*), Pale St John's-wort (*Hypericum montanum*), admittedly in a most unusual habitat, Small Scabious (*Scabiosa columbaria*) and Field Madder (*Sherardia arvensis*).

Wednesday 20th July, Crimdon Cut, led by Vincent Jones.

We first investigated the flora of the large railway embankment. Several species of hawkweed were seen, Shrubby Hawkweed (*Hieracium vagum*), Common Hawkweed (*H. vulgatum*), *H. acuminatum* and *H. eboracense*. Other interesting plants here were Greater Knapweed (*Centaurea scabiosa*), Hoary Plantain (*Plantago media*) and particularly Pale St John's-wort (*Hypericum montanum*). This plant, very rarely seen on our club outings, had now been found on two successive walks! Other plants worthy of mention for the evening were Fennel (*Foeniculum vulgare*) and Wild Clary (*Salvia vebenaca*), both by the railway track and Oak-leaved Goosefoot (*Chenopodium glaucum*), by the sea path.

Saturday 30th July, Raisdale, led by Maurice Ward.

A stream side, close to the Raisdale road, was visited to see one of the few sites in the area for Peppermint (*Mentha x piperta*). This mint continues to thrive here. Other plants seen were Wood Horsetail (*Equisetum sylvaticum*), Bay Willow (*Salix pentandra*), Wild Pansy (*Viola tricolor ssp. tricolor*) and near Raisdale Mill, Hop (*Humulus lupulus*), growing in the hedgerow. A buzzard flew overhead during the course of the afternoon.

Saturday 13th August, Douthwaite Dale, led by Pam Law.

We first admired the lovely tree of Walnut (*Juglans regia*) growing on the green in Hutton-le Hole. Several calcicole specialities of the area were seen. These and other plants of interest included Deadly Nightshade (*Atropa bella-dona*), Woolly Thistle (*Cirsium eriophorum*), Wild Basil (*Clinopodium vulgare*), Hound's-tongue (*Cynoglossum officinale*), Autumn Gentian (*Gentianella amarella ssp. amarella*), Wood Barley (*Hordelymus europaeus*), Plough-man's-spikenard (*Inula conyza*), Hawkweed Oxtongue (*Picris hieracoides*) and Hybrid Woundwort (*Stachys x ambigua*). Peacock (*Inachis io*), Tortoiseshell (*Aglais urticae*), Wall Brown (*Lasiommata megera*), Large White (*Pieris brassicae*), and Meadow Brown (*Maniola jurtina*) were seen in the dale. On the escarpment carrying the road to Hutton-le-Hole Common Blue (*Polyommatus icarus*) and the Mother-of-Pearl (*Pleurotya ruralis*) were seen. Hard Shield fern was also noted. Corn Spurry and Small Nettle were seen in an arable field on the escarpment. A sizable, crushed, fossil echinoid (sea urchin) with ornamented spines was found in the limestone on the escarpment. The lichen *Clauzadea immersa* was found to be completely covering the limestone in places.

Sunday 2nd October, Mulgrave Woods, led by Pat Wood.

The botanical interest of the walk centered around many exotic trees planted in the woodland of the Mulgrave estate, that were resplendent in autumn colours. It was agreed that a future visit to the woods, accompanied by the estate forester, would be most interesting and informative. A report on these trees will therefore be given at a later date. Other plants to note were Wood Small-reed (*Calamagrostis epigejos*), Spindle (*Euonymus europaeus*) and Tall Tutsan (*Hypericum x inodorum*).

Roots and New Shoots

On the 2nd of October 1863, at a meeting held in the Lodge Room of the Odd Fellows Hall, a club was formed under the name of the Middlesbrough Atheneum. In 1868 this became the Cleveland Literary and Philosophical Society. In 1866 they organised a number of Summer excursions. These were so successful and instructive that on the 22nd of March 1867 a Middlesbrough Atheneum Field Club was formed as a branch of the society but under separate management. This was later called the Cleveland Field Club and the Cleveland Naturalists' Club. It had five sections: Geology, Botany, Conchology, Microscopy, and Antiquities. The first excursion was to Guisborough on the 24th April 1867. The club rules of this society are in the Middlesbrough Reference Library and the Cleveland County Archives.

In 1868 the two societies decided to try to establish a museum in Middlesbrough. They leased rooms and established a library and reading rooms. One room was put aside for scientific pursuits and a series of Science Transactions were published. Objects were also collected for the museum. In 1871 the scientific section established a botanic garden in Albert Park which had in it 400 of the rarer British flowering plants. Sadly the scientific section ceased to exist around 1875-6 and by 1910 most of the garden had disappeared.

On the 4th of April 1881 a meeting was held by members of the Literary and Philosophical Society and the present Field Club was formed under its president Dr. W.Y Veitch M.R.C.S.. From 1895 until 1932 our Club produced a set of Proceedings containing details of the Club's activities and articles on both Natural History and Local History. Details of the Club's origins can be found in the Proceedings in an article entitled 'History of Natural History Societies in Middlesbrough' by J.W.R. Punch.

In 1881 the Field Club published a book entitled 'Middlesbrough and District, being Notes Historical, Industrial, Scientific' by W.H.Burnett. Copies of this can be seen in the Guisborough and Middlesbrough Reference Libraries. Also in Guisborough Reference Library is 'Rambles in South Durham and North Yorkshire. First Series. Saltburn and Neighbourhood' by Angus Mcpherson, 1888, author of 'Cleveland Thoughts' etc.. This was dedicated to 'my Comrades of the Cleveland Naturalists' Field Club with whom I have tramped many a merry mile'. He was president of the Club from 1886-1887. In 1909 Frank Elgee produced 'The Fauna of Cleveland'. He is also well known for other work including the publication of the book entitled 'The Moorlands of North Eastern Yorkshire. Their Natural History and Origin'. He was president of the Club from 1922-23.

After 1932 when the last Proceedings were produced there appears to be little information about the Club until 1948 when a portfolio of typed articles and photographs was produced. In this an article entitled 'Per Ardua ad Astra' appeared written by Frank Elgee's wife on the occasion of her husband's death on the 7th August 1944.

The last publication of the club before the 1990's appears to be 'The Natural History of Teesmouth' by David Graham Bell produced by the Club in conjunction with the Teesmouth Bird Club and a booklet to celebrate the Club's centenary in 1981.

Four years ago a recorders' group was formed and a decision was taken to reintroduce the Proceedings. It is hoped that as years go by more members will become involved in the recording sessions and will contribute articles. Any information from existing members on the period of the Club's history between 1932 and 1981 would be greatly appreciated for a future article. It can be seen from scraps of information in the

literature that the Club was active during these years, particularly with regard to early initiatives in nature conservation (see note on Globeflower at Billingham Beck in this issue). Information on presidents, field meetings, records, and publications during this period would be extremely useful and can be given to any member of the recording group.

As a result of the activities of the early members of the Literary and Philosophical Society and the Cleveland Naturalists a museum was finally established in 1904 in Middlesbrough. The Dorman Museum was a gift from Sir Arthur Dorman in memory of his son Lieutenant G.L. Dorman. Collections made by the Club and others could finally be put on display for the public to see. A library of scientific books of one of our past presidents, Rev. J. Hawell M.A. was also donated to the museum.

For a time the museum was used as the Club's headquarters and as a result a number of artifacts relating to the Club are housed there.

When the recorders group was started it was realised that there was no information available to our members on where old Proceedings and other literature about the Club could be consulted. In order to rectify this the following lists have been compiled.

We have many long-standing members of this Club who have contributed a lot to its activities. It is possible they have information about the Club that does not appear in this article or another part of the Proceedings. Old photographs can easily be copied. Many members have records of natural history interest from recent times. Perhaps they could consider passing on copies of these records so they can be placed in the archives and published in the Proceedings.

Local Holdings of Proceedings and Related Material

Local libraries and archives have been examined to determine the holding of past Proceedings. This investigation seems to reveal that the Proceedings were published once in 1889 and then annually from 1895 to 1932. The volumes were published as follows-

Early volume 1899

Volume 1 1895-1902

In 5 parts.(Parts I and II not numbered separately). Edited by the Rev. J. Hawell.

Part I,II	1895-1898
Part III	1899-1900
Part IV	1901
Part V	1902

Volume 2 1903-9

In 4 parts. Edited by Rev. J. Cowley Fowler.

Part I	1903-1904
Part II	1905-1906
Part III	1907-1908
Part IV	1908-1909

Volume 3 1910-25

In 4 parts.

Part I	1910-1911	Ed. Rev. J. Cowley Fowler
Part II	1912-1913	Ed. Rev. J. Cowley Fowler
Part III	1914-1919	Ed. Rev. J. Cowley Fowler
Part IV	1920-1925	Ed. Ernest W. Jackson, F.I.C., F.G.S.

Volume 4 1926-32

In 2 parts.

Part I	1926-1927	Ed. Ernest W. Jackson F.I.C., F.G.S.
Part II	1928-1932	Ed. T.A. Lofthouse F.R.I.B.A, F.E.S. and M.Odling M.A., F.G.S.

From the description of the holdings below it would seem that only the Dorman Museum has a complete set of volumes. This should be a cause for concern. Libraries elsewhere in the country have not been examined. If there is no other institution with a complete set of volumes loss of the Dorman Museum's holdings would be irreplaceable. An initiative to duplicate this holding elsewhere (locally) should be initiated urgently.

Local Library, Museum and Archive Holdings

Middlesbrough Reference Library

Unbound copies of the Proceedings in original covers.

1889 issue.

- Volume 1 complete.
- Volume 2 complete
- Volume 3 parts III and IV
- Volume 4 complete

'Middlesbrough and District, being notes historical, industrial, scientific', W.H. Burnett. Published in 1881 by the Field Club.

'The Natural History of Teesmouth'. Ed. David Graham Bell. Articles by members of the Cleveland Naturalists' Field Club and Teesmouth Bird Club.

Cleveland Naturalists' Field Club, 1866 season. Rule book and outings. This refers to the first Cleveland Naturalists' Field Club which was formed by members of the Cleveland Literary and Philosophical Society.

Dorman Museum

A complete collection of the Proceedings.

It also includes T.A. Lofthouse's copy of Volume 3. Also a duplicate copy of Volume 1.

Miscellaneous items connected to the Club's centenary, and some Winter programmes.

Guisborough Reference Library

Proceedings

Volume 1 Part V

Volume 2 Part II

Volume 3 Parts I, II, and III

'Middlesbrough and District, being notes Historical, Industrial, Scientific', W.H. Burnett. Published in 1881 by the Field Club.

'Rambles in South Durham and North Yorkshire. First Series. Redcar, Saltburn and Neighbourhood', Angus Mcpherson (author of 'Cleveland Thoughts')

Darlington Library, Archives and Local Studies Department

Proceedings Volume 1.

'Middlesbrough and District, being notes historical, industrial, scientific', W.H. Burnett. Published in 1881 by the Field Club.

Redcar Reference Library

Cleveland Naturalists' Field Club Proceedings. Volumes 1 to 3.

Stockton Library

There are no copies of the Proceedings in Stockton Library.

Cleveland County Archives, Exchange House, 6 Marton Rd., Middlesbrough

Parts of Proceedings

Volume 1 incomplete
Vol.1 Part V
Vol. 3 Parts II to IV
Vol.4 Part II

A typed volume of articles called 'A First Portfolio', produced by Club members.

Minute Books for the following years

1881-1904
1910
1923-1963

Some items of correspondence.

Documents relating to the Cleveland Literary and Philosophical Society.

Rule Book 1887

Reports, Transactions, Catalogues 1863-1882

Visitors Book 1895-1942

Members Proposal Book 1926-1946

Two volumes of miscellaneous items 1867-1942

Centenary programme and bulletin 1981.

Collection of photographs, including past presidents of the Club mainly taken by H. Hood.

'History of Natural History Structures in Middlesbrough', J.W.R. Punch

'The Fauna of Cleveland, Past and Present', Frank Elgee, 1909.

Pat Wood, 1994

Guisborough Branch Walkway

The completion of the ponds and car park in early 1994, was followed by the surfacing of the remainder of the walkway to where it terminates near the Esk Valley line. There was also alteration of farm access to nearby fields, so resolving the problem of the many mud-filled ruts and puddles. As a consequence, the cinder-track has gone and the small plants that grew at its surface were no longer evident during 1994. Red Bartsia (*Odontites verna*), that grew at intervals along the western end of the track surface, was similarly not evident. However in a wooded area on the edge of the surfaced walkway a well established group of Broad-leaved Helleborine (*Epipactis helleborine*) was present and a small clump of Hedge Bedstraw (*Galium mollugo*) was growing adjacent to the pond in the car park.

Darroll Fryer, February 1995

Bryophyte recording in Cleveland - progress report

Steady progress had been maintained on the recording of Cleveland's bryophytes since the first report on the project was made in December 1992 at the end of two years' work.

The number of records made at the end of December 1994 is 8020, covering 266 species. Much of the recent field work, particularly in the Autumn months, has centred on stubble fields. Agricultural areas tend to be neglected and, as a result, some plants, particularly the tuberous species, are under-recorded. This concentration of effort has resulted in the following new vice-county records for Durham (VC 66) and North-east Yorkshire (VC 62):-

Weissia longifolia var. *longifolia* (Low Stotfold Farm) (VC 66)

Weissia longifolia var. *longifolia* (Stainton Vale Farm)(VC 62)

Weissia microstoma var. *brachycarpa* (Behind Thorpe Wood) (VC 66)

Phascum cuspidatum var. *piliferum* (Thorpe Bulmer Farm) (VC 66)

Two other species new to Co.Durham are

1.*Hennediella stanfordensis*, which was found growing in the flood zone of the R. Tees at Newsham

2.*Zygodon conoideus*, on old elders in the Howls Dalton Piercy.

Another significant record is *Tortula freibergii*, a tiny moss which has been seen growing on the sides of sandstone rocks in Skelton Beck and also in Millholme Beck at Brotton. This is only the fourth locality for the plant in Britain.

At least 24 species of bryophytes known to have occurred in Cleveland have, so far, not been seen during the present survey. Some of these are undoubtedly extinct, but others are, no doubt, waiting to be refound. The work continues, albeit at a reduced pace.

John Blackburn, 1994

Lichens in a Yarm Churchyard

On the 23rd September 1994, John Blackburn and I, having looked around St.John's church at Egglecliffe, entered the gate of St.Mary of Magdalene at Yarm. This church was rebuilt in 1730 but is almost dwarfed by the awe inspiring 43 arch railway viaduct nearby. I had expected with the proximity of trains and traffic, previous domestic and current industrial air pollution there would be a sparse lichen flora. This is often the case in an urban situation, but in this instance I was proved wrong. The sandstone perimeter wall proved quite rich, some species not appearing elsewhere in the yard. Apart from single-hewn headstones, the acid/alkali nature of masonry can vary considerably and unpredictably as an acid sandstone gradually becomes infiltrated by an alkaline mortar run-off. Two rubbery, black *Collemas* were noted, *C.crispum* and *C.tenax* together with three different 'pixie-cup' *Cladonias*. The first two in the list bear recognisable cups on short stalks, but the last one ends in a spike.

When entering a churchyard for the first time, the most obvious species apart from the many white, grey or yellow orbs is *Psilolechia lucida* with its broad swathes of almost

luminous lime green ,visible from one side of the yard to the other. There are some species so regularly found on the mortar of church masonry that for some irrational reason I sometimes forget to record them. These include the yellow powdery *Caloplaca citrina* and the tiny orange fruits of *Caloplaca holocarpa* and the white *Lecanora albescens* and *Lecanora dispersa*.

John directed my attention to a flat chest tomb near the upper entrance gate and there, to my amazement, were a large number of *Dermatocarpon miniatum* thalli obviously thriving because of the presence of tiny, barely visible youngsters. This species when mature in an ideal habitat is as big as a 50p piece, round with upturned edges and grey with black specks. It is normally found on vertical, damp, shaded calcareous rocks and I have only seen it in 4 or 5 yards out of over 600 surveyed.

However, the best find caught my eye at the extreme western end of the South curch wall, a small patch of bright grass green about head height up. This proved to be *Lecanora epanora*, only found in churchyards on two other occasions. The lichen 'bible' from the British Museum quotes this species as being found on "shaded overhangs and cervices in iron sulphide-rich rocks". At Felixkirk, near Sutton Bank, the headstones were certainly of reddish iron sandstone, but at Ugthorpe it appeared on a copper stained window sill. I have no idea what metallic mysteries the Yarm masonry block would reveal. The thallus of this lichen is cracked into tiny islands called areoles, a mechanical feature which enables the organism to expand and contract on wetting and then drying without flaking away from the surface. Under a hand-lens, the areoles are blue/green while the clumps of powder (soredia) which form on them are yellow/green. Those who remember their fifth year physics (light absorption), or any who paint for a hobby, will appreciate why the lichen appears a pure grass green from a distance.

The list below contains 41 species, but with repeat visits, even by myself but certainly with another lichenologist, the number could increase to over 50, perhaps even to 60. I have been fortunate enough to obtain lists from half a dozen sites where either I alone or in the company of another expert have visited, and also where others, in one instance an organised British Lichen Society outing, have also been previously or subsequently. In the B.L.S. case they visited St.Oswald church in Ravenstonedale, V.C.66 in 1988and recorded 78 species. I visited in 1994, finding 57 species. Between us however there were 95 different species recorded and it was quite obvious that a clump of unkempt bushes and small trees in a corner of the yard had been overlooked in 1988.

There are many reasons for survey differences; haste, carelessness, mega-size of site, and blind spots where certain species are concerned, either dismissing them as common species or overlooking them all together. The ability to recognise an increasing number of taxa is only built up gradually and over a long period of time.

591	Yarm- St. Mary Magdalene		
45/416129	V.C.66	Surveyed 23.9.94	Recorder- D.H.Smith
<i>Acarospora fuscata</i>		2 sandstone church, headstones and outer wall	

<i>Caloplaca citrina</i>	1 sandstone church
<i>C. holocarpa</i>	3 sandstone outer wall
* <i>C. isidiigera</i>	1 sandstone outer wall
<i>Candelariella aurella</i>	2 marble headstones and chest tomb
<i>C. vitellina</i>	1 sandstone church and headstones
*** <i>Cladonia cholorophaea</i>	2 sandstone outer wall
* <i>C. fimbriata</i>	3 sandstone coped tomb
** <i>C. macilenta</i>	2 sandstone outer wall
** <i>Collema crispum</i>	1 sandstone outer wall
*** <i>C. tenax</i>	2 sandstone outer wall
*** <i>Dermatocarpon miniatum</i>	2 sandstone chest tomb
<i>Lecania erysibe</i>	2 marble headstone
<i>Lecanora albescens</i>	1 marble headstone, and outer wall
<i>L. campestris</i>	3 sandstone outer wall
<i>L. conizaeoides</i>	1 sandstone church and headstones
<i>L. dispersa</i>	1 sandstone church and headstones
*** <i>L. epanora</i>	4 sandstone church
* <i>L. expallens</i>	3 sandstone church
* <i>L. orosthea</i>	3 sandstone headstone
<i>L. polytropa</i>	1 sandstone outer wall
<i>L. soralifera</i>	2 sandstone headstones and outer wall
* <i>Lecidea fuscoatra</i>	2 sandstone outer wall
<i>Lecidella scabra</i>	3 sandstone church
<i>L. stigmatea</i>	3 sandstone outer wall
<i>Lepraria incana</i>	1 sandstone church and headstones
<i>Parmelia glabratula ssp. fuliginosa</i>	2 sandstone headstone
<i>P. saxitilis</i>	2 sandstone chest tomb and outer wall
<i>Phaeophyscia orbicularis</i>	3 marble headstone
<i>Phlyctis argena</i>	2 sandstone outer wall
<i>Physcia adscendens</i>	3 marble headstone
<i>P. caesia</i>	3 sandstone headstone
<i>Porpidia tuberculosa</i>	1 sandstone coped tomb
<i>Psilolechia lucida</i>	2 sandstone headstone
<i>Rhizocarpon obscuratum</i>	2 sandstone chest tomb and outer wall
<i>Rinodina gennarii</i>	2 sandstone church
** <i>Sarcogyne regularis</i>	2 sandstone outer wall
<i>Trapelia coarctata</i>	3 sandstone outer wall
<i>T. placodioides</i>	3 sandstone outer wall
<i>Verrucaria nigrescens</i>	1 marble headstone
<i>Xanthoria candelaria</i>	2 sandstone headstone

Total identified 41 rating 32.

Rarity based on Yorkshire churchyards- * uncommon (1 in 5 sites), ** occasional (1 in 10 sites), *** rare (1-2 per 100 sites)

Frequency within yard: 1- abundant, 2-frequent, 3- occasional, 4- only 1 or 2 thalli (frequency with multiple substrates is "in the yard as a whole", where only one named position given, it refers to that one site)

A sandstone church whose masonry is showing weathering and friable surfaces with very little lichen evident. However, despite this a good count of lichen species was noted with some outstanding items. The *Collemas* on the North facing side of the perimeter wall were noteworthy as were the variety of *Cladonias*. There were two outstanding finds however. Two small patches of the pure green *Lecanora epanora* were noted on the church wall, at about head height. This has only been seen twice out of nearly 600 churchyards surveyed. The other remarkable find was a spreading colony of *D. miniatum* on a table grave near the upper entrance gate.

Don Smith
Recorder, Rydale Natural History Society
1994

A Guide to Botanical Reference Material relating to Cleveland in Local Libraries and Museums

The publication of 'A Guide to the Wild Flowers of Cleveland' by Ian Lawrence has at long last given us a comprehensive list of wild flowers to be found locally and the different types of vegetation to be seen here.

Most of the old floras were produced at the end of the last century. It is difficult to ascertain how our flora has changed since then. The records that have been made are scattered around libraries and museums. Others are in local field clubs' transactions or proceedings and some are in private hands. Over the past few years people have become much more aware of how important it is to conserve the countryside. Before any development now takes place a plant survey is normally carried out to see what effect the development might have on the local flora.

The following lists from the local libraries and museums give a guide to where material is available for study in Cleveland and adjacent areas.

There are three publications that are worth consulting first:

1. 'Flora and Vegetation of County Durham', Rev. G.G.Graham, 1988.

This has an excellent chapter by P.S. Davis on the 'History of Botanical Recording in Durham'. The area of Cleveland North of the river Tees is covered by this flora as it deals with the area on a vice-county basis.

2.'A Catalogue of Natural Science Collections in North-east England with Biographical Notes on Collectors', 1984, Peter Davis and Christopher Brewer.

3.'Discovering Green Treasure', The findings of the work of the North-east Museum Service Peripatetic Biology Curator Mark Simmons. Published by the North of England Museum service. (Copies supplied to local museums.)

Owing to the many changes in our County boundary over the years many Cleveland plant records are to be found in books on North Yorkshire and County Durham. There are also many plant lists to be found in some of the old historical books and guides to the area. Some of these lists do not give a precise location as to where the plants are to be found and in some cases it is difficult to decide which plant is being referred to in the text as many English and scientific names have changed. This is a particular problem with the Gramineae (Grasses) family where over the years there have been a lot of changes. D.H. Kent's 'List of Vascular Plants of the British Isles' published by the Botanical Society of the British Isles gives a full list of all the scientific names that have been used for a particular species. English names are more difficult because they may not only have changed but also vary from area to area.

This list is only meant to be a preliminary guide and is based chiefly on material to be found in Cleveland. The libraries and museums in Newcastle, Sunderland, Northallerton and Whitby could also be consulted.

I wish to thank all the Librarians and Curators of the places mentioned in these lists who have been so helpful in providing me with this information.

Dorman Museum, Middlesbrough

'The Naturalist', Journal of the Yorkshire Naturalists' Union, 1886-present.

Transactions of the Northumberland and Durham Natural History Society, 1867-1921

'The Vasculum', Northern Naturalists' Union. 1979-1983

'Zig-zag Ramblings of a Naturalist', Taylor Manson. 1898. Contains a flora of Darlington.

'The Algal Flora of Yorkshire'. W.West F.L.S., and G.S.West BA, ARCS. 1901

'A report on Wildlife Conservation in Teesmouth', R.C.Newell, Dept. of Zoology and Comparative Physiology, Queen Mary College, London, 1974.

Middlesbrough Reference Library

'A Supplement to Baine's Flora of Yorkshire', John Gilbert Baker, John Nowell. 1854

This contains a list of mosses by John Nowell but many of these are from the Todmorden area.

'North Yorkshire. Studies of its Botany, Geology, Climate and Physical Geography', John Gilbert Baker. 2nd Ed.. 1906

This was a revision of Baker's previous flora of 1863. Only 14 new plants were added but there were a few additions to the list of mosses.

'A Supplement to the Yorkshire Floras', F Arnold Lees. Ed. C.A Cheetham, and W.A. Sledge.

This appeared in 'The Naturalist' as supplementary parts from 1937-1940 based on Dr. F.A. Lee's manuscript.

'The Naturalists' Yorkshire', compiled by members of the Y.N.U.

Yorkshire Naturalists' Union Bulletin, 1984-present.

Yorkshire Naturalists' Union Transactions Nos.1-35, 1878-1913. Holding incomplete, discontinued.

Yorkshire Philosophical Society Proceedings Vol.1 1855.

'Conservation Matters', CNCT 1980-present.

'Vasculum' NNU. Nos. 1-44

'The Fungus Flora of Yorkshire', G.Massee FLS,FRHS and C.Crossland FLS. 1905.

Botanical Transaction of the Yorkshire Naturalists' Union. Vol. 4.

Stockton Reference Library

'Zig-zag Ramblings of a Naturalist', Taylor Manson, 1884

'The Natural History of Redcar', D.Ferguson, 1860

'Fields and Flowers' or 'The Stockton Naturalist', W.B.Baker, 1867

'Hedges in Durham County', A.J.Bailey

'The Flora and Vegetation of County Durham', G.G.Graham, 1988

'The Naturalists' Yorkshire', W.A.Sledge

'A Supplement to the Yorkshire Floras', F.Arnold Lees, Ed. C.A. Cheetham and W.A. Sledge

'Billingham Beck Ecological Report', Cleveland County Planning Dept., 1978

Both of the following papers refer to the botany of Cleveland.

'Remarks on the Distribution of the Indigenous Plants of Northumberland and Durham as connected to the Geological Structure of those Counties', , N.J. Winch,1830

'Notes on the New Red Sandstone of the County of Durham below Magnesium Limestone', W.M. Hutton, Transactions of the Natural History Society of Northumberland, Durham and Newcastle, Volume 1, Parts 1 and 2

'Topography and Natural History of Lofthouse and its Neighbourhood. Diary of a Naturalist and Rural Notes'. George Roberts. 1882. Includes information on plants on the North Yorkshire coast to Redcar.

The Vasculum.

Hartlepool Reference Library

'The Three Northern Counties of England', Ed. Sir Cuthbert Headlam Bart., 1939. Contains articles on Natural History.

'The Parochial History and Antiquities of Stockton-on-Tees', J.Brewster, 1829

'The County of Durham. Its Castles, Churches and Manor Houses', J.R.Boyle, 1892

Contains an abridged plant list from 'The Flora of Northumberland and Durham', Baker and Tate.

'Durham County and City with Teesside', Ed. C.Dendney. Contains articles on Natural History subjects.

'Botanists Guide through the Counties of Durham and Northumberland', Volumes 1 and 2, N.J.Winch

'The History and Antiquities of the County Palatine of Durham', Volume III. Hutchinson. Contains plant lists.

'History and Antiquities of the Parish of Darlington', W. Lyton Dyer Longstaffe.1854. Contains a plant list extracted from 'The History of the County Palatine of Durham', Hutchinson.

'A History of the County of Durham', Vol.1. Ed. William Page.Contains plant lists extracted from Baker's Flora with additions by A Wheldon.

'The History and Antiquities of the the County Palatine of Durham'. Vol.1, William Fordyce, 1857. Contains a list of rare plants found in Durham.

'The Moorlands of North-east Yorkshire. Their Natural History and Origin', Frank Elgee.

'History of Hartlepool', L.Sharp with Sir Cuthbert Sharp Knight. 1816 with supplement to 1851. List of rare plants in Hartlepool.

'Scientific Survey of North-eastern England prepared for the meeting held in Newcastle on Tyne . 1949.

Durham Wildlife Trust Bulletin

Cleveland Nature Conservation Trust and Cleveland Wildlife Trust publications

The Vasculum and NNU Transactions

Transactions of the Natural History Society of Northumberland and Durham

Redcar Reference Library

'Natural History of Redcar', D.Ferguson

'The Flora of Yorkshire'. Henry Baines. 1840

'A Survey of the Lower Tees Marshes and of the reclaimed areas joining them'. J.W.Heslop Harrison.

'The Ecology of an Abandoned Shipyard. Establishment and successional development of flora and fauna of the former shipyard at Haverton Hill, County Cleveland'.John Knight. University of Bradford Ph.D. Thesis

'The Naturalists Yorkshire', W.A.Sledge.1971

'North Yorkshire, Studies of its Botany, Geology, Climate, and Physical geography', John Gilbert Baker.

'Wild Flowers of the North York Moors National Park'. Sylvia Arnold,

'Skinnigrove-An Educational Study'. Langbaugh Educational Resources Dept.

Guisborough Reference Library

'North Yorkshire, Studies of its Botany, Geology, Climate, and Physical geography', John Gilbert Baker. 1863. First Edition. Very rare. Only one copy in local libraries. All other copies are 1906.

'A Supplement written to Henry Baines Flora of Yorkshire', John Gilbert Baker. 1854

Darlington Library

'The British Flora'. Stephen Robson. 1776

'The Rare Plants of Durham. *Plantae rariorae agro Dunelmensi indigenae*'. Edward Robson.

'The Flora of Northumberland and Durham'. Transactions of the Natural History Society. Vol 11. 1838. Nathaniel John Winch

'Zig-zag Ramblings of a Naturalist', Taylor Manson, 1884

'Colonisation and Flora of Ironstone Waste in Cleveland with Experiments relating to Land Reclamation' Pickersgill et al. *Vasculum*. Vol 72. No. 3. 1987

'Orchids in County Durham', John Burgess, Durham Conservation Bulletin. 1984

The Vasculum and NNU Transactions

Transactions of the Natural History Society of Northumberland and Durham

Darlington and Teesdale Naturalists' Field Club. Annual Reports 1940-1947 and 1964 to present.

The Naturalist

'Durham County Natural History. Rare Plants found in Durham' Single Sheet. Library Reference U415m L.C.

'Natural History in Northumberland and Durham'. Tegner. 1972

'Sources of Information on the Natural History of County Durham' . Woodward. Supplement to *Vasculum*. 1972

'A Catalogue of Natural Science Collections in North East England with Biographical Notes on Collectors'. Peter Davis and Christopher Brewer.

'Guide to the Nature Reserves of North East England'. Linda Bennet.

'The Flora and Vegetation of County Durham', G.G.Graham, 1988

'The Parochial History of Stockton on Tees', J.Brewster. 1829. With appendix by John Hogg not always present in copies of this book in Cleveland.

Local Herbaria Collections

There are only a few herbaria collections in Cleveland. The largest is Margaret Stovin's Botanical Collection in the Dorman Museum Middlesbrough. This consists of twenty volumes of British Flora (1900 specimens) and eight volumes of exotics. The plants were donated to the Dorman Museum by Lieutenant Colonel J.B. Pennyman of Ormesby Hall, Middlesbrough. Unfortunately there are only two Cleveland records in this collection, but there are a few from Castle Eden Dene, County Durham. This collection has recently been catalogued.

When 'The Flora and Vegetation of County Durham', by G.G.Graham was being produced a database was set up at Sunderland Museum to co-ordinate all biological recording in the area. The individual herbaria of E.Robson (Darlington), W.S. Harrison (Sunderland) and A.M. Norman (Sedgefield) and many smaller collections were retrieved and collated. Also specimen plants collected during the survey and some of G.G.Graham's own herbarium were added to the other collections. As parts of Cleveland were then part of Durham many of these herbaria will contain plants relevant to Cleveland. The Hancock Museum in Newcastle has an extremely large collection and some of the Northern Universities have their own collections.

The Borough of Darlington Museum has on display a series of botanical drawings by Frank Young (1920-30). There are also a large number of timber samples collected by Frank Young and William Starling in the 1920's. Many were collected in the North East and include both native and introduced species, to do with economic botany. These collections are accompanied by extensive notes. There is also a herbarium of two bound volumes, one of ferns collected in the nineteenth century.

Darlington and Teesdale Naturalists' Field Club also has herbaria consisting of flowering plants collected between 1890 and 1940. These were mainly collected from Staffordshire, Derbyshire, Northumberland and Durham. There is also a bound volume of 100 fern specimens and other natural history specimens including microscope slides.

Details of the collections can be found in 'A Catalogue of Natural Science Collections in North East England with Biographical Notes on Collectors'. Peter Davis and Christopher Brewer.

The following is a list of material available locally. It is hoped to add to this list at a future date from areas like Whitby, Northallerton and other areas south of the Tees. The members of The Cleveland Naturalists' Field Club would be pleased to hear of any other herbaria in private collections or any that do not appear on the following-

Dorman Museum

Margaret Stovin's Collection

Economic Botany; A collection of 56 seeds and timber specimens

Vascular plants of Britain collected by C.M. Rob 1946-48

Hartlepool: Gray Art Gallery and Museum

Economic Botany: 10 timber samples

200 seaweed samples from Hartlepool

Specimens from the submerged forest peat bed.

Collection of plants from Northern England.

Cleveland Environmental Resources Section

Southlands Centre, Ormesby Road, Middlesbrough

Collection of 250 plant specimens for identification purposes collected as part of county environmental surveys undertaken in the 1970's

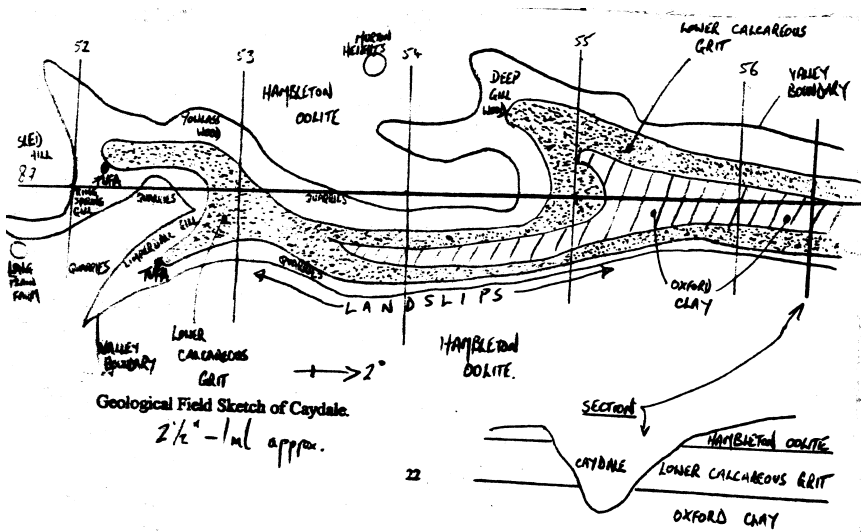
25 Jurassic plant specimens from Marske Quarry.
 There is also a large collection of insects and some spiders.

Caydale

Caydale is a deep, glaciated valley running west to east in a remote area lying north of Old Byland and south of the Hawnby to Boltby road (SE535865). The Coddle beck flows through it and ends up in the river Rye near to Tylas Farm between Hawnby and Rievaulx. A public bridleway leads down into the valley from Murton Grange Farm and ends up in Cold Kirby. Otherwise the whole of the northern side of the valley belongs to the Murton Grange Estate. It was with the kind permission of Mr. P.A.D. Guthrie that we were able to visit the area on two occasions during 1994.

Geology

Caydale is a post-glacial valley cut into limestones of the Corallian Group. These are rocks dated as Oxfordian which is a stage of the Upper Jurassic. The base of the Oxfordian stage is 149 million years Before Present. (The base of the Jurassic is 192 million years B.P.). The rocks are in layers which dip (incline) South-west to North-east at a very shallow angle (2 degrees). The bottom of Caydale is formed from Oxford Clay which is composed of shales, mostly covered by drift deposits. The middle slopes of the valley are composed of the Lower Calcareous Grit. The upper slopes and surrounding area is composed of the Hambleton Oolite. An oolite is a rock composed of small spherical grains which are supposed to look like fish roes. The Lower Calcareous Grit and Hambleton Oolite are very lime rich and can be considered by the layman to be limestones. The rocks have been zoned and sub-zoned i.e. classified in detail, using the ammonites *Cardioceras sp.* and *Quenstedtoceras mariae*. A 1:50000 geological map of the area (solid and drift) is held in Middlesbrough Reference Library.



Geological Field Sketch of Caydale.

These rocks were laid down in open sea conditions. The Lower Calcareous Grit is the same rock that forms Filey Brigg. Coral reefs and related fore and back reef deposits make the relationships between these rocks rather complex to understand- but they can contain very interesting fossils including ammonites, brachiopods, corals, sponges, oysters, and echnoids (sea urchins). However large portions are very unfossiliferous. The Hambleton Oolite is very varied in terms of its rock types and fossil content. William Smith 'the Father of English Geology' devoted a lot of time to this formation as he lived in Hackness between 1828-1834. The study of this particular deposit has a long and venerable history and consequently much is known about it- more than can be related here. At Caydale the Hambleton Oolite is very oolitic and forms the small crags around the edge of the valley. The dry stone walls seem to be mostly constructed with this rock.

Caydale has experienced many large landslips which have confused the geology in parts of the valley by bringing down rocks which are found much higher up the valley sides when in situ. These landslips can easily be seen when looking down into the valley. Another interesting feature is the tufa deposits in the base of the valley. A calcareous tufa is a lime-rich water borne deposit formed by carbonates falling out of solution and coating surrounding vegetation or sub-strates. This is a similar process to that which forms stalagmites in caves and covers the variety of objects at Mother Shiptons Cave at Knaresborough. On our second visit we examined many leaves which were encased (fossilised) in the tufa. These had been covered by the calcareous deposit in the past.

The glacial ice retreated from the Cleveland area around 16000 years ago so Caydale probably dates back approximately to this time- unless it was originally a sub-glacial feature in which case it could be significantly older. However the basic shape of the dale we see now will have evolved over the last 16000 years by water running off the surrounding plateau and by landslips. There seems to also be some evidence of quarrying around the margins of the valley. This is highly likely given the high lime content of the rock and its use for walling.

Malcolm Birtle

Vegetation

The first visit was on June 5th when we concentrated our efforts on the calcareous slopes at the western end of the valley. The southern edge of the set-aside field proved to have some interesting 'weeds' where the land had been ploughed for the growing of fodder plants for the pheasants on the estate. These included

<i>Papaver rhoeas</i>	Field Poppy
<i>Arenaria serpyllifolia</i>	Thyme-leaved Sandwort
<i>Geranium molle</i>	Dove's Foot Cranesbill
<i>Geranium pusillum</i>	Small Flowered Cranesbill
<i>Aphanes arvensis</i>	Parsley piert

<i>Sherardia arvensis</i>	Field Madder
<i>Erodium cicutarium</i>	Storksbill
<i>Viola arvensis</i>	Field Pansy
<i>Myosotis arvensis</i>	Field forget-me-not

The upper slopes beside the track leading down to the Cadell Beck support a typical calcareous flora including

<i>Helianthemum nummularium</i>	Rock-rose
<i>Sanguisorba minor subsp. minor</i>	Salad Burnet
<i>Origanum vulgare</i>	Marjoram
<i>Knautia arvensis</i>	Field Scabious
<i>Crataegus monogyna</i>	Hawthorn
<i>Prunus spinosa</i>	Blackthorn

tend to be dominant here and may well eventually crowd out the more delicate herbs. Away from the scrub are some fine mature Ash (*Fraxinus excelsior*) and Field Maple (*Acer campestre*). Guelder Rose (*Viburnum opulus*) also occurs. Unfortunately what were fine examples of Wych Elm (*Ulmus glabra*) have succumbed to the disease leaving areas of dead trees which no doubt will be made use of by birds such as woodpeckers.

The track leading to Yowlass wood passes through rather dense scrub which includes much Elderberry (*Sambucus nigra*). Here and there Wild Columbines (*Aquilegia vulgaris*) can be seen. It then climbs steeply round the North end of the woods where the banksides are dominated by either Bracken or False Oat Grass (*Arrhenatherum elatius*). In one place, under the shade of Ash trees, are several Early Purple Orchids (*Orchis mascula*) growing amongst Bluebells (*Scilla non-scripta*). On the opposite slope Bloody Cranesbill (*Geranium sanguineum*) struggles for existence amongst Bracken.

The track then takes us to the upper plateau from where a magnificent view of the whole valley presents itself. The south-facing slope of Moor Ings Bank lies to the West of this point. The steep slope consists of limestone covered by dense vegetation much of which is Hawthorn and Rose scrub with Ash and Oak (*Quercus robur*) on the lower slope. The herbs which thrive on the upper slope are of interest and include:

<i>Viola hirta</i>	Hairy Violet
<i>Filipendula vulgaris</i>	Common Dropwort
<i>Alchemilla glabra</i>	Glabrous Lady's Mantle
<i>Pilosella officinarum</i>	Mouse-ear Hawkweed
<i>Rubus caesius</i>	Dewberry
<i>Hypericum hirsutum</i>	Hairy St. John's Wort
<i>Stachys officinalis</i>	Betony
<i>Serratula tinctoria</i>	Saw-wort

The calcareous grasses Meadow Oat-grass (*Helictotrichum pratense*) and Crested Hair-grass (*Koeleria macrantha*) are much in evidence. The contrasting vegetation at the top is very evident where Gorse (*Ulex europaea*), Tormentil (*Potentilla erecta*) and Heath Bedstraw (*Galium saxatile*) with abundant Fine Bent-grass (*Agrostis capallaris*) are the dominant plants.

From here the party made their way down through dense scrub to join a lower track and thence into the valley bottom. Beside the lower track a plant of Deadly Nightshade (*Atropa belladonna*) was seen.

The valley bottom proved to be very interesting with its calcareous flushes and acid bogs producing contrasting marsh plants. Here were found:

<i>Carex dioica</i>	Separate-headed Sedge
<i>Carex demissa</i> ssp.	Long-stalked Yellow Sedge
<i>lepidocarpa</i>	
<i>Schoenus nigricans</i>	Black Bog Rush
<i>Valeriana dioica</i>	Marsh Valerian
<i>Viola palustris</i>	Marsh Violet
<i>Menyanthes trifoliata</i>	Bogbean

The second visit was made on August 21st. This date was purposely late so as to check two plants seen by myself during visits made three years ago. The Fragrant Agrimony (*Agrimonia odorata*) is very uncommon in the North-east and to be certain in its identification it is necessary to see the fruits of the plant which are unmistakably bell-shaped with a fringe of spine-like hooks especially adapted to stick to the fur of passing animals. Several plants were identified as being this.

Another plant formerly seen in this Eastern side of the valley in the vicinity of Murton woods was confirmed as being Greater Burnet Saxifrage (*Pimpinella major*). Much of the morning was devoted to this side of the valley, again in lovely sunny weather! Wild Basil (*Clinopodium vulgare*) and Marjoram (*Origanum vulgare*) were widespread along with Dewberry (*Rubus caesius*) which seemed to outnumber, or even replace, Bramble on these calcareous slopes.

We then concentrated on the marshy lower valley on both sides of the beck. Amongst the Bracken on the dry Northern fringes of the wet areas were several plants of Common Gromwell (*Lithospermum vulgare*). Common Agrimony (*Agrimonia eupatoria*) occurred here which gave us the chance to compare the fruits. Much of the marshy area was dominated by Meadow Sweet (*Filipendula ulmaria*) and Greater Hairy Willow-herb (*Epilobium hirsutum*) with a large stand of Bottle Sedge (*Carex rostrata*) with its distinctive glaucous leaves.

Near to the stream itself were plants of Water Mint (*Mentha aquatica*), Square-stemmed St. John's-wort (*Hypericum tetrapterum*), Greater Bird's-foot Trefoil (*Lotus uglinosus*), Yellow Flag (*Iris psuedocorus*) and Ragged Robin (*Lychnis flos-cuculi*).

A plant of note on the middle slope above the marshes was Clustered Bellflower (*Campanula glomerata*) growing by a track under a Hawthorn.

A very enjoyable day was spent in this beautiful secluded valley. We would like to express our many thanks to Mr. Guthrie for allowing us to visit this unspoiled area tucked away in this corner on the North York Moors National Park.

Ian Lawrence

Bryophytes

The Northerly slopes encountered after leaving the cars had the expected grassland species such as *Rhytidiadelphus squarrosus*, *Pseudoscleropodium purum* and *Thuidium tamariscinum*, but also the noteworthy *Rhytidiadelphus triquetrus* and the calcicole *Ctenidium molluscum*. The trees in this area were disappointing, with *Dicranoweisia cirrata* and *Hypnum cupressiforme* the only finds. Limestone rocks had cushions of *Tortella tortuosa*, *Weissia microstoma* and *Anomodon viticulosus*.

The main interest, as anticipated, was in the wet calcareous area at the Westerly end of the dale. The stream contained abundant *Cratoneuron commutatum*, whilst the marshy areas had the attractive *Climacium dendroides*, *Bryum pallens*, *B. pseudotriquetrum*, *Campylium stellatum*, *Cratoneuron filicinum*, *Philonotis calcarea* and two *Sphagnum* species. Where the stream came down a gully the wet rocks produced the tufa-forming *Eucladium verticillatum*, along with several liverworts, *Aneura pinguis*, *Leicolea turbinata*, *Pellia endiviifolia*, and *Preissia quadrata*. Away from the valley bottom in this Western end some acidic species were present, including *Dicranum scoparium* and *Pleurozium schreberi*.

The first visit to Caydale produced 49 species. The value of second visits was justified as the total was increased to 60 species in August.

Mosses

<i>Amblystegium serpens</i>	<i>Anomodon viticulosus</i>
<i>Barbula convoluta</i>	<i>B. fallax</i>
<i>B. unguiculata</i>	<i>Brachythecium rutabulum</i>
<i>Bryum argenteum</i>	<i>B. bicolor</i>
<i>B. capillare</i>	<i>B. pallens</i>
<i>B. pseudotriquetrum</i>	<i>Calliergon cuspidatum</i>
<i>Campylium stellatum</i> var. <i>stellatum</i>	<i>Campylopus introflexus</i>
<i>Ceratodon purpureus</i>	<i>Cirriphyllum piliferum</i>
<i>Climacium dendroides</i>	<i>Cratoneuron commutatum</i> var <i>commutatum</i>
<i>C. filicinum</i> var <i>filicinum</i>	<i>Ctenidium molluscum</i>
<i>Dicranella heteromalla</i>	<i>D. varia</i>
<i>Dicranoweisia cirrata</i>	<i>Dicranum scoparium</i>
<i>Encalypta streptocarpa</i>	<i>Eucladium verticillatum</i>
<i>Eurhynchium praelongum</i>	<i>E. striatum</i>
<i>Fissidens taxifolius</i>	<i>F. adianthoides</i>
<i>Grimmia pulvinata</i>	<i>Homalothecium sericeum</i>

<i>Hypnum cupressiforme</i> var. <i>cupressiforme</i>	<i>Mnium hornum</i>
<i>Philonotis calcarea</i>	<i>Plagiomnium rostratum</i>
<i>P. undulatum</i>	<i>Pleurozium schreberi</i>
<i>Pohlia carnea</i>	<i>P. wahlenbergii</i>
<i>Polytrichum commune</i>	<i>Pseudoscleropodium purum</i>
<i>Rhizomnium punctatum</i>	<i>Rhytidiadelphus squarrosus</i>
<i>R. triquetrus</i>	<i>Sphagnum squarrosum</i>
<i>S. subnitens</i>	<i>Thamnobryum alopecurum</i>
<i>Thuidium tamariscinum</i>	<i>Tortella tortuosa</i>
<i>Tortula muralis</i>	<i>Trichostomum crispulum</i>
<i>Weissia controversa</i> var. <i>controversa</i>	<i>W. microstoma</i> var. <i>microstoma</i>

Liverworts

<i>Aneura pinguis</i>	<i>Leicolea turbinata</i>
<i>Lophocolea bidentata</i>	<i>Pellia endiviifolia</i>
<i>Porella platyphylla</i>	<i>Preissia quadrata</i>

John Blackburn

Terrestrial Molluscs

A diverse and interesting molluscan fauna was found in this area, a consequence of the variety of habitats available, from drystone walls, grassland, and open woodland, to wetland areas bordering the stream, all on limestone. Snails typical of dry habitats included *Candidula intersepta*, and the diminutive *Pupilla muscorum* both of which occur on the sand dunes of Cleveland. Typical specimens of *Cochlicopa lubricella* were also found. This is another species which shows an affinity for drier habitats, but it is worth noting that the taxonomy of this genus and the status of its species in Europe are currently the subject of investigation and debate.

Wetland species located in the valley bottom included the snails *Oxyloma pfeifferi* and *Euconulus alderi* together with the slug *Deroceras laeve*.

Caydale would repay much more investigation, notably the drystone walls and small rock outcrops, but perhaps especially the wetland area containing bog rush (*Schoenus nigricans*) where various species of the genus *Vertigo* may occur. These are very small and generally scarce, none being found on the Field Club visit that I attended.

<i>Carychium tridentatum</i>	Herald Snail
<i>Oxyloma pfeifferi</i>	Pfeiffer's Amber Snail
<i>Cochlicopa lubrica</i>	Slippery Snail
<i>C. lubricella</i>	
<i>Pyramidula rupestris</i>	Rock Snail
<i>Columella edentula</i>	Toothless Chrysalis Snail
<i>Pupilla muscorum</i>	Moss Snail
<i>Lauria cylindracea</i>	Chrysalis Snail

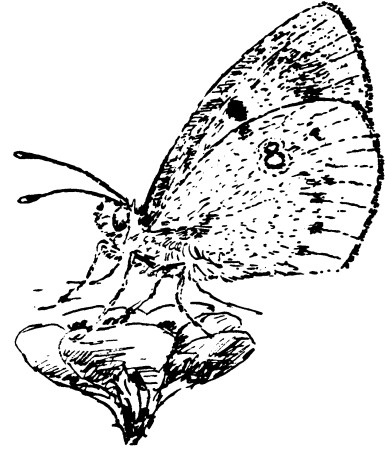
<i>Ena obscura</i>	Lesser Bulin
<i>Discus rotundatus</i>	Rounded Snail
<i>Arion ater</i>	Black Slug
<i>A. distinctus</i>	Garden Slug
<i>A. intermedius</i>	Hedgehog Slug
<i>Vitrina pellucida</i>	Pellucid Snail
<i>Vitrea crystallina</i>	Crystal Snail
<i>Vitrea contracta</i>	
<i>Aegopinella pura</i>	Glass Snail
<i>A. nitidula</i>	Smooth Snail
<i>Oxychilus cellarius</i>	Cellar Snail
<i>O. alliarius</i>	Garlic Snail
<i>Deroceras laeve</i>	Marsh Slug
<i>D. reticulatum</i>	Field Slug
<i>Euconulus alderi</i>	
<i>Cochlodina laminata</i>	Plaited Door Snail
<i>Clausilia bidentata</i>	Door Snail
<i>Candidula intersecta</i>	Wrinkled Snail
<i>Trichia hispida</i>	Hairy Snail
<i>Arianta arbustorum</i>	Copse Snail
<i>Cepaea nemoralis</i>	Brown-lipped Banded Snail
<i>C. hortensis</i>	White-lipped Banded Snail

Woodlice

Trichoniscus pusillus
Oniscus asellus
Porcellio scaber
Philoscia muscorum

Millipedes

Glomeris marginata
Tachypodoiulus niger
Ommatoiulus sabulosus



Hemipterous bug

Cercopis vulnerata

Black and Red Frogopper

Birds

Curlew
Chaffinch
Willow Warbler
Robin

Amphibians

Toad tadpoles

Mammals

Rabbit
Hare
A.A. Wardhaugh

Lepidoptera

Butterflies

Colias croceus
Argynnis aglaja
Polygonia c-album
Inachis io

Clouded Yellow
Dark Green Fritillary
Comma
Peacock

<i>Aglais urticae</i>	Tortoiseshell
<i>Pieris brassicae</i>	Large White
<i>Ochlodes venata</i>	Large Skipper
<i>Lycaena phlaeas</i>	Small Copper
<i>Maniola jurtina</i>	Meadow Brown
<i>Coenonympha pamphilus</i>	Small Heath

Moths

<i>Autographa gamma</i>	Silver Y
<i>Udea lutealis</i>	
<i>Scotopteryx chenopodiata</i>	Shaded Broad Bar
<i>Antitype chi</i>	Grey Chi

Malcolm Birtle

Globe Flower (*Trollius europaeus*) in Billingham

An issue of the Naturalist in 1954 [1] included an interesting field note by O.C. Hill. This concerned the marsh at Billingham Bottoms which was known as the *Trollius* Bed or *Trollius* Bog. This was described in detail by J.W. Heslop Harrison in 1918 [2]. Heslop Harrison suggested that the *Trollius* at Billingham showed differences from the *Trollius* in Teesdale [2] and suggested a sub-specific name of *relictus* for the type.

The Northern Naturalists' Union met for the second ever field meeting there on June 13th, 1925. At that meeting the site contained Birds-eye Primrose (*Primula farinosa*), Green Winged Meadow Orchid (*Orchis morio*), Southern Marsh Orchid (*Dactylorhiza praetermissa*), Common Meadow Rue (*Thalictrum flavum*), Sea Arrow Grass (*Triglochin maritimum*) and Bogbean (*Menyanthes trifoliata*) [3]. By 1950 the site was being tipped on by Billingham Urban District Council, yet an NNU field meeting in that year [4] still found the interesting and important vegetation still intact. Hill [1] noted that the *Trollius* originally occupied an area of about 1 acre with a "considerable sprinkling round about...". Hill states that "With the support of the Cleveland Naturalists' Field Club, efforts have been made to save the plants and the local authorities have shown considerable interest and sympathy, but it was felt that tipping could not be halted". Apparently a Mr. A Bishop (Supervisor of Open Spaces in Billingham) organised a transplantation of *Trollius* roots to a site West of the tipping area.

Hill also noted that a Mr. J.A. Ainsley, an owner of a "private nature reserve" near to Crookfoot reservoir, transplanted "...upwards of twenty clumps that are flourishing in moist ground...". This activity must have been taking place around 1950-53.

In an issue of the Vasculum from 1959 [5] Heslop Harrison he described this site as "...a well-developed fen flora unequalled in extent and richness elsewhere in County Durham...". By 1959 nothing remained of the *Trollius* Bog. Heslop Harrison noted that

"the only plants reminiscent of former years were huge masses of purple-headed *Phragmitis sommunis*, relieved by a few examples of Hemp Agrimony, *Eupatorium cannabinum*, marshalled along the main drainage lode. Nontheless, it can be recorded that, along the beck, and in the old mill race, most of their old tenants were still to be found, even if in a very bedraggled condition...".

Today the site of the Trollius Bog is a golf course and road (A19). However much of the remaining area of Billingham Bottoms is now a country park where significant planting and pond digging has taken place. From this year the river Tees barrage is operating which will change the nature of the river completely. Given the scale of these changes i.e. completely modifying our landscape, perhaps it is time that an area in Billingham Bottoms was designated to be a new Trollius Bog ? Perhaps there could be a search for "*relictus*" in some of the areas where it was transplanted?. Could cuttings (or similar) be taken with the objective of returning it close to its original home ?

[1] O.C. Hill, Field Note, Naturalist, Jan-March, 1954, p.3-4

[2] J.W.Heslop Harrison, 'A Survey of the Lower Tees Marshes and of the reclaimed areas joining them', Trans. of Nat. Hist. Soc. of Northumberland, Durham, Newcastle-upon-Tyne, Vol. V, Part 1, 1918

[3] J.W.Heslop Harrison, 'Billingham Marshes', Vasculum, Vol. XI, No.4, July 1925

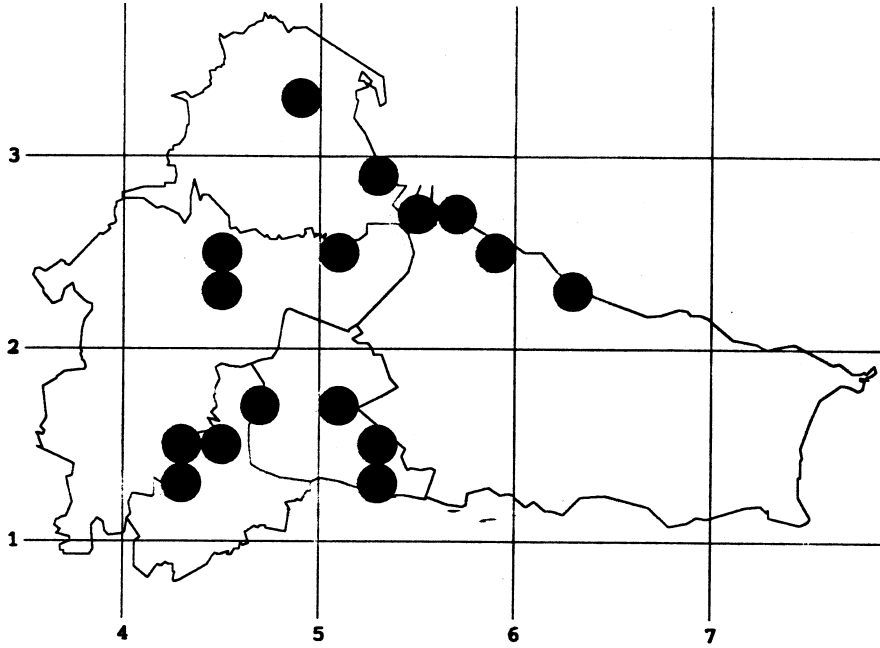
[4] J.W.Heslop Harrison, 'Billingham Bottoms', Vasculum Vol. XXXV, No. 3, September 1950

[5] J.W.Heslop Harrison, 'Billingham Marshes', Vasculum Vol.XLIV, No.4, December 1959

Malcolm Birtle

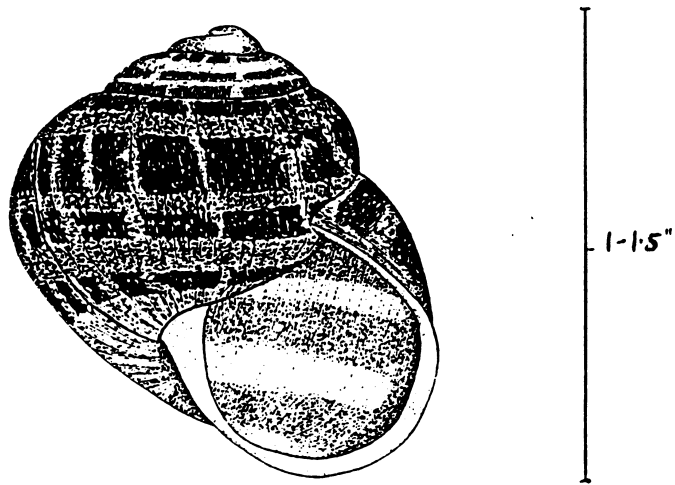
Helix aspersa

In the last issue of the Proceedings records of *Helix aspersa* were requested. It was seen on field meetings in 1994 and the records have been added to the map below. Any records of this snail from 1995 field meetings would be greatly appreciated.



Known Distribution of the Common Snail (*Helix aspersa*) in Cleveland.
All records date from 1990 onwards.

Shell of the Common Snail (*Helix aspersa*)



A.A.Wardhaugh

Field Meetings 1995

Date	Time	Area of Walk	Leader	Meeting Place
Sat. April 22nd	10.30am	Brignall Banks	Eric Gendle	Greta Bridge, 'Morritt Arms'
Sun. May 14th	11.00am	Wynch Bridgeto High Force	Neil Baker	Bowlees Car Park
Wed. May 17th	7.00pm	Bousdale	Kath Dilworth	Pinchinthorpe Car Park
Sat. May 20th	10.30am	Riccaldale	Pam Law	Cow House Bank Car Park
Wed. May 24th	6.45pm.	Bonny Grove Farm	Ian Lawrence	At the Farm
Sat. June 3rd.	10.30am	Falling Foss (Y.N.U.)	John Blackburn	Falling Foss Car Park
Wed. June 7th	7.00pm	Pam Law	Saltburn Cliffs	Cat Nab Car Park
Sun. June 11th	10.30am	Gundale, North of Pickering	Ian Lawrence	Roadside near Ruddings Road
Wed. June 14th	7.00pm	Cliff Rigg Quarry	Vincent Jones	Great Ayton * Roadside near the entrance
Sat. June 17th	11.00am	Richmond area	Colin Chatto	The Old Richmond Station
Wed. June 21st	7.00pm	North Gare	Mike Leakey	North Gare Car Park
Wed. June 28th	7.00pm	Thornaby Marshalling Yards	Chris Lowe	On site
Sat. July 1st	11.30am	Buckden area	Norma Pagdin	Buckden Village Car Park
Wed. July 5th	7.00pm	Eston Hills	Darroll Fryer	'Cross Keys' Car Park
Sun. July 9th	10.30am	Port Mulgrave*	Pat Wood	Near the coastal path
Wed. July 12th	7.00pm	The Rookery, Yarm	Rob Scaife	On the A67 near the Friarage
Sun. July 16th	10.30am	Lake Gormire	Eric Gendle	Sutton Bank Car Park

Sat.July 29th	2.00pm	Bilsdale	Maurice Ward	Chop Gate Car Park
Sat.Aug. 12th	11.00am	Egton Woods	Darroll Fryer	Egton Bridge and Moorland Car Park
Wed.Aug. 23rd	9.30pm	Moth Trap, Castle Walkway	Malcolm Birtle	Car WalkwayPark
Sat.Sep. 23rd.	10.30am	Goathland Woods	Vincent Jones	Outside MallyanSpout Hotel
Sat.Sep. 30th	2.00pm	Hardwick Hall	Ian Lawrence	The Hall Car Park
Sun.Oct. 29th	11.00am	Rievaulx area	NormanThompson	Roadside near Nettle Dale

Please see the programme notes for further details.

Please note that meetings marked * are specifically for recording flora and fauna in a particular area and there may be no sustained walk. All members are welcome to contribute their enthusiasm and expertise!

Meetings of the Northern Naturalists Union 1995

Details of meetings were not available at the time of printing. Further details of times etc.. will be available from M.Birtle on 01642 558055.



CONSULTANT MEMBERS

Members are asked to report finds or records to the following who will be pleased to help with the identification of specimens

Flowering Plants

I.C. Lawrence

Fungi

Alex Weir

Bryophytes (Mosses & Liverworts)

J. Blackburn

Birds

M. Hallam

Lepidoptera (Butterflies & Moths)

N Harwood (General Entomology)

M. Birtle (and Geology)

Heraldry & Genealogy

T.H. Brown

Representatives:

I. C.Lawrence (CWT)

J. Blackburn (YNU)

M. Birtle (NNU)

