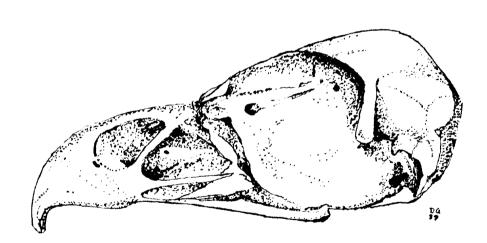


THE DONCASTER NATURALIST



Doncaster Naturalists Society

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If you have any queries about the above branches of Natural History, please feel able to contact the appropriate person.

THE DONCASTER NATURALIST Volume 1, No. 1 O

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EDITORIAL

Nov.1st.1989

This issue of The Doncaster Naturalist completes Volume I. I hope you will agree with me that the articles it contains reflect the varied interests of our members. Once again Ian Mc.Donald has carried out a magnificent piece of research, this time on his local hedgerows in Armthorpe. He tells me that this article contains only a fraction of the data which he has collected!

I am very grateful to Colin Howes of Doncaster Museum for the records of last Presidents of the Society which he extracted for me from the Minutes etc. of the Doncaster Naturalists' Society which are held at the Museum. I thought that it would be a good idea to put this information together, showing, as it does, that in spite of two World Wars and many 'ups and downs' the Society has been operative for 110 years.

Thank-you to all contributors.

D.M.Bramley ..Editor 29,Cantley Lane Doncaster DN4 6NA

Presidents, Doncaster Naturalists 1880–1990

In the first issue of our magazine, we published an article about the formation and history of the Doncaster Naturalists' Society; also an article by the late George E. Hyde which included reminiscences of his many years as a member of the Society. As an extension of the researches which were carried out during the 100th. year of the Society's life, a list was prepared of the members who have served as President. It seemed appropriate to update this list, which we now print in full. Many thanks are due to Colin Howes who extracted the information from the archives of the Society which are held at the Doncaster Museum.

The list is arranged chronologically, and it will be seen that several members did two or three years and then returned at a later date to serve another year or two. Many well-known names occur...Leslie Smith, H. H. Corbett, Henry Stiles, Elsie Morehouse etc.

1880,1881,1	882,1883,1884,1885Rev. Canon M.F.Brock M.A.
1885/6	
1886/7	J.Mitchell Wilson M.D., P.C.S.
1887/8	
1888/9	John Maw Kirk F.R.M.S.
1889/90	
1890/91	James Greenhalgh Walker C.E.
1891/2	
1892/93	
1893/4	John Bennett Prosser
1894/5	J.Mitchell Wilson M.D., F.C.S.

1897/8 .	George Bisat
1898/9 .	George Winter F.R.M.S.
	OThomas Cutriss
1900/01	
1901/02	Samuel Edgar J.P.
1902/03	Alma Jordan
1903/04	A.A.Glarkson
1904/05	Samuel Edgar J.P.
1905/06	George H.Greenslade
1906/7	Robert Watson
1907/8	George Grace B.So.
1908/9	
1909/10	Rev.Halliwell Thomas
1910/11	F.O.Kirby M.Sc.
1911/12	
1912/13	
1913/14	Arthur Crow
1914/15	
1915/16	••••• B.Sc.
1916/17	
1917/18	George Bisat
1918/19	Spencer Baker
1919/20	
1920/21	Major G.W.Phillips A.M.I.Mech.E., F.Z.S.
1921/22	T.M.Williams
1923/24	
	Joseph Dufty
1925/26	
	Rev.Yate Allen M.A.
1927/28	Arthur A.Dallman F.C.S., A.L.S.

1928/29
1929/30
1930/31L.G.F.Waddington
1931/32George E.Hyde F.R.E.S.
1932/33Joseph Dufty
1933-4,1934-5,1935-6,1936-7,1937-8,1938-9George L.Sutcliffe
1939- 1944 incl
1944/45Ben Burrel F.R.A.S.
1945/6Mrs.Elsie M.Moorhouse
1946/7
1947/8Dr.T.S.Allen
1948/49Leslie Smith
1949/50/51/52/53/54Miss Elia Swires B.Sc.
1954/55Miss Kathleen Morehouse B.Sc.
1955/56 " " "
1956/57Ben Burrel F.R.A.S.
1957/58" "
1958/59/60/61/62George E.Hyde F.R.E.S.
1962/63M.P.Salmond
1963/64
1964/65/66Leslie Smith
1966/67/68Miss Kathleen Morehouse B.Sc.
1968/69/70
1970/71/72John Kemsley
1972/73/74/75
1975/76Miss Kathleen Morehouse B.Sc.
1976/77Peter Skidmore
1977/78/79Colin A.Howes M.B.O.U.
1979/80Centenary YearGeorge E.Hyde F.R.E.S.
1980/81/82/83/84/85
1985/86/87Maurice Hanson
1987/88/89/90George Mitchell

Sea Eagle in Doncaster??

Colin Howes

The discovery of the skull and lower mandible of a huge bird of prey in unstratified deposits in Silver Street, Doncaster, during the excavation of 1960, posed problems of identification and interpretation.

Identification

Though the skeletal elements were almost perfectly intact, the absence of bill sheaths of upper and lower mandibles made direct comparisons with 'intact' museum specimens and measurements in the literature problematical.

According to Brown et al (1987) the specimen would appear smaller than Haliaeetus albicilla and comfortably within the size range quoted for Aquila chrysaetos (See Table 1). However the depth of the upper mandible measured in the vicinity of the nostril (21.5mm) was greater than the same measurements in 4 A.chrysaetos bills with intact bill sheaths in the collections at Doncaster Museum.

	Table I.		
	Doncaster Specimen	H.albicilla	A.chrysaetos
Overall length	119.5mm	(Brown e 122-138mm	t al.1987) 104-125mm
Bill length	54.8mm	58 65mm	42- 59mm
Bill as % of overall 1	ength 45.8%	47%	40-47%

The possession of marked morphological similarities with the skull of it. albicilla as illustrated in Brown etal (1987) is significant, (viz. the almost concave cranial mandibular profile, the 90° notch at the origin of the jugal bar, the shape of the post-orbital process, lack of puncturing of the septum and the considerable depth of the upper mandible).

According to descriptions and comparative material, the Silver Street specimen would appear to be the skull of a small example of H.albicilla. The small size is, however, not accounted for by immaturity, since the skull suturing is well fused and therefore indicative of an old specimen. The small size relative to data in Brown et al indicates it to be a male bird, male H.albicilla bill measurements being around 10% smaller than those of females (Gramp et al.1979). The remains of a heavily corroded twisted steel wire passing from the base of the skull through the orbit close to the septum and emerging flush with the top of the cranium is consistent with the specimen having been prepared as a mounted taxidermy specimen.

Doncaster trade directories (Kelly 1867 and 1877) show that between 1867 and 1877 No.6 Silver Street was occupied by Joseph Thompson Storrs 'Naturalist' Storrs, one of at least seven taxidermists and private museum proprietors who operated in Doncaster during the 19th. Century, prepared mounted trophies for the local minor gentry (Hatfield 1866) and an example of his work is in Doncaster Museum.

If No.6 referred to the third building on the right-hand side of Silver St. (currently the 'Electric Avenue' night club), then Storrs' premises would have been amongst those demolished and the site subjected to the 1960 archaeological excavation.

19th. Century Status of the White-Tailed Eagle in Britain.

Healbicilla is essentially a coastal species with a Palearctic range extending from western Greenland through Iceland, Scandinavia, Europe and Asia to the Bering Straits. In the Nearctic its place is taken by races of the closely related, though ecologically more catholic, Heleucocephalus.

It (H.albicilla) was a prominent breeding raptor in Northern Britain up to the 19th.Century, possibly outnumbering A.chrysaetos in Scotland and extending south into the Lake District (Brown 1976).

Rigorous eradication of larger birds of prey during the period of the infamous Highland Clearances, in the interests of sheep and game-rearing (Brown 1976) would have kept the taxidermy trade well-stocked with corpses, indeed many unprovenanced specimens in museums today are no doubt a legacy of this historic and ecologically influential episode.

No doubt prior to its decline in Scotland and Scandinavia it would have been a familiar passage migrant to Yorkshire. In 1764 Edward Tunstall noted that they were 'not unfrequently shot in Yorkshire' (Nelson 1974). Reviewing Yorkshire data of the early 19th. Century, Thomas Allis (1844) knew of 'several' occurrences (Nelson 1974). However, by the third quarter of the 19th. century its status had been reduced to that of a 'casual visitant of rare occurrence'. (Clarke and Roebuck 1881).

Since only 21 Yorkshire records were known from the 1840's to 1898 (Mather 1985) it is unlikely that the Silver Street specimen was of local origin.

Conclusions.

It would seem highly likely that the Silver Street skull represents the remains of a mounted white-tailed eagle (H.albicilla) from the premises of the taxidermist, J.T.Storrs, and though an intriguing part of Doncaster's social history and a reflection on the profound changes in the British fauna during the 19th.century, it has no relevance to the environmental interpretation of medieval Doncaster.

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Armthorpe Hedgerows

Ian McDonald

In the early 1980's there was a lot of publicity about the disappearance of hedgerows in the countryside. I have been looking at the hedgerows in Armthorpe since 1986, and the following article is the result of many hours spent walking the hedgerows of the parish.

Hedges in the Landscape.

It may well be asked 'What is a hedge?'. The first reference to a hedge was possibly one recorded in the Anglo-Saxon Chronicle, erected by Ida of Northumbria in A.D.547. It may not have been a hedge of shrubs as we know it, but possibly an earthen bank. Hedges vary in size, shape and type. In the grounds of the mansion house at Meiklour in Perthshire is a beech hedge which was planted in 1746. In 1965 it was 85 feet tall and 580 yards long. However, the kind of hedges covered in this survey are mostly the ones used to define boundaries and restrict the movement of stock.

Field systems date back to at least the Iron Age. Some hedges are the remains of woodland which was cleared for arable or pasture use, known as 'assarts'. Plants typical of older woods are sometimes indicators of such woods long since cleared and can be found growing in hedge bottoms. There is evidence of early occupation in the parish in the form of flints, and Roman artifacts have been found in and around the village. Ever since man first cleared land for arable use field patterns have been changing. The large fields in evidence at the South and East of the parish are not unique in man's history. The typical three field system of Medieval farmers usually consisted of large open fields without hedges between each plot. In Armthorpe these fields are preserved in name only, as in Northfield, Westfield, and Southfield, to be seen on older maps.

The Inclosure Award of 1773 made it necessary for landowners to erect fences and hedges around their property...these to be of 'quick'...that is hawthorn.A period of 12 months was allowed from the date of the award, during which all land had to be inclosed.

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There were approximately 530 hedges on the Inclosure Map (See Fig.I). Two ponds were allocated to George Cook Esq., namely Pittam Pond and Tranmoor Pond. Right was granted to the people of Armthorpe to water their cattle 'freely and at all times forever' at these ponds. (They have now been filled in). The Inclosure Map and accompanying Award may be inspected at the Doncaster Archives.

There was an old custom of 'beating the parish bounds'. This was to impress upon the rising generation the boundary of the parish. Various tricks were played on village lads in the party at strategic boundary marks. Beating the bounds usually took place every 7 years on Rogation Day, but after 1837 it was discontinued owing to the availability of reliable O/S maps.

By 1854, some of the Enclosure fields had been split into smaller units, thus creating a rise in the number of hedgerows, app. 685. On the 1854 map there were 17 woods and copses, now there are 9. In the census of 1981, Armthorpe parish covered an area of 1137 ha. or 2800 acres, with a population of 12,330. Until the 1960's the majority of people lived in the new village built for workers at the Markham Main Colliery. The village is now spreading out in all directions, and the older parts along Church St. and Mill St. are being demolished, to make way for new shopping areas.

Archaeologists may that the site of the Medieval village has not been discovered so far. In a few year's time the 19th. Century village will also have been lost!

I have used maps to study the rise and fall of the hedgerows of the past, consequently the number of hedges must be an approximation. Not being sure if all field boundaries were hedged, I went to look at the evidence left. On the Inclosure Map of 1774 a series of narrow fields known as 'Lings' were shown to have a number of boundaries. These were shown on the 1854 O.S. map, the 1931 O.S. map, the 1966 O.S. map, and also on aerial photographs of 1967. Nevertheless, it cannot be stated that features contained on maps, such as field boundaries were there when the later maps were published. Maps were often copied from earlier ones with just the major features up-mated, such as buildings and roads. The Lings which are at SE 6305, are now one large field. If it were not for the aerial photograph,

how would we know that the boundaries were hedges? If you look at the Lings you will see a number of large Oak trees standing in the field, and you will see that they are not in a straight line. If you take a map with you, the old field boundaries become apparent. The fields known as the Pieces or as the 'Poor Pieces' at SE 6504 are less obvious, as there are no surviving boundaries, except one lone tree. Some hedges have a marked difference in their species content in some parts than in others. This may be that the hedge was divided in days past, and that the division has been removed.

There have been two boundary changes this century. The first was in 1926 when the South Yorks. Joint Railway was adopted as the parish boundary to the West of the village, resulting in the loss of approx. 20 hedges. The second was in the last decade when the West Moor link road was built to join the M 18. This new road almost follows the old parish boundary to the North of the village. In the total of 155 hedges, 84 are complete and 71 are remnants.

Hedges as a Refuge

Hedges provide a refuge for many forms of wildlife. The hedgehog hibernates among the grass and leaves of the hedge bottom. Mice and voles frequent hedges and are hunted there by the weasel. Various insects live among the hedge and are hunted by spiders of many species. In summer caterpillars of butterflies and moths can be found among the hedgerows. Many birds use the hedges as a roost, a nesting place or larder. These include the aptly-named hedge-sparrow, the wren, robin, various tits, pigeon, magpie etc. When I was young, I spent my spare time walking in the fields and woods around Nutwell. There were more animals and birds to be seen then, no doubt due to the extra cover afforded by bushes and trees. Some of the more notable were:— owl, woodcock, duck, shrike, pheasant, partridge, jay, moorhen, hare, rabbit and the occasional fox. On the increase these days are magpies... I do not recall seeing them in times past. Perhaps this is due to the M 18. With more animals and birds killed on the fast road, the magpie has followed this ready-made larder into the district.

Hedges as Providers.

Hazel nuts are well-known as a seasonal fare, and they are also eaten by squirrels and jays. The latter also collect acorns. Brambles are taken by a number of animlas and birds and the flowers are a nectar source. Autumn heralds the berry-picking season for humans too, for blackberry and apple pie and blackberry wine. Blackthorn fruits..sloes..are bitter, and are used for sloe gin, but I have a suspicion that the gin is preferable to the sloes. Crab apples, though often bitter, are eaten by animals and birds. When I was young, it was quite common to go along the hedges to collect wild apples to make crabapple jelly, which is delicious. The wild rose is a well-known plant of the hedgerows, as it its fruit, the hip. These were gathered during the last war as a valuable source of Vitamin C.

But perhaps the most common shrub of the hedgerows is the hawthorn. The sweetscented blossom appearing is a sign that Spring really is here. The fruits,
haws, are taken by berry-eating birds and are an important food for over-wintering birds such as fieldfares and redwing. Holly berries are a food for birds
and of course the use of holly as a Christmas decoration dates back many years.

In hard winters holly was fed to cattle when other fodder was not available.

Ivy is frequent in hedges and is a good nesting place for birds, as well as being
a late summer source of nectar for insects. Purging buckthorn is a rare plant
of Armthorpe hedges...it normally grows on chalk or limestone, neither of which
are present in the parish. Its fruit has been used as a dye and also as a purgative, but it is considered very severe. Spindle is also rare in the parish, its
unusual fruit is poisonous to humans, but eaten by blackbirds.

The alder occurs infrequently, usually beside streams and ditches, where it helps to hold to ether the banks. Ash is fairly common, in the past its timber being used for tool handles and cart shafts. Both such and English Elm are in the hedgerows. planted as shade for cattle. The mature trees were used in furniture and by wheelwrights. The English Elm has, of course suffered greatly due to

Dutch Elm disease which is spread by the elm-bark beetle. Field maple has a wide distribution in the parish, not growing into a tall tree in the hedge, and in the past used by wood-turners. The sycamore needs no introduction, it is a wide-spread coloniser, and when allowed to grows into a large tree.

Willows are mainly represented by crack-willow and pussy-willow. Most people will have noticed a red oval gall on willow leaves, this is caused by a sawfly. Another type of willow found is the osier. this was used in basket-making and was planted for this very purpose. On the 1854 O.S. map of Armthorpe there are osier beds marked near Low Farm. The oak tree plays host to a vast array of wildlife and its wood has long been used for many purposes. Fig. 2 shows the distribution of species within the parish. It will be noticed that there are no records for Grids 6104 and 6105, this is because this area is occupied by Markham Main Colliery. Grid 6302 is the Southern parish boundary and contains no hedges. Grid 6506 only has Holme Wood within the parish.

Age of Hedges in the Survey

In order to collect the information from each hedge, I used hedgerow-recording sheets supplied by Doncaster Museum. Each hedge has its own recording sheetand there are separate columns on the same sheet for the 30-metre sample and total hedge survey. Fig. 3 shows the total number of species when each recording sheet is taken into consideration...e.g. from a total number of 155 hedges, 145 contain hawthorn, 138 contain elder, 102 contain oak etc..

If we are to follow Dr.Max Hooper's technique of dating hedges which he demonstrated in 1970, then the age of a hedge = the average number of tree and shrub species present in a series of 30 metre sections x 100 years. I looked at a sample of 23 hedges in 1986, and using the above formula, the ages ranged from 100 - 500 years. Some authors doubt the accuracy of this system, personally I think that it cannot be a strict guide to say that one extra species will colonise the hedge every 100 years, given the wide variety of soil types, topography, management etc. The system should be used with caution and if possible, validated with documentary evidence, as supposted elsewhere. I have used the formula

alongside the railway and come to the conclusion that parts of the railway system are 500 or 600 years old !! Obviously, the side of the railway was never planted as a hedge, but it shows what can happen when trees become established without the help of man , and no hedge management is practised.

Age of hedges looked at using method of 30 metre-sampling.

I only took one 30 metre sample from each hedge, therefore I cannot say how accurate my findings are. The results were:-

Hedges with 1 species..... 21

" " 2 " ····· 68

" " 3 " 32

" 4 " ••••• 28

" 5 " 6

As can be seen from the figures, the largest group indicates an age of 200 yrs. this would tie in with the Inclosure Act of 1774. This still leaves 66 hedges that pre-date this award. Unfortunately, I have not been able to obtain a map earlier than 1774 showing field boundaries.

Conclusions The number of hedgerows and woods has fluctuated over the past 200 years. Since 1854 the total of (app.) 685 hedges has fallen to 155

Fig.4 shows the distribution of hedges at the present time, but does not include roadside hedges which are mainly along Holme Wood Iane. In 130 years, or even less we have lost as many hedges as we had in 1774. Probably the greatest threat to hedgerows is the pressure put on farmers to create larger fields for the larger machines thus becoming more efficient producers. This seems to me to be too efficient, producing a glut of some crops. We cannot put the blame solely onto farmers, as they have to compete like any other business man, but unfortunately the wildlife is on the losing end. Without replanting schemes such as that on land quarried by Butterley Aggregates, and on land near Low Farm, there will be no slowing down of the decline.

When the proposal to build the M18 near Armthorpe was announced, an exhibition was staged at Armthorpe Library. There was a person on hand to answer any points raised. I asked what would be done to lessen the impact of the Motorway? I was assured that a screen of trees would be planted to hide the road. This was never done. A case of promise anything until you get what you want?

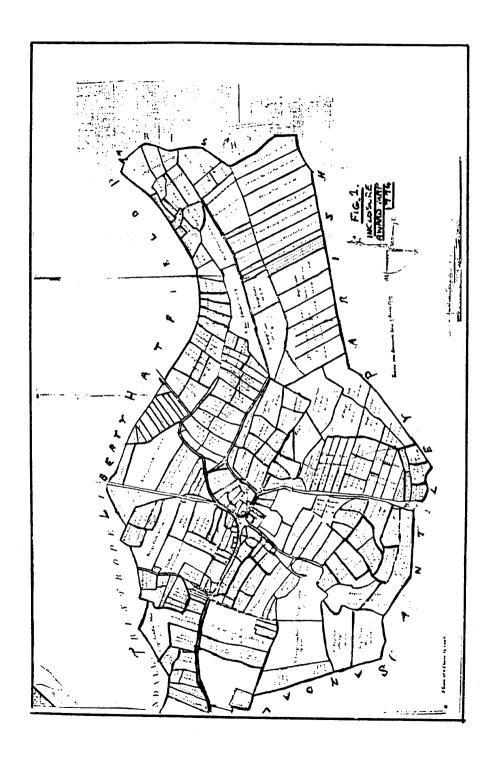
It would be very advantageous to plant trees along the Armthorpe part of Nutwell Lane to break up the flat scenery, created when the roadside hedges and a wood were removed. Any new developments in the parish should take into account existing hedges and trees. New plantings should be of native species such as those found growing locally, and not the ornamental foreign species, and due regard should be given to the encouragement of wildlife, rather than just giving the place a 'facelift'.

The hedge along Rands Lane which contains Purging Buckthorn and Spindle is most likely an 'ancient' hedge and should be preserved, whilst the hedge along the playing fields at Southfield Primary School contains a high number of species and is worthy of being adopted by the school to prevent its destruction.

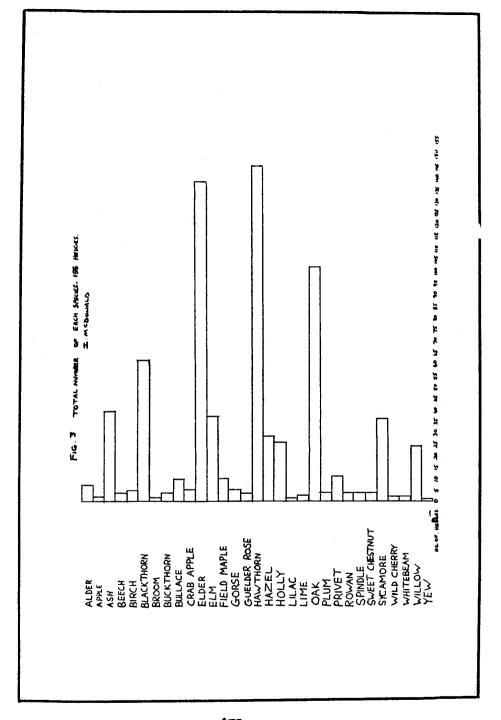
I hope this article will make people aware of the danger to hedgerows, and also awaken those in authority to do something about it! I would like to thank the following people whose permission to walk over their land was generously given..... The Braithwaite Family, the Carlisle Family, The Reed Family Butterley Aggregates, Mr. Cottam, Mr. Kelly, Mr. Turner, the Youdan Families.

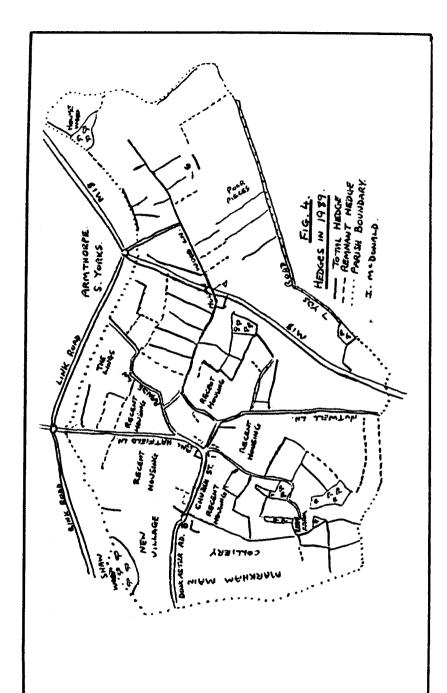
Also:- Mr. C.A.Howes of Doncaster Museum,
Mr. G.Shepherd, Parish Clerk
Dr.B.Barber, Archivist, Doncaster Archives.
Mr. M.Bottomley, Archivist, Wakefield.

Bibliography.



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Odonata

Michael Snow

If you have ever been walking by a stretch of water in the summer and seen those large insects darting about in the air, looking for all the world like miniature jet bombers whizzing about, you have encountered Dragonflies and Damselflies.

Dragonflies are the more robust of the species, and Damselflies the delicate ones. Dragonflies are quite harmless to humans but not to other insects as they are voracious carnivores, and will attack and eat any other insect which it can catch, even other dragonflies. If held in the hand they are capable of giving a sharp nip to the skin that will make you jump, but it is not usual for it to pierce the skin. Dragonflies are usually shy and will quickly fly away at your approach, except for the Southern Hawker, which has a habit of hovering quite close to you as if examining you.

There are some 45 species of Odonata in great Britain, some of which are very rare and need protection. However the main need for protection is the habitat, as they cannot live without some sort of water. The main habitats are by streams, rivers, ponds, lakes and swamps where ther must be sufficient clean water for them to lay their eggs and for the nymph to live in. Any pollution would kill them.

The places chosen by the dragonflies to breed depends to a certain degree on the particular species, also there must be plenty of vegetation and other insects for their food. The nymphs need as much food for their sustenance as the adult insects. The nymphs will live in the water for anything from one to three years before leaving the water to turn into adult insects. They do this by climbing out of the water at dawn to moult out of the nymphal skin into an adult dragonfly. The eggs are laid in a number of ways, some lay their eggs by hovering above the water and dipping the end of the abdomen into water to drop them single or in clumps. Some damselflies lay eggs in plant tissue, but the Migrant Hawker (Aeshna mixta) lays its eggs into soft mud by the bank

side. Most eggs hatch in a few weeks but some e.g. Aeshna cyanea..overwinter to hatch in the Spring.

If ten or more species are found in one area then it is of local importance, but if twelve or more are found then it makes the site of National importance, and perhaps will mean that the area deserves an S.S.S.I. label.

The following list is of the species which are normally found on most sites.....

Southern HawkerAeshna cyanea

Common HawkerAeshna juncea

Brown HawkerAeshna grandis

Four Spot Chaser..... Liellula quadrimaculata

Black Darter..... Sympetrum danae

Common Darter Sympetrum striolatum

Emerald damselfly Lestes sponsa

Large Red Damselfly Pyrrhosoma nymhula

Blue-tailed damselfly Ischnura elegans

Common blue damselfly Enallagma cyathigerum

Azure blue damselfly..... Coenagrion puella

If you are interested to find out more about these beautiful insects, the following books are recommended....

Country Life Guide ... Dragonflies and Damselflies of Britain

and N.Europe.....Bob Gibbons

The Dragonflies of Gt.Britain and N.Ireland....Cyril O.Hammond FRES

published Harley Books

Rarer species should be reported, if you find them, to the Doncaster Museum and to

the British Dragonfly Society.... R.Merritt

48. Somersby Ave.

Walton Chesterfield Derbs.

Old Woodland in Cantley

Derek Allen

In ancient times the Doncaster district is known to have had a quite extensive woodland cover. However, by reference to the documentary evidence, it has become clear that this cover has been greatly reduced. Much of it has been lost to a griculture but increasingly the threat has come from the expansion of housing development. This is especially true for Cantley where a large amount of new houses have been constructed during the last 25 years, and more are still being erected at a seemingly inexorable pace.

According to Page (1912) Cantley at the time of Domesday was 4 square leagues in extent and of this 1 square league was classed as pasturable woodland. Smith's book (1961) is the basic source to use together with a current 0.S.map. In it he gives the origin of the name Cantley as being 'a forest clearing or Canta's glade'. He also lists details of specific woods which appear to have an ancient' origin and are still extant today. Using this process for the Parish of Cantley, it can be seen that there are at least six woods which fit into this category. These are:-

Brackens Plantation(SE 639022)

Crowther Wood (SE 622029) Hatchell Wood (SE 624005)

Dunniwood Hole (SE 618006) Littlewood Plantation (SE 583999)

Gatewood (SE 670046)

Two of these, Brackens Plantation and Hatchell Wood appear to have the oldest histories. The former is listed in the Kirkstall Abbey Coucher Book (Lancaster and Baildon 1904). Here it was called 'Bracineleion' and was mentioned in an agreement between the monks and Hugh de Brampton as to estovers etc. This entry is apparently dated c.1187. It is actually in Latin, but there is a precis in English.

Hatchell wood has a much more complicated history and is the subject of a long list of references in Smith. Again the earliest of these is in the Kirkstall Abbey Coucher Book and again the wood appears under a different name. Echeles, as it was then called appears in an agreement between the monks and Peter de Bessacar

respecting common rights in Bessacar. There are then details of grants by the same Peter of his part of the wood called Echeles. There are details of a grant of Hugh Fitz Hugh's wood and essarts in Echeles and a quitclaim of an essart near the wood of Echeles by Henry de Atwick. Each of these entries is apparently dated 1187.

Later in the book there is an entry for the composition between the Abbey and the Rector of Cantley as to tithes of land in Bessacar. In this entry the wood has altered its name slightly to 'Echelesflat'. The entry is dated 1209 or 1210. A footnote states that the size of Hatchell Wood was obviously much greater in ancient times as the bounds are contained in a number of charters. There are a number of other references to the wood which are listed in Smith (1961). Three of these are from entries in Farrer (1915).

1190-1210 645 lb Aincurt Fee

Quitclaim by John and Hugh, sons of Adam Brun, to the monks of Roche of land at Hitchells (in Bessacar) which Adam their father sometime held of Adam de St. Mary in the territory of Rawmarsh.

1183-1200 817 Caux Fee

Confirmation by Hugh de Branton to the monks of Kirkstall of the land which they have of his fee in Bessacar by the gift of Norman de St.

Patrick, namely 12 bovates to hold by rendering to the grantor 3s. yearly; and quitclaim of the wood called Hitchells with common right of his fee in Bessacar on the western side of the road leading from the Church of Cantley to the ford called Thornwath; and liberty to reduce all these lands to tillage, reserving common of pasture to the donor, his heirs and their men.

1187 820 Caux Fee

Cirograph of an agreement made in 1187 between the monks of Kirkstall and Peter de Besacle before the justices at York whereby Peter quitclaimed to the monks land at Hitchells in Bessacar to be tilled by them and they agreed that Peter and his men might bring part of the common into tillage:also agreement relative to turbary, bracken and heather.

Crowther Wood may be named after a local family of Crowder. The marriage of Joseph Crowder and Mary Chester took place on Mar.2lst.1714, and is listed in the Parish Registers for Cantley. (Whiting 1941)

<u>Dunniwood Hole</u> was apparently present as <u>Dunyngwoods</u> in the 1557 survey which according to Smith is unpublished.

Gate Wood is also mentioned in the Parish Registers, but at a slightly later date than Crowder Wood.....1656 Jan.16th. Burial of Ellen daughter of John Rawson of Gate Wood.

Littlewood Plantation is apparently named from or gives its name to the numerous local family of Lytelwood. In the Parish Registers there are a number of entries for the family. These include the baptisms in 1623,1626,1628, and 1631 of four children of Richard Littlewood of Cantley and the baptism in 1635 of a daughter of Robert Littlewood of Cantley.

These six woods outlined above are thus the 'old' woods of Cantley Parish which it has been possible to trace. There are two other parishes in the Doncaster area which have 'ancient' woodland. Firstly, the Parish of Rossington, which has two old woods.

- 1. Holmes Carr is according to Smith, first mentioned in 1474 in the Doncaster Corporation Courtiers No.1 as Holmescarr. It is mentioned again in 1495 in Courtier No.6 as Holmesker, and in 1579 in Courtier No.33 as Holmescar. This wood is located at SK 605980.
- 2. Hunster Wood is slightly later in date, being listed in 1584 in the Doncaster Deeds No.109.

The other Parish which has an old wood is Hampole, and this is listed in Purvis in 1931. In 1540 it was known as Hampall High Wood and comprised 120 acres split into 18 coppies of different ages.

Of the woods listed above, at least two have suffered in recent years. Much of Dunniwood Hole has been felled to allow 'infilling' with houses and even

Hatchell Wood has been subjected to encroachment, not to mention the swathe cut through it by the M 18 Motorway. It will be interesting to see how the latter wood fares in the future.

This study has utilised only some of the available documentary evidence. There is undoubtedly further information to be unearthed. Detailed fieldwork may well also provide evidence of other 'old' woods which warrant further analysis and research.

Glossary of Terms.

... An area of land... 1/8th. of a caracute or app. 15 acres. Bovate

... A register of land rentals and leases. Coucher Book

... A piece of land converted into arable by grubbing up Assart

trees and brushwood. A clearing in a forest.

... Wood which a tenant is privileged to take from his Estover

landlord's estate so far as it is necessary for re-

pairing his house, hedges, implements etc.

... Formal renunciation or giving up of a claim. Quitclaim

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George Nicholson's Plant Records

Colin Howes

Further evidence of the botanical exploits of G.P.Nicholson of Wath-on-Dearne came to light whilst consulting William Whitwell's study of the herbarium of John Tatham (b.1793...d.1875).the celebrated botanist from Settle in N. Yorkshire (Whitwell.1893). Tatham. one of the original members of the Ray Society-founded in 1884--contributed substantially to the records used by Henry Baines in his Flora of Yorkshire (1840) and John Windsor in his Flora Cravenensis (1873). He also formed a considerable herbarium both from material he collected and from specimens or whole collections acquired from other botanists. Whitwell's study shows that seven sheets in Tatham's herbarium bore Nicholson's name, and another sheet whilst bearing no signature was a specimen collected from Wath on the same date as another of Nicholson's specimens.

Exactly how George Nicholson's herbarium sheets got into Tatham's hands is not known, though this was a period whena considerable volume of purchase and exchange of botanical material took place. None the less, the discovery of this evidence provides additional information on the plant life of the Doncaster district during the 1830's and tantalizingly suggests that Nicholson may have formed a herbarium of his own, the survival of which could corroborate and maybe add to his many unpublished records.

Nicholson's records from Tatham's herbarium are as follows:-

Wath-upon-Dearne

Tower Mustard

Purple Milk Vetch

Turritis glabra L.

Astragalus danicus Retz. (no doubt near Wath

i.e. on Mag. Limestone 6-7m. away. F.A. Lees)

Burnt-tip Orchid

Autumn Lady's Tresses

Orchis ustulata L. 1836

Spiranthes spiralis L. (as A.danicus)

Smooth Tare

Vicia tetrasperma L. (very common about Wath

1836)

Adwick-on-Dearne

Hare's Foot Clover

Trifolium arvense L

Brodsworth

Wild liquorice

Astragalus glycyphyllos L.

Brodsworth..cont. Salsify Tragopogon porrifolius L.

References

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Cevennes National Park

Margaret Bellamy

Last year, for our summer holiday, we visited the Cevennes National Park in Southern France. This Park was created in 1970 to preserve the rugged mountain landscape and the rural way of life. It consists of windswept limestone plateaus called 'causses', deep narrow valleys with downy oak, beech and pine; tremendous gorges which are botanically rich (over 1,000 species including varieties), and in the north, Mount Lozere, a stupendous bar of granite. There are over 1,000 peat bogs and a Flora renowned for its mosses, sedges, water clover and sundew. For centuries flocks of sheep from the lower Cevennes came to feed in the summer, a practice known as 'transhumance', but now the sheep number only a few thousand.

The moors have heather, bilberries, narcissi and mountain everlasting, and in June and July there is an explosion of colour from the numerous martagon lilies, wild tulips, pandies, globe flowers and orchids. On the limestone grow the species which are best adapted to drought. there are small shrubs like box and juniper, grasses such as brome and sheep's feacue. The soil is very shallow, an average of five centimetres, but in spite of this a great variety of herbaceous plant species grow—for instance asters, asphodels, stemless carline thistle, thyme lavender, orchids, yellow pheasant's eye and pasque flower. Sweet chestnuts grow well on the schist and the groves are formerly tended and the nuts used as a

staple food for stock and for humans. Because of the great variety of plants, and the woods, open spaces in the causses, there are many birds. It is claimed that there are altogether in the National Park one hundred and fifty species also forty five species of mammal, twenty three species of reptile, and thirteen species of fish. Whilst we were in the Park we saw lark, jay, pied wheatear, and the successfully introduced griffon vulture, but mainly we gave most of our attention to the flowers.

It may be of interest to know how we tackled our Natural-History holiday. To begin with we obtained information at the National Park centre in the small town of Florac where we used the pleasant municipal camp-site, by the river. We followed a number of the round walks which were described in excellent leaflets, starting from a parking place with a map and following the symbols. Early June was chilly as the 'mistral' was blowing. Whole hillsides were golden with broom, and often we were the only walkers, taking much longer than the estimated hours to complete the walks, as we had to stop often to identify the many flowers which we saw; also to photograph both flowers and views.

One of the most rewarding places we visited was 'L'Hopital', the ruins of the Knights Templars' base. We saw many orchids within the first five minutes walk from the hamlet of L'Hopital....these included the burnt tip orchid, the frog, lady and fly orchids.

On amuch hotter day we climbed 1,000 feet to a plateau and found a field of cornflowers and ox-eye daisies, purple viper's grass, golden drop, and great patches of mountain milk vetch, alpine asters, yellow and white rock rose flourished by the ruined shepherds' huts. On another level upland, stemless carline thistle heads were blowing about and pheasants eye was growing among a crop in a cultivated patch. On the downhill walk we found the great yellow gentian and more orchids, even a late elder flower orchid and a large patch of the broad-leaved marsh orchid.

The eight days which we spent in the Cevennes whether our appetites, as we hope we have yours.

Bats in Jossey Lane

D. Parker

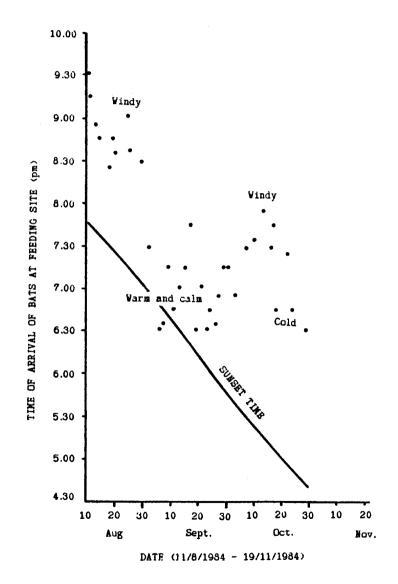
A survey of bats at Jossey Lane Angling Pond, Scawthorpe (SE/559060) was carried out during 38 nights between 11.8.1984 and 19.11.1984. The object was to estimate the number of bats visiting the pond, and to record their arrival times.

Bats,up to three at any one time, were observed feeding low over the pond for most of the time that they were at the pond. Occasionally they would also hunt moths and other night-flying insects attracted to a nearby street light. Bats were not seen entering or leaving a roost in the vicinity of the pond, and it was not possible to identify the species, although their habits suggest that they could have been Daubenton's (Myotis daubantonii).

Although the arrival times shown on the accompanying graph seem highly randomised, there was a relationship between sunset time and the arrival time of the first bat at the feeding site. Arrivals became progressively earlier, presumably in response to progressively earlier sunset times, and therefore earlier emergence from the roost. Those evenings when the bats arrived on site much later than predicted by the sunset time consistently coincided with windy and cold weather conditions. Perhaps the bats were emerging later or visiting other feeding stations first on these occasions.

Since no bats were observed after October 29th. it was assumed that they had commenced hibernation.

I would like to thank Doncaster Museum for advice on this project, and for preparing the graph. Since this study, I have been involved in other Bat Survey work at Cusworth Park.



Field Trips

It has not been customary to include reports of our outings, nor indeed of our winter talks. However it seems that it might be of interest to readers to hear where we go on these excursions and what we do!

April 29th.1989 Visit to Sandbeck Park.

Fourteen members of the Somiety enjoyed a Spring walk round the lake at Sandbeck. We were welcomed by Lord and Lady Scarbrough, and their young daughter who accompanied us for part of the way. Apologies were made for the scarcity of flowering fritillaries, the heads having been eaten by some malevolent predator! It was very interesting to see how many cowslips and primroses were thriving in the grassland, and we found an excellent clump of the primrose / cowslip hybrid, commonly called the false oxlip.

We were told how in his Lordship's grandfather's time, 28 gardeners were employed, currently there is one. This means that everything has to be kept simple, consequently much of the park is a natural 'wild' garden.

It was a pleasure to saunter through the wood and note the signs of Spring. At the end of the afternoon our President, George Mitchell, thanked Lord Scarbrough who seemed to have enjoyed entertaining us..indeed, he invited us to make a return visit.

May 13th. Visit to Chee Dale, Derbyshire

A dozen or so members travelled by car to Chee Dale in Derbyshire to see the excellent limestone flora. We were blessed with a fine Spring day, and the woods rewarded us with many interesting plants.

Among the rarities seen were:

Shining Cranesbill (Geranium lucidum)

Meadow Saxifrage (Saxifraga granulata)

Lambs Lettuce (Valerianella locusta)

Wall Whitlow Grass (Dgaba muralis)

Hutchinsia (Hornungia petraea)

We saw an outstandin display of the female flowers of the Butterbur (Petasites hybridus). These grow in profusion by the side of the River Wye in the Dale.

During our walk we were questioned by the Warden who was conducting an opinion survey about the proposed re-opening of the railway through the Dale.

Members enjoyed the bird-song-(more birds heard than seen, of course, although we did see a dipper on the river.

June 1 th. Tickhill Lanes.

This walk did not seem to attract a great number of the membership, but they missed a treat. Maurice Whitta led the walk, and gave us interesting information. about the history of Tickhill as we walked, starting from St. Mary's Church along Wong Lane, through the fields and over the Hailway line, finally down Apy Lane and back to the Car Park (and the pub) Those who were not able to attend missed seeing some local rarities...Wild Service tree(Sorbus torminalis)

Wild Berberis (Berberis vulgaris)

Nearby in Apy Lne we found several patches of the Wild Licorice (Astragalus
--a new record for the area.
glycyphyllos)

Altogether during the evening we recorded 93 species of flowering plants.

July 8th. Lound Wetland Reserve

This turned out to be one of the few poor days of this outstandingly good summer. Five members went in one car to the sand and gravel extraction area near Barnby Moor. Maurice Hanson diverted the party from the park-like reserve (and the expensive entrance fee) and conducted us round the neighbouring lakes which had been formed as a sequel to the gravel extraction.

The visibility was limited but 32 species of bird were seen or heard, including Common Terns, Ringed Plover, Herons. The Flora was not outstanding but typical of the mandy areas South and East of Doncaster. It was a surprise to most of us to realise what a vast area of water there is, and that it contains such a variety of wildlife.

July 26th. Down River from Sprotborough.

Another lovely summer evening for a Naturalists' stroll. Maurice Hanson led the party past the lock and through Engine Wood. The great rarity of this wood, the Lesser Teasel (Dipsacus pilosus), was in full flower and it was pleasing to note that it has spread considerably over the last few years, holding its own against the competing vegetation.

All ten members then walked down river as far as the Bell Pond to see the Yellow Water Lilies and other aquatic plants, returning on the South side of the river to the Car Park near the Boat Inn. Altogether 123 species of flowering plants were recorded.

July 15th. Scunthorpe Quarries.

Fourteen members drove to the British Steel Offices in Scunthorpe, where our guide, Mr. Elford met us. He then led us in a car caravan to the Dragonby Quarries. These were originally Ironstone quarries but closed down last December. In the six months since the closure nature has begun to take over the miles of open-cast workings and now presents a feast of flowers both dry and aquatic, and also thousand of fossils-mainly Devil's Toe-Nails. The flora included spectacular displays of Viper's Bugloss and one large plant of the unusual Compass Plant (Lactuca serriola) Over 30 species of birds were recorded, and a thoroughly enjoyable time was experienced.

Sept.2nd. Fungus Foray to Howell Wood

Foray under the leadreship of Bob Taylor. Owing to the extremely dry summer, the prospects were not very favourable for either variety of species or the quantity. In the event, with some diligent searching in the undergrowth, a reasonable collection was made. 27 different varieties were found, most of which were easily identified. Most notable of these were:— The False Death-Cap, Amanita citrina, False chanterelle, Hygrophoropsis aurantiaca, Brown Roll-rim, Paxillus involutus.

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Doncaster Naturalists' Society Winter Programme

Unless otherwise stated, all indoor meetings are held at the B.N.I.H.E. Waterdale, Room C 201 from 7.15 until 9.00p.m.

Oct.4th. 'A Kenyan Kaleidoscope'	George Mitchell
Oct.18th. Squire Waterton of Walton Hall	Richard Bell
Nov. 1st. Members' Blides	
Nov.15th. 'A Close Look at Fungi'	Chris Yeates (Rotherham Museum)
Nov.29th. Thomas Tofield of Wilsic	Peter Skidmore
Dec.13th Annual Quiz.	D.M.Bramley
1990	
Jan.10th. Badgers	Mike Dyson
Jan.24th. Butterflies of Yorkshire	Dr.Sutton, President Y.N.U.
Feb.7th. A.G.M.	
Feb.21st. Ralph Chislett	Jim Griffith
March 7th. The Work of a Nature Reserve Warden	P.Rowarth
March 21st. The Man who looked at Mountains	
through a microscope	.Fars.V.Clinging