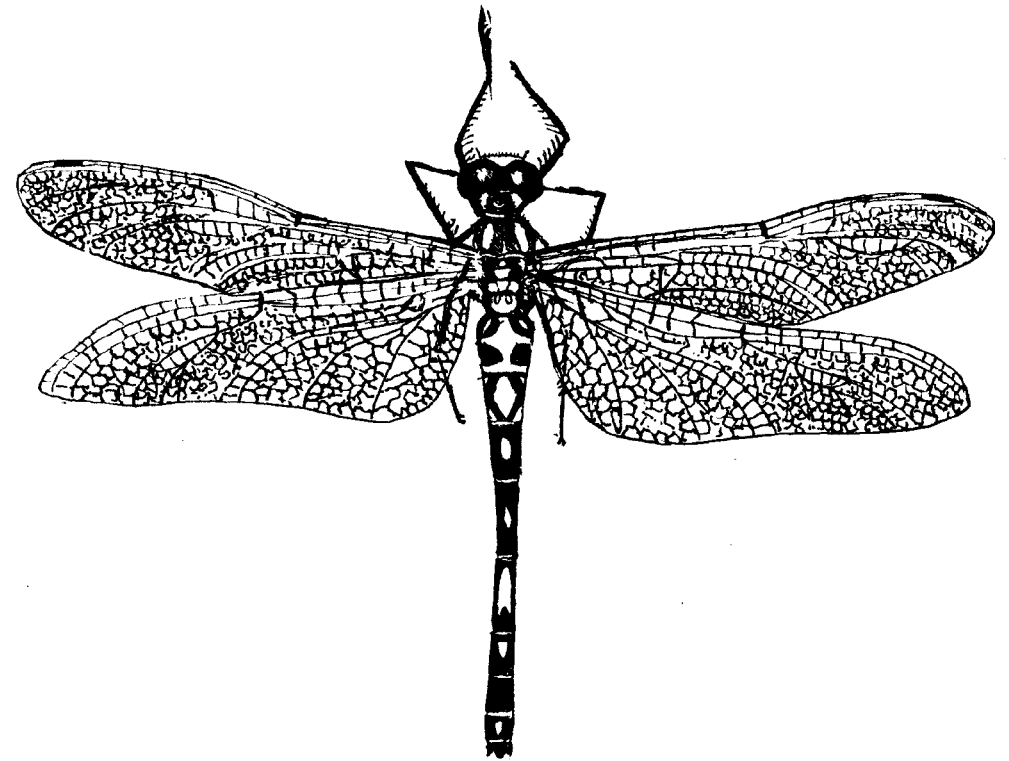


THE DONCASTER NATURALIST



£1

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THE DONCASTER NATURALIST

Volume 1, No. 6

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EDITORIAL

At last we are able to produce Copy No., 6 of Volume I of the Doncaster Naturalist. There was barely enough for an issue in March, so we now offer a bumper production and are charging slightly more for it.

The Doncaster Naturalists' Society has had a very busy summer, despite the long spell of wet weather. Outings to Gibraltar Point and Bolton Abbey Woods were well attended, and other trips included Brodsworth Park, Frickley and Clayton, Braithwell, Bishopswood, Hatchell Wood and so on. These outings including reports of interesting sightings have been written up in the Field Meetings' Book by the leaders of the various excursions, so that a record is made for posterity!

Many thanks to all contributors, not forgetting David Gagg who continues to design delightful covers for us.

D. M. Bramley.

REFLECTIONS ON '84

George Chapman

Some people when out and about make copious notes in order to record accurately what they have seen; others, who are blessed with a retentive memory, have no need to put pen to paper. I readily confess to being in neither of these categories - for me it's a case of hastily jotting down a few observations on any odd scrap of paper I can lay my hands on and hoping for the best. Thus it was during '84 my travels and pastimes found me in such varied locations as the Western Highlands, Southern France, our own inimitable corner of South Yorkshire and, strange as it may sound, the station buffet at Kings Cross.

The Western Highlands jaunt was sparked off by a television programme featuring the train journey to Kyle of Lochalsh. On a dark Friday night at the end of March we climbed aboard the Aberdonian and fourteen hours later, having changed trains at Aberdeen and Inverness, cast our eyes on the beautiful Isle of Skye watched over by the majestic snow-capped Cuillins. Contrary to all the gloomy forecasts of our friends the weather was fantastic. Frosty morns, clear blue skies and magnificent sunsets were the order of the day - it was a joy to be 'on the hoof' amidst such serene and tranquil surroundings. A feature of the week was the constant sighting of herons - on one occasion a flight of four being seen. We also saw numerous groups of deer grazing on the lower slopes of the snow covered hills northwards of Kyle of Lochalsh.

All good things come to an end but, unlike the narrator in the old 'travel talk' films who was forever bidding a fond farewell as the 'golden sun sank in the west', we were up at the crack of dawn and on our way - as the 'golden sun rose in the east' we bade a reluctant farewell to this unique corner of the British Isles where, except for us being able to understand the native tongue, there was often a feeling of being in foreign parts. Meanwhile, in South Yorkshire life hadn't been standing still and it was, literally, back to our native soil. Both in the garden at home and at the allotment our old friends the weeds had begun a determined take over bid so it was a case of licking

things into shape - chopping back the weeds, digging and muck-ing trenches and all the other jobs that go into preparing for the main planting season.

I know there are those who knock the lads who work on the Youth Training Scheme projects - with me this is not the case. Earlier in the year during some very unpleasant weather they had put in some sterling work on the dyke system - in consequence of this the dyke that runs the full length of my garden was opened up and for the first time in many years contained water. Not only did this give me a better drained patch but also, in my quiet moments a very interesting dyke to study.

There have always been a few frogs knocking about but now it was different. First of all an abundance of spawn and then the emergence of the first tadpoles - by the middle of May the dyke was teeming with 'em. Come mid-June, tiny frogs were in evidence everywhere - the predators no doubt will have accounted for quite a few, but I look forward to the survivors giving a repeat performance this coming spring.

We were only a few days into June when I began to hear reports of sticklebacks being seen in the main dykes and, low and behold, on the 14th June I saw one or two in my own stretch of dyke - proof positive that if the waterways are cleaned out and kept fresh and wholesome nature will flourish - it must be all of twenty years since fish were seen as far up the dykes.

The other side of the coin is always present of course - from early July to mid September that rarely seen but oh, so evident little creature, the mole, took up residence. Efforts to clear them - dropping mothballs in their runs, for instance, - were of no avail. However, from autumn onwards there have been no tell tale hills - let's hope they have moved elsewhere, to a deserted plot preferably.

Towards the end of May we had taken ourselves off to Southern France for a couple of weeks - to Perpignan to be precise. The grim forecasts of our friends back in April were now replaced with glowing accounts of the weather we could anticipate - this was not to be so. The backdrop to the lively city of Perpignan is the snowcapped Canigou and from its snowy slopes came the winds that no doubt accounted for the very mixed bag of weather. Be that as it may, we didn't let it cramp our style and found

the friendly 'frogs' every bit as fascinating as the frogs back home. We moved around by local bus and train, taking in a variety of places that ranged from mediaeval walled cities to picturesque fishing ports. Having a yen for being off the beaten track, we also found ourselves, from time to time, in and around the vineyards and cherry orchards - this we thoroughly enjoyed, especially when the cherry pickers gave us handfuls to eat.

On one of our excursions by train to Narbonne, we crossed vast lagoons and for the first time in our lives saw flocks of flamingoes feeding. Later in the year we visited Slimbridge and saw the flamingoes there- whilst we were able to observe them at a much closer range, there was no comparison with the thrill of the real thing. At a less exotic level, the hotel bedroom gave us every opportunity to study the cockroach. Needless to say, we left them to their own devices, although I must confess to killing the first one I saw - a reflex panic action, I suppose.

Late on in November, I had myself a day in the big city. The main reason for my visit was to call in at Head Office and say hello to a few ex-colleagues; from then on I intended having a mooch round some old and favourite haunts. Although I have a deep affection for the countryside and everything about it, there is also a streak in me, a mile wide, that loves the big city pavements. As things turned out the weather was not set fair - it rained and rained and rained. It was one of those days that would have wiped the smile off the face of Gene Kelly. About two o'clock, I decided to call it a day and made my way to Kings Cross. Having just missed a train I took myself into the station buffet to have a cup of tea. Sitting there, watching the world drift by, I heard a voice say "It can't be real" and, on looking round, my reaction was similar. On a nearby table, looking as happy and contented as if it was in its native habitat was an iguana. How did I know it was an iguana you may ask - I went and asked its owner, didn't I? Oh, yes, its owner was with it, it wasn't on the loose.

Brilliant green was its colour, with a pale blue shading on the top of the head - the fact that it was only about two feet long and stood absolutely motionless added to the illusion of its being unreal. The young man who owned it was a student of zoology - he told me it was a common iguana and two years old. Its growth would continue right through a life span of about fifteen to sixteen years, by which time it would be somewhere in the region of six

feet long. Many are the strange sights to be seen in London town, but I reckon my friendly little iguana put even some of those colourful characters in the shade.

Reflecting on a year that embraced flocks of flamingoes and an iguana, pride of place must go to the humble stickleback - to me it was the most significant discovery of the year.

ABBREVIATIONS FOR AMATEURS

Donald Bramley

A feature of everyday life is the proliferation of abbreviations for Government Bodies, Large Firms and even in the field of Natural History and Conservation. It is not always easy to remember what they stand for and what in fact is the purpose of the outfits which they describe. What do we imagine is the purpose of the YWT, NCC, NERC, WFS(Woofs!) and the BSBI? Well, the Editor thinks that an explanatory article would not come amiss. So, here goes:-

YNU--- Yorkshire Naturalists' Union

This is a Federation of Yorkshire Natural History Societies, founded in 1861 at a meeting in a pub in Calderdale to further by joint action the interests of the constituent Societies. Over the years, The Naturalist, produced quarterly by the YNU has become an internationally known Journal, carrying serious scientific papers relating in the main to the North of England. The initials YNU have become well known in the landowning community of Yorkshire and almost an open sesame to some very choice areas of Natural History Interest. After more than 100 years, it is still going strong; there are now over 40 affiliated Societies, 500 individual members and over 100 subscribers world-wide. Membership of the Union puts you in touch with the real enthusiasts, both amateur and professional, and the five annual summer meetings at differing Yorkshire sites are still much appreciated.

YWT--- Yorkshire Wildlife Trust

This was founded in the 1940's as the YNT - Yorkshire Naturalists' Trust, and has often been confused with the YNU. It was in fact founded mainly by the efforts of YNU members to purchase and run Nature Reserves in as many sites in Yorkshire as possible. It has grown into a land-owning organisation with over 5,000 members and supports some 50 Reserves. Similar groups now exist in most counties and are overseen by the -

SPNR--- Society for the Promotion of Nature Reserves

This is based at the Manor House, Alford, Lincs. The work is mainly to collect and collate information about areas of land, in relation to their flora and fauna.

CC--- The Countryside Commission

This is a similar body to the above and is a statutory body with a wide range of responsibilities under the National Parks and Access to the Countryside Act 1949, and the Countryside Act, 1968.

NERC--- National Environment Research Council

This was established by Royal Charter in 1965 and its objects are to encourage, plan and execute research into those sciences which relate to man's natural environment. Amongst the component councils are the SPNR and the Institute of Geological Sciences.

NT---- The National Trust

A better known body which is required by Act of Parliament to acquire and hold inalienable land and buildings of historic interest or natural beauty. As a result quite a number of properties are of interest to naturalists, although it must be remembered that they will not be preserved primarily as Reserves. Thus, Fountains Abbey will be managed as an estate, although last year the YNU did a Flora and Fauna Survey of the area on behalf of the National Trust.

RSPB--- The Royal Society for the Protection of Birds

This is on a more specialised plane, founded some time ago to encourage the better conservation of wild birds and their habitats. It runs a research department, helps publicise the Bird Protection Acts and may prosecute egg collectors and people found shooting and trapping protected birds. It now manages some 50 Reserves across the country. The general public is encouraged to join.

BTO---- The British Trust for Ornithology

A different kind of body - it is primarily concerned in promoting field work and co-ordinating the work of British Bird Observatories, and of amateur and professional birdwatchers. It is mainly concerned with the collection of data and is not a land-owning body. (cf YNU)

BSBI---- The Botanical Society of the British Isles

This is concerned with the study of systematics and the distribution of Flowering Plants and Ferns in the British Isles. The well-known Botanical Atlas is a memorial to this work, and equally well known is their twice-yearly publication, Watsonia - a work clearly for the dedicated (and informed) enthusiast.

WFS---- The Wild Flower Society

On a different plane to the above - a descendant of a middle-class, Victorian organisation, founded by the Dent family. This is not so abstruse and, dare I say it, puts one a little in mind of the 'Train Spotters' approach. If you join the WFS and keep their diary (not a must) it will make sure that you learn the Latin names of the plants as well as searching out the localities in which they grow. You will also meet some very friendly people, who are always prepared to show you where 'it' may be found. Members and their addresses are listed, which tempts you to call on them for advice when visiting a new area. Members keep in touch through field meetings and receive the Wild Flower Magazine three times a year.

RES---- The Royal Entomological Society

Founded in 1833, this Society is to be taken seriously. Membership is by invitation and the letters FRES can be tacked on to one's name.

ISL---- The Linnean Society of London

Founded in 1788, this Society aims to promote those aspects of Biology which are related in various ways to the diversity and interrelationships of organisms. Members are entitled to use the letters FLS after their names. A particular concern of the Linnean Society is with the nomenclature used in the study and listing of living materials.

Both these last two societies have softened their approach to the admission of members in the past few years, owing no doubt to the difficulty in raising funds in the time-honoured ways of patronage by the wealthy.

The ultimate in glory is to be able to sport the letters FRS after one's name - Fellowship of the Royal Society. Founded by Charles II, this is the premier scientific society and membership a much-coveted item. Doncaster can lay to two claim in the past:-

Sir Godfrey Copley of Sprotborough who was not only an FRS, but founded the Copley Medal to be awarded by the Royal Society for distinguished work in the scientific field.

William Sawney Bisat - the nephew of George Bisat, printer of Baxtergate. Born in Doncaster, 1886, he became a civil engineer. As a hobby he studied fossils of the Millstone Grit, which led to him being made a Fellow of the Royal Society. I shall always regret having put off the chance to visit him in his retirement in Wetherby before he died in 1973. Needless to say, he and his uncle were members of the Doncaster Scientific Society.



THE HISTORY OF THE DONCASTER NATURALISTS' SOCIETY EXCURSIONS

Derek Allen

The Doncaster Naturalists' Society and its predecessors have a long history of excursions extending back into last century. Most of these are listed in the minute books of the Society. These have now been extracted and catalogued.

The first reference to an excursion occurs as early as the Annual Report of the Doncaster Microscopical and General Scientific Society for 1883 when it was reported that: 'Another new and pleasing feature which occurred later in the session was the visit of the Y.N.U.... on Whit Monday. The meeting, which had for its object the investigation of the natural history of Sandall Beat, the Green Farm Wood and Potteric Carr was rather too early in the season to allow of much work being done.'

However, the first official excursions were organised at a Committee Meeting on 8th May 1896: 'which was convened for the purpose of drawing up a short Excursion Programme for the summer months. It was decided to hold three on the following dates:

May 21st	Edlington Wood	16 present
June 18th	Conisbro' and Sprotborough	16 present
July 23rd	Adwick, Burghwallis, Campsall and Askern	7 present

It was reported later in the Annual Report for 1895/96: 'That they were well attended and gave a great satisfaction to those who were present at them.'

These three excursions were to be the start of a series of outings which have continued to the present day. During this long history, there have been two breaks in the sequence. The first occurred during the latter half of World War I and was mainly due to a lack of transport. The second occurred between 1960 and 1963. It was formally announced at the A.G.M. on 6th April, 1960 that: 'in view of the difficulty of transport on Saturdays, the inaccessibility of the fast disappearing country-

side and the lack of support shown at joint meetings with other societies in 1959, it was necessary although regrettable to suspend the Summer Excursion Programme of the Society.'

The programme was resumed in 1964 and has steadily recovered ever since, such that in 1984 sixteen excursions were listed on the Summer Programme. This did not include the Y.N.U. outings which have also been added to the programme in recent years.

The Society has a good record of holding joint meetings with other local societies. Fifteen different societies have been represented over the years with the Yorkshire Naturalists' Union being the most numerous participant. Y.N.U. Meetings have often been added to the Society's programme and D.N.S. members have frequently attended.

The geographical range of the excursions has also been fairly extensive. Local sites comprise the majority of the venues, but the Society has also ventured forth to places as far afield as Cambridge Botanical Gardens, the Yorkshire Dales, Derbyshire and Gibraltar Point Nature Reserve in Lincolnshire. These are only some of a total list of over 200 places which have been visited over the years. The most popular have been Sprotborough, Roche Abbey, Cusworth and Barrow Hills.

These excursions have provided Society members and their friends with both a chance and an impetus to visit their local countryside. They have also provided valuable records and information of the changing flora and fauna of the district.

The excursion catalogue is in two parts. The first is a card index which lists in alphabetical order the numerous venues and includes details of the date visited, if it was a joint meeting and also where it was recorded in the Society's Minute Book.

The second part consists of a series of annual lists of the excursions from 1896 to July, 1985. Both the card index and the annual lists are located in the Doncaster Naturalists' Society Archives which are in turn housed at the Museum where they are available for inspection through the Natural History Department.

FLOWERS OF THE HIGHLANDS

Ian McDonald

We left Doncaster in late May for three weeks holiday in Scotland. The first few days were spent at Kenmore by the side of Loch Tay. A large variety of plants was seen amid beautiful scenery, including:-

- Globe Flower
- Bird Cherry
- Bog Myrtle
- Fly Honeysuckle
- Red Berried Elder
- Kidney Saxifrage
- Green Leopardsbane.

We went to Ben Lawers Nature Reserve which is famous for its Alpine plants. Among those seen were:-

- Alpine Saxifrage
- Holly Fern
- Alpine Woodsia,
- Alpine Cinquefoil
- Alpine Meadow Rue
- various Clubmosses.

We then moved north by way of Glencoe, over the new Bridge at Ballachulish and on to Contin. From Contin we went to the Tropical Garden at Inverewe, well worth a visit, with plants growing from all over the world, outside in the warm climate provided by the Gulf Stream.

From Inverewe we moved to Ardmair Point near Ullapool and saw our first rain. We visited Inchnadamph Nature Reserve, which is on the Durness Limestone. There is a cave on the Reserve in which remains of prehistoric animals and early man have been found.

Plants seen included:-

Holly Fern
Mountain Avens
Early Purple Orchid.

We were too early in the year to see many specialities of the area.

Because of the mist we did not see what must be the most spectacular scenery in Scotland, Suilven, Canisp, Cul Mor, Stac Pollaidh and Cul Beag.

We then journeyed north to Bettyhill, where I went to Strathnaver Reserve. There is a wide variety of habitats in quite a small area, such as bog, scree, blown sand and rock.

Again, I was probably too early in the year to see a lot of the flowers that grow there, but among those seen were:-

Long Leaved Sundew
Bogbean
Mountain Avens
Juniper in all shapes and sizes
Spring Squill
Mountain Milk Vetch.

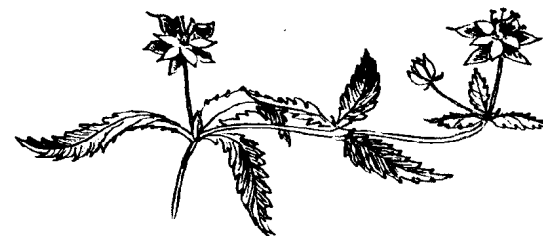
From Bettyhill we travelled to Wick, stopping off to see Scottish Primrose and Oyster Plant. From Wick, we made our way to Elgin, where we stayed about a week. Along the coast hereabouts are miles of golden sands, while inland the area is one of fertile land interspersed with rivers and small lochs. Nearby is Culbin Sands, a large area of blown sand, approximately 6 miles x 2 miles. Several farms and a village were buried by sand in the 17th century. The Forestry Commission took over the area in 1922 and have been planting trees there ever since. There is a wide range of plants as recorded by local botanist, Mary McCallum Webster. Some of those I saw were:-

Common Wintergreen
Serrated Wintergreen
Lesser Twayblade,
Marsh Cinquefoil
Cornflower
Coral Root Orchid.

We then made our way home, stopping to see

Blue Heath
Dwarf Cornel
Cloudberry
Small Cranberry

A very enjoyable holiday, with plenty of natural history and unspoilt scenery, which I can recommend to anyone vaguely interested in either.



From the Doncaster Chronicle August 1st.1890.

At a recent fashionable "At Home" the rooms were beautifully decorated with wild roses and honeysuckle. It may sound very pretty but I sincerely hope that wealthy people will not generally use wild flowers for decorating their rooms. The cultivation of flowers is now a large industry and one is always glad to hear of the great floral displays made throughout the season upon the occasion of a ball or dinner. If, however, wealthy people are to use wild flowers in the enormous quantities they have used the cultivated ones there will soon be none left. Already the pretty primrose is quite scarce in many places, through being gathered in such masses for "Primrose Day" and others will soon be quite as scarce if the fashionable leaders of society rob their poorer neighbours of wild flowers for decorating purposes.

SHORT LANE, BESSACARR

Dorothy M. Bramley

Conservationists nationwide are becoming more and more concerned about the wholesale destruction of hedges. Huge prairie-like fields are created by farmers, resulting in the destruction of cover for birds and small mammals. In urban areas this is even more serious than in the country, because owing to the clearance of natural vegetation for housing projects, industrial sites, roads and so on, there are very few hedges left.

Walking in my home area last year, I noticed a hedge in Short Lane, Bessacarr, which is very rich in species, and I thought it was worth a careful study. Hopefully the hedge will be left as it is, bordering as it does, the Potteric Carr Reserve. Short Lane itself connects Burnham Close on the West Bessacarr Estate with Doncaster Airport, on which the Local Authority plans to create a Leisure Complex par excellence. On the eastern side of the Lane, the hedge is double with a ditch between two rows of trees. Some of the trees are relatively large, including several old alders. In all the 300 yards of the portion of Short Lane studied yielded 11 different tree species - these are shown in Diagram 1. (Figures are approximate). In addition to these there are a few brambles in the hedge, several rose bushes (*rosa canina*) honeysuckle and in the hedge on the western side of the lane, a flourishing area of hop.

After looking critically at the lane and in particular at the hedge on the eastern side, I decided that it must be of considerable antiquity. Employing the method used by Pollard, Hooper and Moore in their book "Hedges" in the New Naturalist Series, I paced out two adjacent 30-yard stretches of hedge, and found that they each contained six species. Using the formula for dating a hedge which they recommend in the book, as follows:-

Age of Hedge = (110 x no. of species in a 30 yd. stretch
+ 30 years)

This gives (110 x 6) + 30 = 690 years.

Obviously this rule of thumb can give only a very approximate dating, but by any standards this hedge must be counted as 'old' if not even 'ancient'. I decided to visit the local Archives to see whether I could find records which would corroborate the existence of this Lane and perhaps even the hedge in previous centuries.

In 1890 a map was prepared for the Trustees of the St. Thomas' Hospital Estate (see Diagram 1), who were interested in selling some of their holding of land to the South Yorkshire Joint (Railway) Line Committee. This clearly shows Short Lane, and a number of trees are drawn along the eastern side of the Lane, which is the hedge in which I am interested. So that takes us back nearly 100 years!

In 1859, a map of the Parish of Cantley was prepared by W.M. Godfrey. This shows clearly our Short Lane, with a drain on the eastern side of the various fields adjacent to the farm at High Ellers. (Joseph Hunter in his work on South Yorkshire that "High Ellers first occurs in the inquisition of Adam de Everingham 9 Edward I. i.e. 1280). Whilst the hedge is not marked in any way on this map, presumably it would be necessary to have a hedge along the line of the drain for practical purposes.

Two Eighteenth Century Maps survive which also depict Short Lane. The first is an enclosure map of the Doncaster Carr, dated 1771, in the Reference Library, Doncaster. This clearly shows Short Lane and marks the strips of land allocated to various freeholders. No fields are marked on the High Ellers side of the Lane, as this was the Parish of Cantley. Therefore the hedge with which I am concerned formed the boundary at this point between Doncaster and Cantley.

The second map, drawn by Joseph Colbeck of Marr (see Diagram 2) is dated 1782. He was commissioned in 1777 to 'draw up a true, exact and perfect survey of all lands...garths, gardens, orchards, ancient enclosed lands and grounds!.....within the townships of Cantley, Brampton, Bessecarr and High Ellars. The Lord of the

Manor of Brampton was Childers Walbanke Childers, and William Dixon was Lord of the Manor of Bessecarr. Again the map shows Short Lane and names all the drains - Mother Drain, Childers Drain etc..which names persist to this day.

The very earliest map which I have found relating to the area is one by the famous early mapmaker, Robert Saxton, dated 1616. (See Diagram 3). He was employed by the Crown in 1615 in connection with a dispute about waste land at Hatfield. It seems as if Potteric Carr was also surveyed in the same connection, no doubt because it had been part of the Royal Hunting Forest of Hatfield Chase. This map shows High Ellars and, lo and behold, the distinctive right hand bend in Short Lane. This bend, no doubt, had something to do with avoiding a morass! Even now, after all the extensive draining, it can be very boggy there.

So, 370 years ago, Short Lane was there, but this does not prove that a hedge was. My next step will be to research written sources for reference to maintaining the 'fence'. I am sure there will be some- a parish boundary, and adjacent to the Royal Forest of Hatfield Chase, there just must be. Meanwhile I am drawing up a total list of the flora of the Lane, and keeping a close eye on it. (A Histogram showing the approximate numbers of tree species in the Lane is depicted in Diagram 4).

REFERENCES.

Map prepared 1890 for Trustees of St.Thomas' Hospital Estate

Doncaster Archives

1859 Plan of the Parish of Cantley

56 = 1 mile

ditto

1771 Enclosure Map of Doncaster Carr

Doncaster
Reference Library

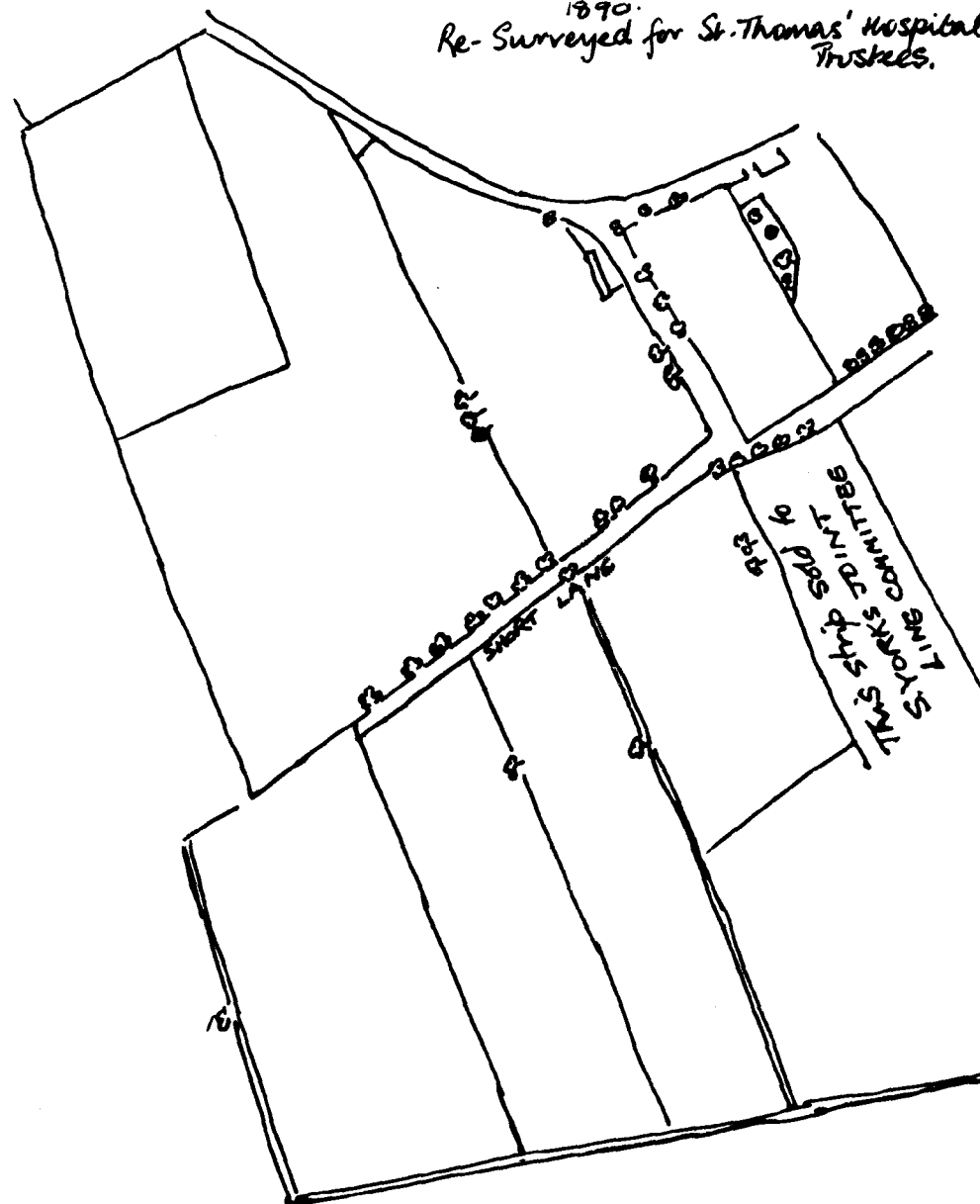
1782 A Plan of the Rivers, Cuts & Drains
and Water Courses etc. J.Colbeck

Doncaster Museum

1616 Saxton's Map "Potterick Carr"

ditto

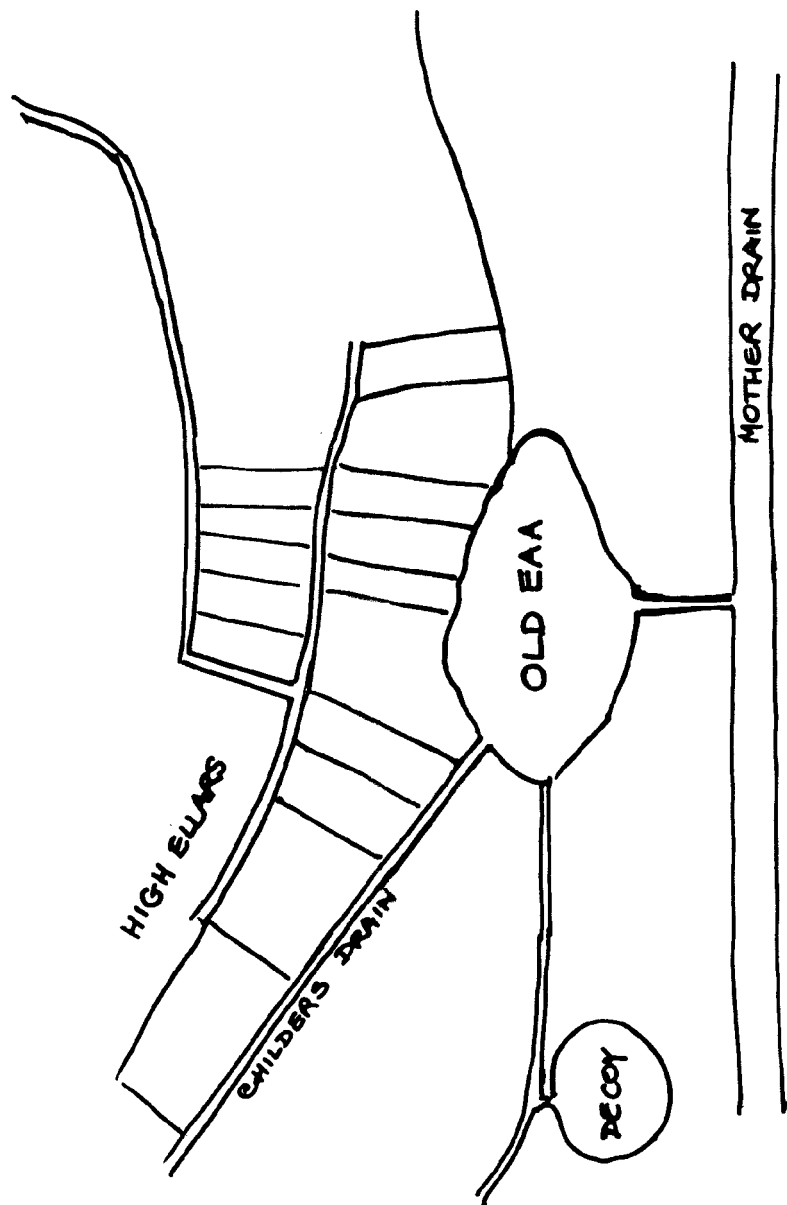
1890.
Re-Surveyed for St.Thomas' Hospital
Trustees.



Diag. I. Drawn from Survey Map of 1890.

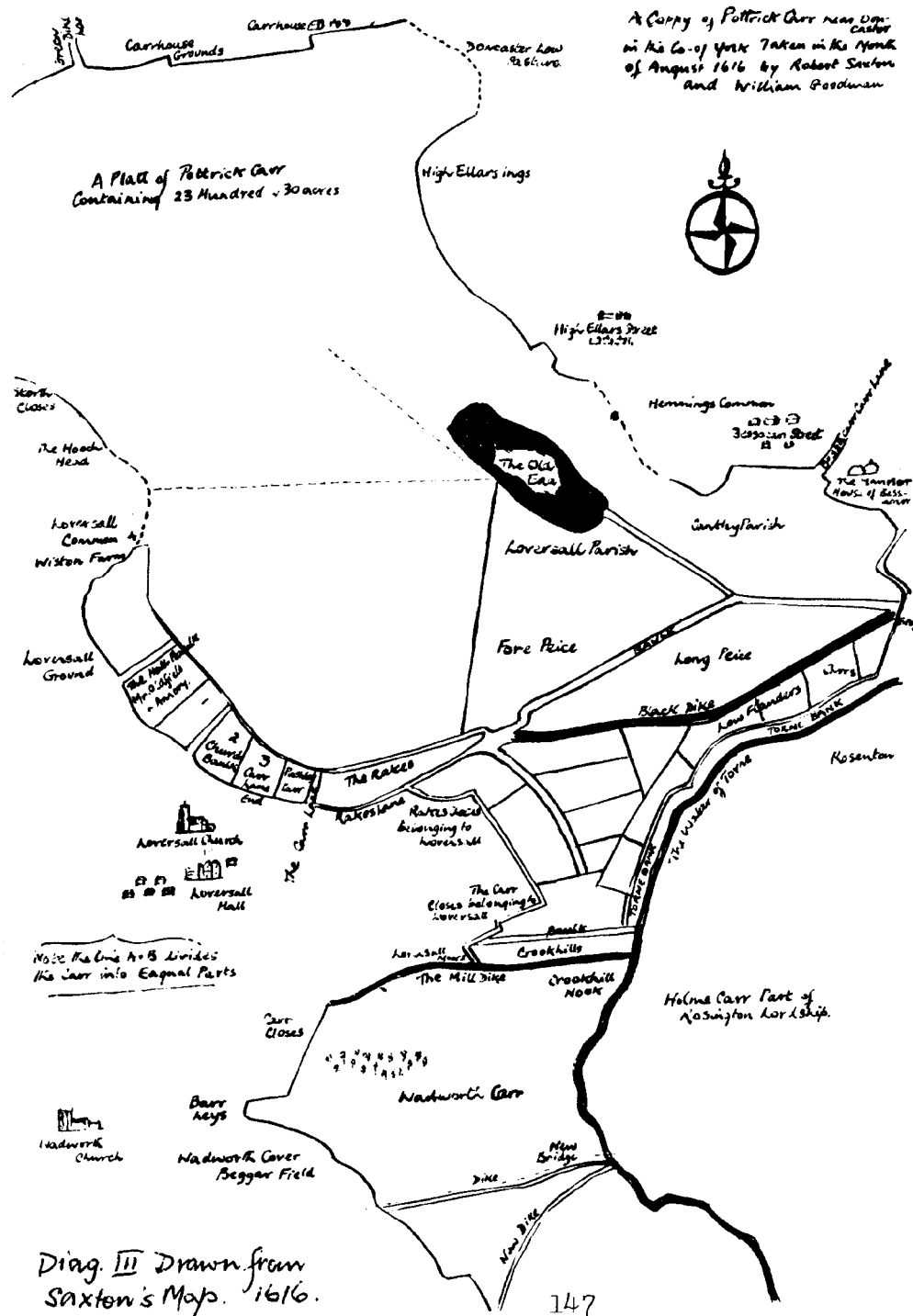
"Hedges" by E.Pollard, M.D.Hooper & N.W.Moore.

--Published by Collins in the New Naturalist Series.

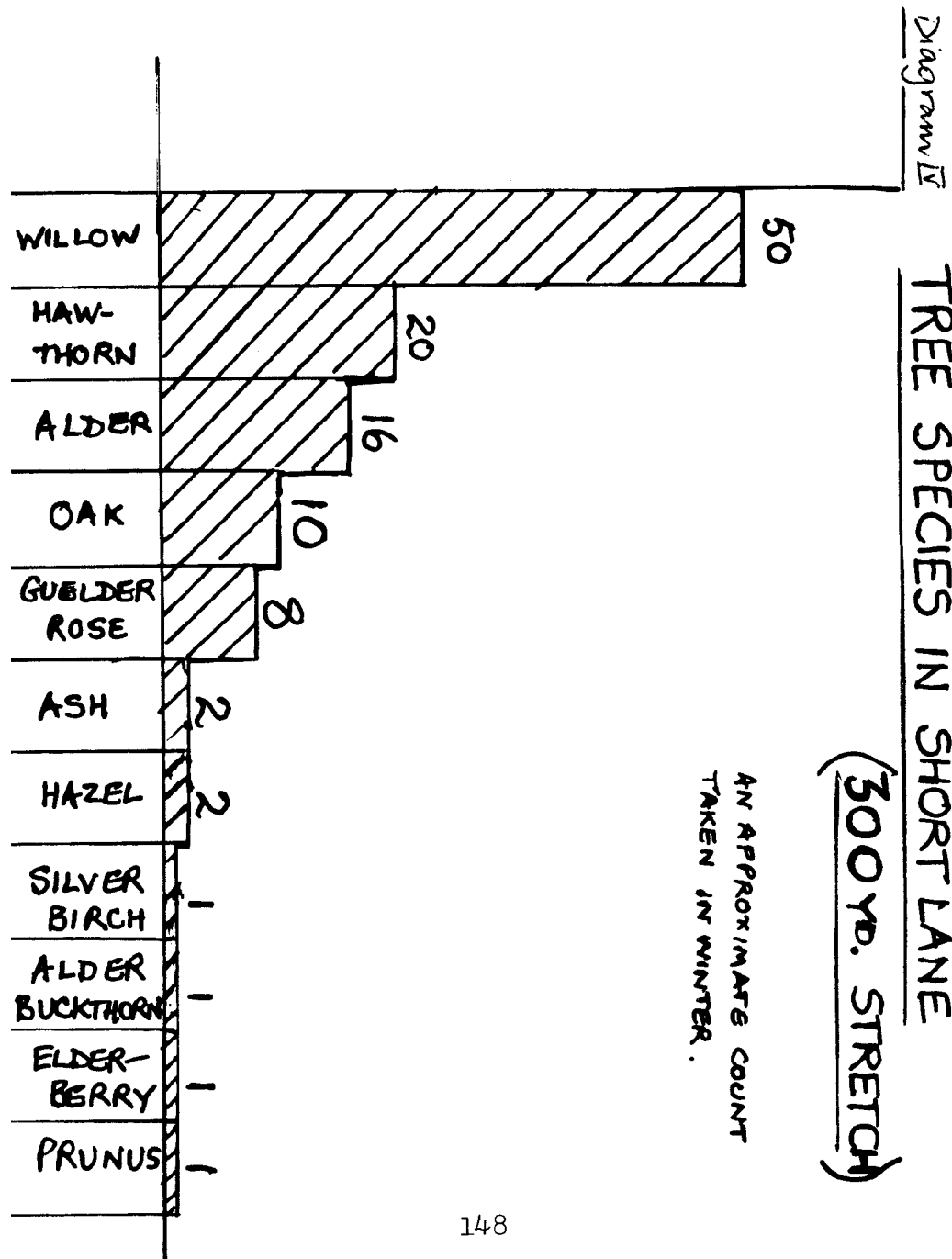


Drawn from Joseph Colbeck's Map 1782

Diag. II



Diag. III Drawn from
Saxton's Map. 1616.



DRAGONFLIES

Michael Snow

The habitats of Dragonflies vary quite a lot, from ponds and lakes to canals, lily ponds, fast and slow-moving streams, bogs and marshes, ditches, woodland glades, along hedgerows. A long list, but they only breed in wetland habitats.

The larvae need water to live in and are totally aquatic. Like the adults they are carnivorous. Metamorphosis is incomplete as there is no pupal stage. The adults have various methods of egg-laying, either from above the water, by flying low over the water and flicking the eggs singly or en masse into the water, or by landing on a plant and inserting their eggs into pondweed stems or into the mud. Most eggs hatch in a week or two, but those of some species (e.g. the Emerald Damselfly, *Lestes sponsa*) overwinter to hatch in the spring. The mature larva climbs up a rush or reed stem to emerge. At first, the adult is soft and colourless, then it dries out and changes to its appropriate colour, before flying off to find a mate and breed, thus starting the cycle over again.

The Conservation of Dragonflies

Out of the 41 species of Dragonfly known to breed regularly in Britain, four species have almost certainly become extinct.

These are as follows:-

- The Orange Spotted Emerald
- The Norfolk Damsel Fly
- The Dainty Damsel Fly
- The Scarce Emerald Damsel Fly

The latter has been found in small colonies in Ireland.

It is important that those which still persist are conserved for the future. If you should happen to find twelve or more species in one locality please inform the local museum.

If you are interested in Dragonflies, the best book to obtain is:-

Dragon Flies of Great Britain and Ireland
by Cyril O. Hammond F.R.E.S. (2nd Edition)
Revised by Robert Merritt

Published by Harley Books. Cost app. £17.

Local Records (M.Snow) 1984

Birds Wood, Haxey

Four spotted Chaser,	Common Blue Damsel,	Azure Blue Damsel,
Blue-tailed Damsel,	Common Emerald Damsel,	Large Red Damsel,
Common Darter,	Black Darter,	Brown Hawker
Common Hawker.		

The Emperor Dragonfly has also been seen - 2 males, 1984.

Sandal Beat Wood

Common Darter,	Common Blue Damsel,	Common Hawker,
Brown Hawker.		

Idle Stop Ponds, Mission

Common Blue Damsel,	Common Emerald Damsel	Blue-tailed Damsel
Common Darter	Black Darter	
Common Hawker	Brown Hawker.	

N.B. I am doing some more recording this year - if you see any dragonflies, of interest, please let me know.

GEORGE NICHOLSON'S PLANT RECORDS FROM THE DON & DEARNE VALLEYS

Colin A. Howes

During the 1830s the village of Wath-on-Dearne, then a small community of about 1150 inhabitants, had within its population sufficient literary interest and expertise to produce its own monthly Journal THE VILLAGE MAGAZINE OR WATH REPOSITORY. It was launched in January 1831, cost 4d. and was run by an enthusiastic committee of twelve, the leading lights being Rev. William Moorhouse and Mr. Larret Langley F.L.S. It is not known whether Rev. Moorhouse was an active naturalist but that highly colourful character, Larret Langley, who taught botany at the

nearby 'Brompton Academy' was certainly an active field botanist who, in 1821, together with Rev. E. Wilson of Swinton compiled a Flora of Rotherham (Langley and Wilson 1828).

Clearly the journal was regarded as one of the major achievements (possibly one of the only redeeming features of the district, William White in his Sheffield directory of 1852 noting that "here is published an interesting miscellany called the Village Magazine... this is the only village periodical in the kingdom... and seems likely to have a long and prosperous life".) In fact, it only ran for three volumes 1831-3, all of which are available for consultation at the reference section of the Doncaster Central library.

This fascinating and beautifully produced publication attempted to maintain a high moral tone, its editorial policy was clearly designed to be spiritually uplifting and to encourage an awareness and appreciation of the 'works of nature'. There was a marked bias towards local history and natural history and during the 1830s, as today, observers were patently aware that the once familiar rural features were being subjected to the destructive powers of industry and farming.

In 1831 George Pearson Nicholson, a solicitor who lived in Wath from at least the 1830s to at least the 1850s (White 1852 and other local directories) wrote three articles for the Village Magazine entitled 'Indigenous Botany'. These were based on lists of plants he had found in flower in a number of localities along the Dearne and Don Valleys and to the north of Doncaster during May, June and August 1831. To the botanists of the time this information, containing some amazing revelations, would have been of great interest. Today the significance of these long forgotten records is considerably magnified as they provide a rare glimpse into the botanical and therefore the ecological state of sites along the Dearne and Don Valleys some 150 years ago. We can also compare Nicholson's lists with those of Jonathan Salt about 50 years earlier.

In 1918 Nicholson's botanical lists were rediscovered by none other than that famous South Yorkshire entomologist and purveyor of ladies underwear, Edwin Goldthorpe Bayford, who, no doubt, stumbled across them whilst in pursuit of his local history and folklore interests. Bayford was instrumental in bringing these precious records to the attention of a wider audience. He combined the three articles into a single species list and together with comments and notes from F.A. Lees (who had missed them whilst compiling his Flora of West Yorkshire) published them under the title of 'A Floral Film of 1831' in the Naturalist (Bayford 1918).

For the benefit of currently active botanists and conservationists, the records from Nicholson's three lists are presented here under the locality headings. The nomenclature and arrangement of the species is updated to conform with Clapham, Tutin and Warburg (1952).

Near Brampton (SE/4101)

Dyer's Greenweed	<u>Genista tinctoria</u> L.	July
Common Wintergreen	<u>Pyrola minor</u> L.	July
Greater Broomrape	<u>Orobanchae rapum-genistae</u> Thu.	July
Giant Bellflower	<u>Campanula latifolia</u> L.	July
Common Helleborine	<u>Epipactis helleborine</u> (L.)	July
Common Twayblade	<u>Listera ovata</u> (L.)	July
Scented Orchid	<u>Gymnadenia conopsea</u> (L.)	July
Green-winged Orchid	<u>Orchis morio</u> L.	May
<u>Near Wath-upon-Deane (SE/4400)</u>		
Celery-leaved Buttercup	<u>Ranunculus sceleratus</u> L.	May
Water Crowfoot	<u>R. aquatilis</u> L.	May
Ivy-leaved Crowfoot	<u>R. hederaceus</u> L.	May
Common Wart Cress	<u>Coronopus squamatus</u> (Forsk.)	July
Tower Mustard	<u>Turritis glabra</u> L.	May
Spiked Water-milfoil	<u>Myriophyllum spicatum</u> L.	August
Bistort	<u>Polygonum bistorta</u> L.	July
Amphibious Bistort	<u>P. amphibium</u> L.	July
Small Stinging Nettle	<u>Urtica urens</u> L.	May
Hop	<u>Humulus lupulus</u> L.	May
Blue Pimpernel	<u>Anagallis foemina</u> Miller	July
Common Comfrey	<u>Symphytum officinale</u> L.	July
Convolvulus	<u>Calystegia sepium</u> (L.)	August

Henbit	<u>Urtica urens</u> L.	May
Arrow-head	<u>Sagittaria sagittifolia</u> L.	July
Autumn Lady's Tresses	<u>Spiranthes spiralis</u> (L.)	August
Marsh Arrow Grass	<u>Triglochin palustris</u> (L.)	July
Frog Orchid	<u>Coeloglossum viride</u> (L.)	May
Lesser Butterfly Orchid	<u>Plantanthera biloba</u> (L.)	May
Fly Orchid	<u>Ophrys insectifera</u> L.	May
Early Purple Orchid	<u>Orchis mascula</u> L.	May
Heath Spotted Orchid	<u>Dactylorhiza maculata</u> (L.)	May
Early March Orchid	<u>D. incarnata</u> (L.)	May

Near Adwick-upon-Deane (SE/4701)

Creeping Bellflower	<u>Campanula rapunculoides</u> L.	July
Common Valerian	<u>Valeriana officinalis</u> L.	July

Near (H)arlington (SE/4802)

Water Violet	<u>Hottonia palustris</u> L.	May
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In a Bog near Conisbrough Castle (SK/5198)

Large Bittercress	<u>Cardamine amara</u> L.	May
Water Speedwell	<u>Veronica anagallis-aquatica</u> L.	May
Common Butterwort	<u>Pinguicula vulgaris</u> L.	May
Marsh Valerian	<u>Valeriana dioica</u> L.	May
Cotton Grass	<u>Eriophorum angustifolium</u> Honk.	May

On Conisbrough Castle (SK/5198)

Salad Burnet	<u>Poterium sanguisorba</u> L.	July
Pellitory-of-the-Wall	<u>Parietaria diffusa</u> Mertens & Koch	July
Viper's Bugloss	<u>Echium vulgare</u> L.	July

Near Conisbrough Village (SK/5198)

Green Hellebore	<u>Helleborus viridis</u> L.	May
Lesser Spearwort	<u>Ranunculus flammula</u> L.	May
Common Pepperwort	<u>Lepidium campestre</u> (L.)	May
Fingered Saxifrage	<u>Saxifraga tridactylites</u> L.	May
Common Gromwell	<u>Lithospermum officinale</u> L.	May

Near Conisbrough (SK/59)

Bog Pimpernel	<u>Anagallis tenella</u> (L.)	August
Lousewort	<u>Pedicularis sylvatica</u> L.	July

Near Sprotbrough (SE/5301)

Yellow-wort	<u>Blackstonia perfoliata</u>	(L)	July
Trifid Bur-marigold	<u>Bidens tripartita</u>	L	July
Pyramidal Orchid	<u>Anacamptis pyramidalis</u>	(L)	July

Near Rotherham (SK/49)

Musk Mallow	<u>Malva moschata</u>	L	July
Meadow Cranesbill	<u>Geranium pratense</u>	L	July

Near Aldwark Hall, Rotherham (SK/49)

Water Avens	<u>Geum rivale</u>	L	
(Editorial note:- The elegant <u>Geum rivale</u> or Water Avens has been found in the neighbour- hood of Aldwark Hall, near Rotherham, from whence we have received specimens			

Near Hooton Roberts (SK/4897)

Self Heal	<u>Prunella vulgaris</u>	L	July
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Near Denaby (SK/4899)

Wild Licorice	<u>Astragalus glycyphyllos</u>	L	August
Shrubby Cinquefoil	<u>Potentilla fruticosa</u>	L	August
Black Nightshade	<u>Solanum nigrum</u>	L	August

Near Brodsworth (SE/5007)

Purple Milk-vetch	<u>Astragalus danicus</u>	Retz	August
Man Orchid	<u>Aceras anthropophorum</u>	L	August
Hard Pea	<u>Desmazeria rigida</u>	(L)	August

Near Adwick-le-Street (SE/5408)

Whorled Water-milfoil	<u>Myriophyllum verticillatum</u>	L	August
Greater Bladderwort	<u>Utricularia vulgaris</u> agg.		August

Near Askern (SE/5613)

Marsh Fern	<u>Thelypteris palustris</u>	Schott	August
Knotted Pearl-wort	<u>Sagina nodosa</u>	(L)	August
Purple Loosestrife	<u>Lythrum salicaria</u>	L	August
Pennywort	<u>Hydrocotyle vulgaris</u>	L	August

Cowbane

Cicuta virosa L August

(of this record F.A. Lees
in Bayford (1918), notes:
"The one undoubted name
error in the list; the
plant that grew and grows
still from Barnsley to
Askern is Oenanthe crocata
locally called Cowbane, also
because equally with the
water-hemlock - a rare,
declining species, now no
longer existent in
Yorkshire - it was poison-
ously acrid-narcotic to
cattle.")

Creeping Jenny	<u>Lysimachia nummularia</u>	L August
Yellow Loosestrife	<u>L. vulgaris</u>	L

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and Twenty Miles around. Sheffield.

P.S. It has recently been discovered that George P. Nicholson was
a notable ancestor of Derek Allen, currently an active
member of the Doncaster Naturalists Society.....it's in
the blood, you know!

GEOLOGY IN THE DONCASTER SCIENTIFIC SOCIETY

Martin Moss

Geology in the 19th Century was pursued in a way far removed from the exploration surveys for economic deposits of today. When the Doncaster Microscopical Society was founded in 1880, geology was still an infant science, and was immensely popular amongst the Victorian middle classes and naturalists of all leanings. The Doncaster Microscopical Society (later renamed Doncaster Scientific Society) successfully brought together the late Victorian naturalists of the region and enabled them to co-operate with each other, so that at this time research and recording of Doncaster's natural history advanced at a tremendous rate, probably most intensely between 1895 and 1915. Unlike today, Geology was a major topic of discussion in the Society between these years and a very active section of the Society. During the most active part of its history the Geological Section produced a profusion of observations and numerous published accounts. Its most prominent figures were H.T.Culpin and H.H.Corbett. Culpin was Doncaster's most productive and prominent geologist who left more work than the rest of the Section put together, and yet was active in Geology for little more than 13 years.

The Society displayed interest in Geology at an early stage with F.Milner delivering the first geological talk entitled 'The Origin of Chalk revealed by the Microscope' on 7th April, 1880. Later that year in October, T.H.Easterfield was elected to the Society. Easterfield was a geologist and was responsible for the initial stages of local research within the Society. His contribution was, however, shortlived as he emigrated to New Zealand and later became Prof.Sir T.H.Easterfield, Professor of Natural Science at Wellington University.

The Society's real interest was evident between 1885 and 1915, and local geologists were then at a great advantage, because during this period several railways were constructed in the

district, also coalmining arrived with the sinking of many colliery shafts. This facilitated excellent chances to examine new exposures, and sequences previously unobserved. The Geological Section of the Society recognised the potential of the development and eagerly pursued any chance of describing new exposures.

The developments in the district roughly determined the topics of major interest pursued by the Geological Section and these were more or less threefold:-

1. Interest in Pleistocene-Holocene deposits of the Region
2. Interest in the Permian Deposits
3. Description and correlation of the coal measures.

In an attempt to give an account of the Society's activities, I will consider these three in turn.

Pleistocene-Holocene Deposits

Interest in Glacial and Post-glacial deposits was initiated in the early 1880's and persisted, on and off, through to the 1930's, with most of the work between 1896 and 1907. A deposit of clay was then worked for brickmaking in Balby. Its geological character was apparently first recognised by Mr.J.Furnivall but Easterfield was the first geologist to investigate it, and he delivered an account of his observations to the Society in February 1884. He determined the deposit to be glacial with a "lower part smoothed down as if there had been a cessation of glacial activity". He displayed erratics from the clay and thus began the Society's collection of such rocks which were donated to the Free Library in 1896.

Geology in the first 15 years of the Society's existence was only a minor topic of interest when, in 1896, Professor P.F. Kendall of Leeds University lectured to the Society on the Balby clay. Kendall had a major interest in Pleistocene Geology at this time and was the first eminent geologist to examine the Balby Clay. He determined the deposit to have been produced by an extension of the Vale of York Glacier and discovered in the clay an erratic of Shap Granite from Cumberland. At that time this was the most southerly known example east of the Pennines.

Kendall's lectures influenced the Society tremendously and on 28th October, 1896, the Society sectionalised, with the Geological Section coming into being officially. Almost immediately members began to report on their findings, with the Balby Clay being a major topic of interest. Reports of erratics from all over the district became a regular feature of meetings and these were in turn passed on to the Yorkshire Boulder Committee (a committee of the YNU responsible for the collection of data on erratics) by H.H. Corbett. New developments in the clay workings were closely observed and the Boulder Clay/Bunter Sandstone contact was reported on 13th April, 1898. Mr. A. Jordan reported his finds between 1900 and 1901, notably a pottery fragment 40ft below the surface in "undisturbed clay" which he cited as evidence of pre-Glacial man. He also reported on 11th December, 1901, a porphyry boulder from the clay which was considered by T. Sheppard, (the Director of Hull Museum and a contemporary geologist) to be of Scandinavian origin, the first such erratic to be found in the district. An account of the Balby Clay was delivered to the Society by H.H. Corbett in December, 1901. He explained that the chief ice influx had been from the north-east, with erratics from Scottish and possibly Scandinavian regions. The region's post-glacial gravels he associated with an inter-glacial lake with an outlet in the Humber region.

The discovery of another Boulder Clay was reported in February, 1906, exposed by railway building, as was the unearthing of mammalian bones near Conisboro'. This was the subject of a short paper by Corbett in *The Naturalist* of 1906, and consisted of an antler probably of Cervus elaphus and two bones of Rhinoceros; interestingly one is noted as having been "distinctly gnawed, apparently by hyaenas".

Annual reports of the Society usually contained a substantial summary of geological work conducted during the past year.

The most lengthy were in 1906/7, and reveal that by 1907, the Balby Clay had become recognised as the best and most southerly example in Yorkshire. Corbett had mapped the post-glacial gravels, and detailed descriptions of new exposed deposits in railway and colliery cuttings had been taken, showing the ancient floor of the Vale of York to be below present sea-level. Kendall had studied this extensively and determined the Vale to be a filled hollow that did not extend much further south than Doncaster.

The Society's interest in superficial deposits of the district declined after 1907, with only the occasional casual record in the minutes. Of interest is one report of the discovery of a horn cone of Bos primigenius in a railway cutting at Loversall, noted in 1907 and the subject of a short note in *The Naturalist*. Corbett lectured on "Doncaster at the close of the Pleistocene" in December, 1915, and the next report of work on Pleistocene deposits was in 1924, when the Balby Clay was inspected in an attempt to find implements in order to date the deposit. Occasional reports of erratics occur up to 1929, after which no further mention is made in the minutes.

Permian Deposits

Observation of the region's Permian rocks began about the same time as those for Pleistocene deposits. Work was initiated by H.H. Corbett and H. Culpin, when they inspected the new cuttings of the South Yorkshire Junction Railway between Sprotborough and Pickburn, and delivered an account of their findings to the Society on 10th March, 1897. By 1900 the escarpment between Warmsworth and Conisbro' had been examined and a Fossiliferous Zone within the Lower Magnesian Limestone identified.

An unusual entry in the minutes of 20th October 1900 reveals how a Mr. Moore, inspired by the sight of dendritic manganese oxides common in the limestone of the region exhibited how artificial dendrites could be produced by fluid injection between two plates of glass. The mode of origin of the limestone itself was the subject of a talk by D. Werrybone on 12th November, 1902, but it was after 1904 that members were most productive concerning the Permian rocks.

H.Culpin reported the exposure of a 'fossil bed' at the top of the upper magnesium limestone at Balby and Hexthorpe on 13th January 1904. This was the first time that fossils from the UML had been reported in the district. In successive months, this bed was discovered to occur at numerous sites, e.g. Wadworth, Newton, Scawthorpe and Askern, and yielded the bivalves Schizodus, Bakevellia and Mya.

The limestone escarpment at Cadeby and High Melton was examined in 1904, and the Society was informed of the exposure of the basal Permian unconformity on 22nd March. Later in this year, H.Culpin delivered an account of a fault he had discovered in Cusworth Park, which became the subject of his first published work in the proceedings of the Yorkshire Geological Society.

By 1905, geology field trips had become regular weekend events and much Permian work resulted. In December, 1906, W.S.Bisat lectured on the fossils of the Magnesian Limestone, outlining the two zones recognised by local geologists, one at the base of the Lower Magnesian Limestone and the second near the top of the Upper Magnesian Limestone. It was noted that the fossils in the lower zone were always more prolific and larger than in the top zone. Railway construction in the district allowed H.Culpin to lecture on "Local Rocks Recently Exposed" on 13th February, 1907, in which he recognised the undulatory nature of the base of the Permian and that lower Permian sands and marls had been eroded away prior to limestone deposition.

Bisat lectured on the wealth of information revealed by the sinking of the Brodsworth and Bentley shafts on 28th April, 1908. The fossils revealed had verified almost all previous records over the past 30 years since Kirby's paper of 1863. This became the subject of a paper published in The Naturalist by Culpin, entitled "Permian Fossils in the Doncaster District" (1909).

As so often happens in geology, when new horizons present themselves, interest in much previous work evaporates. Culpin's lecture; on 22nd February, 1911, called "Our Local Limestone Rocks", was the last interest shown by the Society in Permian rocks.

A brief note by Saunders in the A.G.M. minutes for 1921/2, concerning observations from Levitt Hagg was the only evidence of Permian interest after Culpin's premature death in 1912. Interestingly, Saunders refers to a fossil coral from the limestone of Levitt Hagg, corals in the magnesian limestone being very rare and restricted to the Durham sequence. (D.B.Smith personal comment).

Coal Measure Deposits

For the last five or six years of his life, Culpin's major interest was in the coal measure deposits of the district. As early as 1904, Culpin showed interest in the coal measures, when he described a section exposed by a railway cutting at Cadeby, where the unconformity at the local base of the Permian deposits had been exposed. Bivalve fossils of unfamiliar affinity had been collected from a marly clay in the coal measure rocks. The fossil was later identified as Anthraconauta phillipsii by H.A.Allen of the Geological Survey, after having been submitted to him by P.F.Kendall. The significance of this species became the subject of a short note in The Naturalist of 1905 by H.Culpin and G.Grace, since it was "strong evidence from the beds"(from which they were collected) "belong to the upper coal measures" - the first time that upper coal measure had been proved in Yorkshire.

Details of the find were given to the Society in the Annual Report for 1906, and the implications of the discovery were the subject of a lecture by P.F.Kendall on 13th February, 1907. The fossil was described as a freshwater bivalve, discovered in a thin bed of ironstone some six feet below the unconformity at the local base of the Permian Deposits. The minutes record that soon after Culpin and Grace had discovered Anthraconauta phillipsii at Cadeby, A.Jordan found it in Grey Shale on the south side of the Don in Conisbro' Brick and Tile Works.

When on 13th February, 1907, Culpin had lectured on "Local Rocks Recently Exposed" Kendall pointed out that information regarding the character and correlation of the Coal Measure and Permian Rocks was required. He suggested that W.S.Bisat should investigate the palaeontology, that the Chemical Section of the Society should analyse the limestone of the region, and

that the Microscopy Section should investigate the Permian marls and sands. Unfortunately, none of these recommendations seems to have been pursued, except in the case of Culpin, who seized the opportunity afforded by the sinking of the Brodsworth Colliery to research the coal measure rocks. An account of his work was delivered to the Society on 28th April, 1908, and became the subject of a paper entitled, "Marine and other Fossils in the Yorkshire Coal Measure above the Barnsley Seam", in which were detailed the discovery of four marine bands within the Westphalian Succession, and the discovery of a bivalve previously unknown to science, and which became named Aviculopecten culpinii. The paper was published in the proceedings of the Yorkshire Geological Society of 1908. It formed the basis of a lecture to the British Association for the Advancement of Science at their meeting in Sheffield in September, 1910. An account also appeared in The Naturalist, along with further details in 1910, which mainly concerned fossils from the Coal Measures.

The Society received full details of Culpin's work when he lectured on the "Marine Bands in the Yorkshire Coalfield" on 29th February 1909, though, strangely, after this the geological notes in the minutes become, by comparison with earlier years, trivial, being mostly notes of unusual specimens or casual records. One of the most interesting is recorded for 26th January, 1910 by H. Foster, who displayed a stalagmite from the roof of the Daincil Seam at Bentley Colliery from 1,900 feet below ground surface. The growth rate of the stalagmite was given as about one inch per week. (Can this be true?. Editor).

On the morning of 23rd December, 1912, shortly before arriving at work, H. Culpin died. With him the major driving force behind the Geological Section died. Though it continued to exist, it appears that for eight or more years after Culpin's death, its activities were minimal. It was not until the Annual General Meeting for 1914 that any further geological interest was shown, when Mr. Golledge reported on sections of glacial gravels exposed at

Hexthorpe and Balby. Occasional lectures of geological flavour were given, the most notable being by H.H. Corbett on 8th December 1915, entitled "Doncaster at the close of the Pleistocene Period". Fossils from the coal measures encountered in the Edlington sinking were displayed by W.S. Bisat in January, 1919, and in the early 1920's, a mild rejuvenation of the Section occurred when J.W. Saunders became Sectional Leader.

On 21st April, 1920, Saunders lectured on his observations in the vicinity of the Barnsley Bed at Bentley Colliery, a theme he continued into 1922.

After this period, the geological activities of the Society became restricted to occasional lectures. One of the more interesting of these was a report of a field meeting at the Balby Clay Pit on 9th April, 1924, listing the erratics found, along with the bivalves Cyprina islandica, Tellina gallica and Astarte compressa, collected from the "200 feet gravel" of the post-glacial Lake Humber.

After 1925, there are only a few entries of geological interest. These include a lecture by W.S. Bisat who first bio-stratigraphically zoned the Millstone Grit, using Goniatites (types of extinct mollusc).

H.C. Versey of Leeds University lectured on "The Study of Scenery" in November, 1928, and a Mr. Dufty lectured on "The Leading Features of the Exposed Geological Structure in Doncaster" in October, 1932. Local geological specimens were exhibited constantly in the Society's Annual Conversazioni up to this period, after which these appear to have declined. The Geological Section existed through the 1930's and 1940's, but appears to have ceased to exist much after 1950.

The contribution to the knowledge of Doncaster's geology by the Society in the first decade of this century is considerable, but one can only contemplate what might have been had Culpin not died prematurely, and had the various sections of the Society enjoyed a more active co-operation. Nevertheless, the minutes of the Society not only represent a valuable insight into the scientific lives of local naturalists at the turn of the century, but also provide a data base of knowledge which is of use to researchers today, and will continue to be so in the future.

ACKNOWLEDGEMENTS

The author gratefully acknowledges the help of Doncaster M.B.C. Museums and Art Services, the staff of which, Mr.C.Howes and Mr.P.Skidmore allowed access to the Minutes of the Doncaster Naturalists' Society, and provided study facilities. Mrs Anne Pennington-George supplied additional information. I also thank all the respective society secretaries for their patient, if at times illegible, records that comprise the minutes of the Society.

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WINTER PROGRAMME 1985/6

1985

Oct.2nd. Presidential Address

Maurice Hanson..Walking Sticks for a Naturalist

Oct.16th. Roy Crossley President

Y.N.U.1985."The Naturalist in Yorkshire"

Oct.30th. John Newbould.." A

Naturalist in Norfolk"

Nov.13th. John and Michael Snow

"Nature through a Macro"

Nov.27th. Geoff. Trinder

"Epworth Turbary"

Dec.11th. Annual Natural History

Quiz.. set this year by last year's winner.

George Mitchell

1986

Jan.8th. Colin Howes ..Guess what? "Bats"

Jan.22nd. Members' Papers

Feb.5th. Derek Bailey..... " Natural History of the Rotherham Area"

Feb.19th. George Mitchell....

"Kenya continued "

Mar.5th. David Owen.... "Owls"

Mar.19th. A.G.M. and the results of Photographic Competition.(Slides etc. will be shown)

(Unless otherwise stated all indoor meetings are held at D.M.I.H.E. Waterdale, 7.15 - 9.00 p.m.)