CLEVELAND NATURALISTS' FIELD CLUB







RECORD OF PROCEEDINGS

Volume 6 Part 3 Spring	g 1997
Editorial	2
Acknowledgements to Contributors	2
News	2
Highlights of the 1996 Field Meetings	4
The Trees of Hardwick Hall	13
Summary of the Molluscs and Non-insect Arthropods on Field Meetings 1996	15
Prey Eaten by Tawny Owls at Flatts Lane, Ormesby	17
Vegetation Management at Guisborough Branch Walkway	24
Moths at Cowpen Bewley	27
The Knopper Gall	29
Marton West Beck and Sandy Flatts	31
Field Meetings 1997	35

THE OFFICERS & COMMITTEE 1997-8

President, Mrs Pam Law 'Brinby', Hutton Lowcross, Guisborough.

Secretary, Mr Eric Gendle, 13, Mayfield Road, Nunthorpe.

Membership Secretary, Mrs Jean McClean, 28 Pendle Crescent, Billingham.

Programme Secretaries, Mr Vincent Jones, 'Hillways', Ingleby Greenhow.

Mr Darroll Fryer, 8 Rye Dale, Guisborough.

Treasurer, Mr John Blackburn, 6 Bylands Grove, Fairfield, Stockton-on-Tees.

The immediate past-president, Mr Norman Thompson.

Ordinary members: Mr Colin Chatto, Mr Neil Baker, Mr Ian Lawrence, Mr Alick Hunter.

HONORARY MEMBERS

Mrs Jessie Graham, Mrs Joan Williams, Mr Ian Lawrence, Mr.Maurice Ward, Mr Maurice Hallam

CONSULTANT MEMBERS

The following members will be pleased to assist in the identification of specimens.

Flowering	Bryophytes	Birds	Lepidoptera		
Plants					
Ian	John	Maurice	Neville	Malcolm Birtle (and	
Lawrence	Blackburn	Hallam	Harwood	Geology), Eric	
			(and General	Gendle	
			Entomology)		
Representatives					
I.C. La	awrence (CWT)	J.Blac	kburn (YNU)	M.Birtle (NNU)	
Membership Details					

The Club seeks to promote an interest in all branches of Natural History and to assist members in finding out about the living things that they see in the countryside around them. The present membership includes those who have particular interests in birds, insects, slugs and snails, lichens, fungi, flowering plants and mosses and liverworts. Members with interests in other fields would be very welcome.

In spring and summer there are evening, half-day and whole-day visits to investigate the natural history of a particular area. During the winter months there is a series of monthly meetings that are held at the Leeds University Centre, Harrow Road, Middlesbrough. A meeting usually takes the form of a lecture given by a club member or visiting speaker. The annual subscription is £5.

Any person interested in joining the Cleveland Naturalists Field Club should send their subscription to the Membership Secretary. **Potential members are welcome to our field meetings listed at the back of this issue.**

Annual subscriptions are due on the 1st January each year.

(Adult £5.00. Students under 18 yrs. £1.00)

Members are entitled to attend meetings of:

Yorkshire Naturalists' Union
Cleveland Wildlife Trust

Northern Naturalists' Union
The Ramblers' Association.

The Club is affiliated to these organizations.

Editorial

This is the seventh issue of the new Proceedings. The site chosen for specific comment this year was Marton West Beck and Sandy Flatts. In actual fact our Record of Proceedings seems to show our interests have been oriented more towards other sites visited this year. A particular site is chosen each year to help to focus member's interests but the Proceedings are a record of those things that which we actually find to be of interest during the year. Consequently we should expect that our planned sites for recording may not turn out to be the sites most extensively worked at the end of the year. The site chosen for the next Proceedings is the fields immediately North of the railway at Billingham Beck. Any records for this site will be gratefully accepted for inclusion.

Acknowledgements to Contributors

Many thanks to all the contributors that include Christopher Lowe (News and Botany), Tony Wardhaugh (Molluscs, Owls, and various inverterbrates), Pat Wood (Botany), Malcolm Birtle (Proceedings preparation, Moths), Ian Lawrence (Botany), Darroll Fryer (Proceedings preparation, Botany and Guisborough Walkway), Maurice Hallam (Ornithology, Entomology and Botany), Vince Jones (Botany), John Blackburn (Bryophytes), Eric Gendle (Drawings), Gywnn Williamson (Moths), Bryony Serginson (Guisborough). Many people contribute to botanical records including Ian Lawrence, Vince Jones, Darroll Fryer, Pat Wood, Norman Thompson, John Blackburn, Pam Law, Maurice Ward, and Chris Lowe. Apologies in advance to anyone overlooked in these acknowledgements.

News

Shepherds Needle (*Scandix pecten-veneris*)

This year plants of Shepherd's Needle turned up in a field of wheat near Lythe. Nan Sykes, in her book 'Wild Plants and their Habitats in the North York Moors', states that although it was described as 'common' in the 'Natural History of the Scarborough District' published in 1953, not a single plant was found when the surveys for her book were done. Neither was it recorded when Ian Lawrence surveyed our area for his book 'The Wild Flowers of Cleveland'.

The plant declined rapidly after 1955 owing to the introduction of herbicides MCPA. and 2,4-D. It is now classed as a scarce plant in Britain because since 1980 it has been recorded in only 35 10km. squares.

It is a member of the *Apiaceae* (Carrot Family) and has rather inconspicuous flowers, but it produces distinctive long needle-like fruits which when ripe split in half with a violent jerk and shoot out their seeds. As a result of this it has been given over fifty common names but Shepherd's Needle and Venus's Comb are the best known.

Pat Wood

Some Notable Moths

Two moths were found on separate field outings in 1996 that may be worthy of note

Rheumaptera undulata Ebulea crocealis

Scallop Shell

Willow Scrub Wet flush

Beast Cliff, Ravenscar NZ120403 N. bank of Tees, Aislaby

As pupa, 20/4/96 17/7/96

According to Sutton and Beaumont Scallop Shell has not been recorded in VC62. Dunn and Parrack describe it as a 'rare species' in Northumberland and Durham. This particular specimen was picked up as a pupa which subsequently emerged in June. *Ebulea crocealis* has not been recorded elsewhere in Northumberland and Durham since 1896. It has been recorded at this same site on previous club outings. In Yorkshire, the moth is regarded as 'locally common' in vice-counties 61-64. However, there are no records for VC65 which, with VC62, has the river Tees as the northern boundary.

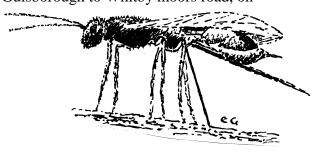
Pale Tussock

A caterpillar of the Pale Tussock (*Calliteara pudibunda*) was noted at home by Maurice and Mary Ward in October. This is a large (up to 4cm) striking green and yellow larva with long grey hairs arising from tufts along the body. The larvae feed during the late spring and summer on a variety of deciduous trees. It is widely recorded in Yorkshire having expanded its range appreciably in the last twenty five years. Dunn and Parrack do not mention the moth implying that the moth has not been recorded in Northumberland and Durham.

Horntail (Urocerus gigas)

Whilst sitting outside the Jolly Sailors Inn, on the Guisborough to Whitby moors road, on

14th July 1996 Malcolm Birtle, Alex and Hannah Weir noticed a Horntail in the grounds of the pub. The Horntail is a Sawfly (*Symphyta*-a sub-order of the *Hymenoptera* i.e. bees, wasps and ants). It is noticeable because of its large size and yellow/black markings. It has a very aggressive appearence due to it's size (up to 2 inches long), yellow/black coloration, and



long ovipositor. It is actually a harmless, impressive member of the sawflies. It lays eggs in wood, preferably pine, and the larvae take two to three years to mature. It is also called the Wood Wasp.

Butterflies of Poole Woods

The following butterflies have been noted in Poole Woods.

Large White Small White Green Veined Orange Tip

(Pieris	(Pieris rapae)	White (Pieris	(Anthocharis	
brassicae)		napi)	cardamines)	
Peacock	Comma	Large Skipper	Ringlet	Meadow Brown
(Inachis io)	(Polygonia c-	(Ochlodes	(Aphantopus	(Maniola
	album)	venata)	hyperantus)	jurtina)

..... And Some Butterflies from a Nunthorpe Roadside and Garden

Large Skipper (*Ochlodes venata*), Common Blue (*Polyommatus icarus*), and Meadow Brown (*Maniola jurtina*) were observed on the Nunthorpe Bypass.

The following were noted in a garden in Mayfield Road.

Orange Tip (Anthocharis cardamines), Painted Lady (Cynthia cardui), Comma (Polygonia c-album), Small Copper (Lycaena phlaeas), Meadow Brown (Maniola jurtina), and Wall Brown (Lasiommata megera).

Eric Gendle

Highlights of the 1996 Field Meetings

Saturday 20th April, Beast Cliff, Ravenscar, led by Eric Gendle.

Owing to the very late season very few spring flowers were yet flowering. A large patch of Creeping Comfrey (*Symphytum grandiflorum*) was in good flower in Ravenscar village. The main botanical study of the day was the examination of sedges in leaf. Greater Tussock-sedge (*Carex paniculata*), Remote Sedge (*C.remota*), Wood-sedge (*C.sylvatica*) and Carnation Sedge (*C.panicea*) were among those noted.

Birds- 44 Willow Warblers, 2 Blackcaps, 3 Wheatears, 2 Yellow Wagtails, Greenfinch, Chaffinch, Dunnock, Yellowhammer, Meadow Pipit, Common Tern, Kittiwake, Swallows, Sand Martins, Jackdaws, Carrion Crow, Pheasant, Stock Doves.

An Eyed Ladybird (*Anatis ocellata*) was noted on some scrub on the cliff top.

Molluscs at Beast Cliff (SE9999), Tony Wardhaugh

Records collected on a visit made with Adrian Norris (Leeds City Museum) on 31st August 1994 have been included (with references) in the summary section below. On both visits, recording was restricted to the wooded part of the cliff. The presence of the snails *Acicula fusca*, *Spermodea lamellata* and *Leiostyla anglica* are of note and suggest that this is an area of ancient semi-natural woodland (i.e. in continuous existence since at least 1600 AD). *Acicula fusca* is of particular interest, there being only three known localities where this species occurs in North-east Yorkshire (VC62), the other two being the Forge Valley, near Scarborough, and Airey Holme Wood, near Great Ayton (Kerney,

1976). It was first recorded at Beast Cliff in 1910 (Moore, 1911) and not found again until the visit by Adrian Norris and myself. This tiny species is one of only two land prosobranch snails (i.e. ones possessing an operculum) occurring in Britain. The recently collected records indicate that Beast Cliff has a rich molluscan fauna but the list compiled so far is likely to be incomplete.

Freshwater molluscs were recorded from a pond at grid ref. NZ997002. These included the Pea Mussel *Pisidium hibernicum* which is uncommon in Yorkshire.

Wednesday 8th May, Flatts Lane & Old Brick Works, led by Tony Wardhaugh.

See below for a detailed study of the Tawny Owl roosts at this site.

12th May, Hardwick Hall led by Ian Lawrence.

The aim of the meeting was to study the trees in the park. Details can be found in the section The Trees of Hardwick Hall below.

Sunday 19th May, Whitecliffe Wood, Skinningrove, led by Pat Wood.

Many woodland spring plants were in fine flower; we were particularly pleased to see convincing Dog-violet x Early Dog-violet (*Viola x bavarica*) and good stands of Leopard's-bane (*Doronicum pardalianches*) and Goldilocks Buttercup (*Ranunculus auricomus*). Black Currant (*Ribes nigrum*) was seen in a truly wild situation and the leaves of Wood Vetch (*Vicia sylvatica*) were observed. By the stream were Large Bittercress (*Cardamine amara*) and Bay Willow (*Salix pentandra*). By the main road Hungarian Brome (*Bromus inermis*) was flourishing well in its known site. The party was pleased to see regenerating English Elm.

Small White (*Pieris rapae*) and Orange Tip (*Anthocharis cardamines*) were seen in Whitecliffe Wood. Chiff-chaffs were heard throughout the day. Large White (*Pieris brassicae*) was noted in Whitecliffe Wood.

A note on the Molluscs at Deepdale and Whitecliff Woods (NZ713188, NZ712185) by Tony Wardhaugh:-

(These notes on molluscs found on the field excursions are supported by a summary table and references below)

The snail *Ashfordia granulata* is virtually endemic to the British Isles (Wynne 1993) hence its presence in Deepdale Wood and apparent abundance in Whitecliff Wood are of significance. The presence of *Spermodea lamellata* is suggestive of ancient semi-natural status. In contrast, the slug *Boettgerilla pallens* is a recent introduction to Britain but is spreading rapidly. It was recorded on a Field Club visit to Cliff Rigg on 14th June 1995. The current record brings the total for the Cleveland area to five, all noted since 1990. Evidence of the snail *Vitrina pellucida* was in the form of empty shells only. This is not suprising because this species has an annual life cycle maturing in Winter.

Lymnaea truncatula was recorded from the margin of a small pond in Deepdale Wood (NZ713189)

Birds- Willow Warblers, Blackcap, Marsh Tit, Goldfinches, Greenfinch, Bullfinch (heard), Wren

Wednesday 22nd May, Riverside Walk (N. bank upstream), Middleton-One-Row, led by Maurice Hallam.

Several fine trees were seen; we particularly noted Grey Poplar (*Populus x canescens*), Cherry-laurel (*Prunus laurocerasus*) and Bullace (*Prunus domestica ssp. insitia*). Oregon-grape (*Mahonia aquifolium*), Spanish Bluebell (*Hyacinthoides hispanica*) and Lesser Periwinkle (*Vinca minor*) were all flourishing as garden escapes. Two pleasing woodland plants were Wood Meadow-grass (*Poa nemoralis*) and Wood Stitchwort (*Stellaria nemorum*). *Helix aspersa*, Strawberry Snail (*Trichia striolata*), Hairy Snail (*Trichia hispida*), Plaited Door Snail (*Cochlodina laminata*) and Banded Snail (*Capaea nemoralis*) were seen. Chiff-chaffs were also heard frequently.

Birds- Long-tailed Tit, Marsh Tit, Song Thrush, Mistle Thrush, Sedge Warbler, Grey Partridge, Great Spotted Woodpecker, Wren, Chiff-chaff

Saturday 1st June, Kildale Woods, led by Maurice Ward.

A well-attended walk, on a rather blustery day, took us out of Kildale village on the Cleveland Way and then through Kildale Woods. Plants seen included Changing Forgetme-not (*Myosotis discolor*), Chickweed Wintergreen (*Trientalis europaea*), Pink Purslane (*Claytonia sibirica*) and plenty of Yellow Pimpernel (*Lysimachia nemorum*). We were not so pleased to see that Japanese Knotweed (*Fallopia japonica*) is intruding into the woods!

Diaporus boleti, a carrion beetle, was noted. Orange Tip (Anthocharis cardamines) was seen flying by the stream.

A note on molluscs and other invertebrates at Kildale Wood (NZ600098) by Tony Wardhaugh:-

This site yielded a number of notable records. It was the third site at which the snail *Spermodea lamellata* was recorded during the 1996 Field Club meetings (see comments above on this species). It is present at the south-eastern limit of its range in NE Yorkshire but in spite of this the local area seems to be something of a stronghold. These three records bring the known number of sites occupied in the area to at least ten. The other snail of note found in Kildale Wood was *Zonitoides excavatus*. This is the only British snail which is a calcifuge, all others either requiring calcium in the substratum or being indifferent to its presence. *Z. excavatus* was found in two places beneath fallen logs and bark alongside the footpath north of the stream. Here, it occurred with superficially similar but far more common *Discus rotundatus*. *Z. excavatus* has a markedly western distribution in the British Isles and is scarce in NE Yorkshire (Kerney, 1976).

All specimens of the snail *V. pellucida* were small juveniles (see comment for Deepdale and Whitecliff Woods above).

Four wetland molluscs were recorded from a small damp area in the eastern end of the wood (NZ603098), these being *Carychium minimum*, *Oxyloma pfeifferi*, *Deroceras laeve* and *Euconulus alderi*. The three freshwater species listed in the table below (*Potamopyrgus jenkinsi*, *Lymnaea truncatula*, *Ancylus fluviatalis*) were recorded in or by the stream running through the wood.

In addition to this interesting molluscan fauna, two centipede species of note were found; *Lithobius curtipes* and *L. macilentus* (formerly *Laulacopus*). Centipedes are a much under recorded group but even so, by 1988 there were only 58 and 55 records respectively for these two species for the whole of Britain (Barber and Keay, 1988). In comparison, for a common species, *L. forficatus*, there were 3017 records. *L. curtipes* is strongly associated with ancient woodland; of the 58 British records, 29 are from such sites e.g. the New Forest (Hants), Wytham Wood (Oxon.), Monk's Wood (Hunts.).

Wednesday 5th June, Egglescliffe Circular, led by Andrew Astbury.

The party walked from Egglescliffe North-east across fields to the river then upstream on the North bank to the Blue Bell pub. By the river were some fine stands of Dame's-violet (Hesperis matronalis) sporting different colours. Green Alkanet (Pentaglottis sempervirens), Amphibious Bistort (Persicaria amphibia) and White x Red Campion (Silene x hampeana) were in good flower. Also observed but in leaf only, were Giant Hogweed (Heracleum mantegazzianum), Tansy (Tanacetum vulgare) and Wild Onion (Allium vineale).

Sedge Warbler, Reed Bunting and Yellowhammer were seen near the river margins and field edges. A kingfisher was seen behaving in a territorial manner next to the riverbank in Yarm itself. A tantalising glimpse of an interesting butterfly was probably the Club's first encounter with the influx of Painted Ladies in 1996. Birds- Blackcap, Whitethroat, Linnets, Greenfinch, Dunnock, Reed Bunting, Kingfisher, Collared Dove, Sedge Warbler, Yellowhammer

Wednesday 12th June, Oakdale, led by Pam Law.

A well attended walk on a beautiful summer evening, took us alongside the reservoir at Oakdale, where Vincent discovered a wren's nest in a rocky cleft while investigating a fern. We then went up into Big Wood where we were able to compare two subspecies of Scaly Male Fern (*Dryopteris affinis ssp affinis & ssp borreri*) and admire a veritable carpet of Chickweed Wintergreen (*Trientalis europaea*). In grassland we identified Squirrel-tail Fescue (*Vulpia bromoides*) and Crested Hair-grass (*Koeleria macrantha*) Yellow Pimpernel (*Lysimachia nemorum*), Butterwort (*Pinguicula vulgaris*) and Sundews (*Drosera rotundifolia*) were found in a bog just south of the path from the Hawnby road to the reservoir. Brown Silver Line (*Petrophora chlorosata*) was seen on the moor path and Common White Wave (*Cabera pusaria*) was found in the wood at the east end of the reservoir.

Sunday 16th June, Gaitbarrows, led by Vincent Jones.

Our visit to the Gait Barrows National Nature Reserve was the highlight of the summer. We were privileged to be led by the reserve's warden, Rob Petley-Jones, an enthusiastic and expert naturalist. It is difficult to single out plants for particular mention amongst the many nationally rare species seen, so any listing which is not exhaustive must be one of personal selection. In the limestone woodland were Spindle (*Euonymus europaeus*), Common Gromwell (*Lithospermum officinale*), Herb Paris (*Paris quadrifolia*), and the sedges, Pale Sedge (*Carex pallescens*) and Fingered Sedge (*Carex digitata*). The grykes

in the limestone pavement yielded Angular Solomon's Seal (*Polygonatum odoratum*), Spring Cinquefoil (*Potentilla neumanniana*), Lily-of-the-valley (*Convallaria majalis*) and the ferns Limestone Fern (*Gymnocarpium robertianum*) and Rigid Buckler-fern (*Dryopteris submontana*). We were particularly pleased to see Common Whitebeam sp. (*Sorbus lancastriensis*), a new species for all members of the party. We were able to add a new hawkweed record for the reserve, the rare Hawkweed, (*Hieracium glanduliceps*), confirmed by D.J.M^cCosh; it was also a new record for vice-county 60. In the wet meadows orchids were in fine flower; we particularly noted Northern Marsh-orchid (*Dactylorhiza purpurella*), Southern Marsh-orchid (*Dactylorhiza praetermissa*) and Hybrid Spotted-orchid (*Dactylorhiza x venusta*). By the lake Tufted Sedge (*Carex elata*) and Great Fen-sedge (*Cladium mariscus*), the latter just starting to flower, were seen.

Saturday 22nd June, Muker, led by Joan Bradbury.

On a fine summer day we enjoyed an excellent walk along the side of Kisdon Hill to Keld, thence to Swinner Gill and back through the riverside meadows, which were in full flower and looking at their best. We particularly enjoyed watching a family of stoats at play below Ivelet Wood. Plants seen included Shining Cranesbill (*Geranium lucidum*), Mossy Saxifrage (*Saxifraga hypnoides*), Hairy Rockcress (*Arabis hirsuta*) and New Zealand Willowherb (*Epilobium brunnescens*).

Wednesday, 26th June, Sandy Flatts, led by Ian Lawrence

The field behind Acklam cemetery held large numbers of breeding skylarks. Birds- Sparrowhawk, Skylark, Meadow Pipit, Dunnock, Swift, Greenfinch, Reed Bunting

Sunday 30th June, Thrislington National Nature Reserve, led by Vincent Jones.

In spite of squally thunder showers members were able to enjoy the natural history of the reserve. Grasses were studied during the day. We were able to compare Meadow Oatgrass (Helictotrichon pratense) and Downy Oat-grass (Helictotrichon pubescens) and to note the distinguishing features of Spreading Meadow-grass (Poa humilis) and Meadow Fescue (Festuca pratensis). The dominant grass over much of the reserve is Upright Brome (Bromopsis erecta). We admired the reserve's speciality, the rare Perennial Flax (Linum perenne ssp. anglicum). Other noteworthy plants of the calcareous grassland were Greater Knapweed (Centaurea scabiosa), Common Rock-rose (Helianthemum nummularium), Frog Orchid (Coeloglossum viride), Pepper-saxifrage (Silaum silaus), Mountain Everlasting (Antennaria dioica) and Dark-red Helleborine (Epipactis atrorubens), the latter not yet in flower. In a nearby limestone quarry we found Squirreltail Fescue (Vulpia bromoides), Pyramidal Orchid (Anacamptis pyramidalis), Wild Basil (Clinopodium vulgare), Small Scabious (Scabiosa columbaria) and Blue Fleabane (Erigeron acer).

The following lepidoptera were noted Silver Ground Carpet (*Xanthorhoe montanata*), *Chrysoteuchia culmella*, Shaded Broad Bar (*Scotopteryx chenopodiata*), Small Heath (*Coenonympha pamphilus*), Orange Tip (*Anthocharis cardamines*), Chimney Sweep (*Odezia atrata*), *Crambus lathionellus*, *Agriphila tristella*, Common Blue (*Polyommatus icarus*), Painted Lady (*Cynthia cardui*). The molluscs Rounded Snail (*Discus rotundatus*),

Banded Snails (Capaea nemoralis, C. hortensis), and the Copse Snail (Arianta arbustorum) were also seen. The most impressive non-botanical find was Glow Worms (Lampyris noctiluca) amongst some scrubby grassland at the east end of the quarry.

Wednesday 10th July, South Bank Station, led by Ian Lawrence.

We met at South Bank Station, crossed the railway bridge and explored the area beside the railway track towards Cargo Fleet. A rather depressing-looking area of waste-land proved very satisfying, botanically speaking! Some of our finds included Wild Parsnip (Pastinaca sativa), Field Pennycress (Thlaspi arvense), Hoary Mustard (Hirschfeldia incana), Hare's-foot Clover (Trifolium arvense), Lucerne (Medicago sativa), Blue Fleabane (*Erigeron acer*), Fern Grass (*Catapodium rigidum*), and Orange-peel Clematis (Clematis tangutica).

The following butterflies were noted- Small Copper (Lycaena phlaeas), Peacock (Inachis io), Meadow Brown (Maniola jurtina), Common Blue (Polyommatus icarus). Also a number of Six Spot Burnets (*Zygaena filipendulae*).

Birds-Goldfinches, Greenfinches, Meadow Pipit, Kestrel, Jackdaws, Carrion Crow,

Wednesday July 17th, Aisalby, led by Rob Scaife.

15 or so CNEC members met at Aislaby Farm on a fine, mid - July evening. The rich semi - natural habitat of overgrown flushes and scrub proved interesting as usual, but of more surprising note was the way in which the Tees' water - levels had risen, due to the newly -created 'Barrage'. Though the mud -dwelling plant - and animal - life may have suffered as a consequence although Greater Yellow Cress (Rorippa amphibia) has been re-located.

More puzzlingly, a tall grass exercised the experts' identification skills, and even after some discussion was not satisfactorily named. However, the foci of interest were not all botanical: other phenomena included singing sedge warblers, a badger-sett, the nests of the local yellow ant (Lasius flavus). Dwarf Mallow (Malva neglecta) was noted in the stack-yard of the farm where we parked our cars. The most interesting plants growing in the river's edge were Amphibious Bistort (*Persicaria amphibia*), Great Yellow-cress (Rorippa amphibia) and Horned Pondweed (Zannichellia palustris).

Small Skipper (*Thymelicus sylvestris*), Ringlet (*Aphantopus hyperantus*), Meadow Brown (Maniola jurtina), Red Admiral (Vanessa atalanta), Blood Vein (Timandra griseata), Silver Ground Carpet (*Xanthorhoe montanata*), Brimstone (*Opisthograptis luteolata*), and Swallowtail (Ourapteryx sambucaria) were also seen together with Peacock (Inachis io) larvae on nettles. Silky Snail (Ashfordia granulata) was found in a wet flush with Rounded Snail (Discus rotundatus), Common Snail (Helix aspersa) and the Copse Snail (Arianta arbustorum). A notable pyralid moth was also found in the same wet area-see News above - all contributing to an enjoyable evening ably led by Rob Scaife. Birds- Grey Partridge, Sedge Warblers, Bullfinch

Saturday 20th July, Barnard Castle to Cotherstone, led by Colin Chatto.

We walked upstream on the north side of the river along a path that hugged the riverbank and was shaded by trees for much of the way. It was a hot sunny day, and the shade was much appreciated. This section of the walk presented a much greater variety of flowers than the return route through fields to the south side of the river. Among the plants noted were Golden Rod (Solidago +virgaurea), Hairy St John's-wort (Hypericum hirsutum), Slender St John's-wort (Hypericum pulchrum), Common Cow-wheat (Melampyrum arvense), Monkey Flower (Mimulus guttatus), Giant Bellflower (Campanula latifolia), Pendulous sedge (Carex pendula), Wall Lettuce (Mycelis muralis), Woodruff (Galium odoratum), Yew (Taxus baccata), Sanicle (Sanicula europea), Enchanter's Nightshade (Circaea lutetiana), and Leopard's Bane (Doronicum pardalianches). The birds observed during the walk were Dipper, Grey Wagtail, Kingfisher, Mistle Thrush, and Tree Creeper. We also observed a large bed of stingingnettles where there were several hundred larvae of the Painted Lady (Cynthia cardui) butterfly feeding.

Sunday 28th July, Footpaths north of Wrelton, led by Eric Gendle.

The botanical highlight of the walk was a small area of calcareous grassland, rich in flora. Here were growing Hawkweed Oxtongue (*Picris hieracoides*), Woolly Thistle (*Cirsium eriophorum*), Pyramidal Orchid (*Anacamptis pyramidalis*), Burnet-saxifrage (*Pimpinella saxifraga*), Small Scabious (*Scabiosa columbaria*) and Wild Basil (*Clinopodium vulgare*). In heathy woodland Beaked Hawk's-beard (*Crepis vesicaria*), a plant uncommon in N.E. England, was beautiful.

A number of butterflies and moths were noted namely Small Tortoiseshell (*Aglais urticae*), Large Skipper (*Ochlodes venata*), Small Skipper (*Thymelicus sylvestris*), Ringlet (*Aphantopus hyperantus*) (in abundance), Meadow Brown (*Maniola jurtina*), Large White (*Pieris brassicae*), Small White (*Pieris rapae*), Peacock (*Inachis io*) larvae, Small Tortoiseshell (*Aglais urticae*) larvae, Silver Y (Autographa gamma), Shaded Broad Bar (*Scotopteryx chenopodiata*), Common Wave (*Cabera exanthemata*), and *Agriphila tristella*. The hoverfly *Leucozona lucorum* and Soldier Beetle (*Rhagonycha fulva*) were also seen.

Birds-Swifts, Swallows, House Martins, Yellowhammers, Dunnocks, Goldfinch, Wren

Saturday 3rd August, Rosedale, led by Alec Hunter.

On another fine, sunny day, we walked from Rosedale Abbey village via Northdale and across to the disused ironstone railway track and back through Hill Cottages. On the village car-park wall we found Reflexed Stonecrop (*Sedum rupestre*). In wet areas in Northdale we found Musk (*Mimulus moschatus*), Round-leaved Crowfoot (*Ranunculus omiophyllus*), Blinks (*Montia fontana*), and Small Sweet-grass (*Glyceria declinata*). In the woods we saw Climbing Corydalis (*Ceratocapnos claviculata*). Beside the railway line there was a lot of Musk Thistle (*Carduus nutans*) apparently resisting attempts to eliminate it!

Ringlet (Aphantopus hyperantus), Meadow Brown (*Maniola jurtina*), Small Tortoiseshell (*Aglais urticae*), and Small White (*Pieris rapae*), were noted. The striking Stinkhorn (*Phallus impudicus*) fungus was also seen.

Birds-Kestrel, Goldfinch, Greenfinch, Willow Warbler, Pied Wagtail, Meadow Pipit, Swift, Swallow, House Martin, Red Legged Partridge (remains of kill).

Sunday 18th August, The Bridestones & Staindale, led by Darroll Fryer.

The ferns growing on the Bridestones were admired, in particular Wall-rue (*Asplenium ruta-muraria*) and Black Spleenwort (*Asplenium adiantim-nigrum*), the latter especially exhibiting fine specimens. On a track close by it was pleasing to see the uncommon Trailing Saint John's-wort (*Hypericum humifusum*).

On one of the hottest days of the year a profusion of butterflies were seen and appreciated namely Peacock (*Inachis io*), Red Admiral (*Vanessa atalanta*), Painted Lady (*Cynthia cardui*), Small Tortoiseshell (*Aglais urticae*), Brimstone (3) (*Gonepteryx rhamni*), Meadow Brown (*Maniola jurtina*), Small Skipper (*Thymelicus sylvestris*), Small Copper (*Lycaena phlaeas*), Large White (*Pieris brassicae*), Small White (*Pieris rapae*), Green Veined White (*Pieris napi*), Ringlet (*Aphantopus hyperantus*), and Dark Green Fritillary (*Argynnis aglaja*) together with active Silver Y's (*Autographa gamma*). Larvae of the Oak Eggar (*Lasiocampa quercus*) were also seen.

Sunday 1st September, Roxby Moor & Lealholm Moor, led by Darroll Fryer.

The botanical focus of the day was the examination of a number of species of 'eyebright'. *Euphrasia nemorosa* was common in several places. By the side of a stony road near Danby Beacon *Euphrasia confusa*, taking advantage of the calcareous influence of the stones from the road, was frequent. In the vicinity, amongst the heather, were some fine plants of *Euphrasia micrantha*. The close proximity of the two species meant that the hybrid *E. confusa x E. micrantha*, looking really convincing, was plentiful. Amongst the other plants seen the most interesting was Bristle Club-rush (*Isolepis setacea*), found typically in gravelly wet flushes.

Small Copper (*Lycaena phlaeas*) was very evident and seemed to indicate a strong colony. Painted Lady (*Cynthia cardui*), Peacock (*Inachis io*) and Meadow Brown (*Maniola jurtina*) were also noted. A very good specimen of a moth with, at the time, very distinctive markings was also found. A field sketch was made with confidence that the moth would be easy to identify. However, subsequent searching in Skinner's book of moths was very unproductive- the nearest match being Six Striped Rustic (*Xestia sexstrigata*). Another lesson in the need for careful field observation.

Saturday 28th September, Darlington Cemetery, led by Ian Lawrence.

We were joined by a few members of the Darlington Field Club on this visit to look at the trees in this large cemetery.

Participants were given a list of the tree species that they were likely to be seen on the guided tour. The site is dominated by conifers most of which are as old as the cemetery itself making them 150-200 years old and are concentrated in the eastern half. The newer western half consists mainly of deciduous trees, mainly Cherry, Purple Leaved Plum, Norway and Cappadocian maples, Lime and Black Poplars. There are also several hollies in this section. These are mainly concentrated at the Western end. The open areas

are planted with scattered Lawson and Sawara cypress trees. The older east part of the cemetery has a fine a collection of trees as can be seen anywhere in the north-east. The conifers are dominated by many varieties of the Lawson Cypress (*Chamaeacyparis lawsoniana*) with the impressive columnar or fastigiate forms. The Sawara cypress is also well represented (*C.pisifera*) and, less commonly, the Nootka Cypress (*C. nootkatensis*). There is also a fine collection of the similar looking group of conifers, the Thujas. These are known as 'Cedars' rather confusingly, but are not true cedars. There is a fine specimen of *Thuja plicata* known as the Western Red Cedar and several White Cedars (*Thuja occidentalis*) and Chinese Cedars (*Thuja orientalis*). All these *Thujas* have distinctive cones. There are one or two Hita trees (*Thujopsis dolabrata*)- attractive trees from Japan. Corsican Pine (*Pinus nigra ssp. laricio*) is well represented. Fine specimens of the true cedars Indian Cedar (or Deodar), Atlas Cedar, and Cedar of Lebanon (*Cedrus deodara*, *C.atlantica*, *C. libardi*) occur.

Of the deciduous trees there are two outstanding specimens of Tree of Heaven (Ailanthus altissima) and a fine sample of the rare True Service Tree (Sorbus domestica). One or two old Walnuts (Juglans rugia) are to be seen long with a fine Tulip Tree (Liriodendron tulipifrea). One very unusual small tree set back against the north wall is a specimen of Bladder Nut (Staphyllea pinnata) from SE Europe. It's bladder fruits were there for all to see. Perhaps the rarest tree in the cemetery is a small specimen of the Umbrella Pine (Scyadopitis verticillata). When you look at the leaf arrangement on the twigs it is easy to see how it got its name. These are just some of this collection of fine trees, some of which are rare and unusual in this part of the country.

Saturday 21st September, Sinnington & Appleton le Moors, led by Pam Law.

We enjoyed a pleasant walk round the villages of Sinnington, Appleton-le-Moors and Cropton via field paths and woodland. We were rather early for autumn colours but there were still summer flowers in some places. We saw Peppermint (*Mentha x piperita*) in the river and Pink Purslane (*Claytonia sibirica*) nearby. We inspected a small pond near Appleton-le-Moors which was being invaded by New Zealand Pigmyweed (*Crassula helmsii*) and also found Hard Rush (*Juncus inflexus*), Soft Rush (*Juncus effusus*) and a possible hybrid of these *Juncus x diffusus*. In the wood we saw Wood Barley (*Hordelymus europaeus*). We were pleased to see Grey Sedge (*Carex divulsa*) in the lane below Sinnington church, only recently reported in this area.

The Forest Shield Bug (*Pentatoma rufipes*) was found near the bridge across the river on the path from Appleton to Cropton.

A note on the molluscs in the Sinnington Area (SE7485) by Tony Wardhaugh:-

A specimen of the snail *Balea perversa* was found during a brief search of a dry stone wall just south of Cropton (SE756889). This species has declined in range since the 19th century possibly due to atmospheric pollution (Holyoak, 1978).

Freshwater molluscs listed in the summary section below were found in a pond in a pasture field (SE7338872).

Saturday 12th October, Gills to the south east of Oscar Park Farm, led by Norman Thompson.

It was most pleasing to see so many interesting plants in flower so late in the year. Arable fields yielded Dwarf Spurge (*Euphorbia exigua*) and the two rare speedwells, in fact growing together, Grey Field-speedwell (*Veronica polita*) and Green Field-speedwell (*Veronica agrestis*). In a small stream was Lesser Water-parsnip (*Berula erecta*). In woodland the uncommon grass Wood Barley (*Hordelymus europaeus*) was still in good flower. Extensive patches of the late winter flower Green Hellebore (*Helliborus viridis*) were also seen by the side of the woodland track. The 'eyed' ladybird (*Anatis ocellata*) was found on a fence post.

A note on molluscs in the Hawnby Area (SE5787) by Tony Wardhaugh:-

A specimen of the snail *Oxychilus alliarius* with a colourless shell (rather than the usual brown) was found at the Western end of the conifer plantation (SE579881). The snail *Monacha cantiana*, which is at the Northern limit of its range in NE Yorkshire (Kerney, 1976), was found together with *Cernuella virgata* on the grass verge on the east side of the B1257 road (SE5786).

Freshwater species noted in the summary section below were located in a stream by a footbridge (SE598853).

The Trees of Hardwick Hall

Originally Hardwick Hall Park consisted of 150 acres. It was landscaped between 1754 and 1758 to a design by the architect James Paine (1716-1789). Originally it had a serpentine lake constructed to give the appearence of a river, and this flowed into a twenty acre lake. In the park were extensive woodlands, tree-lined walks and a variety of ornamental buildings or follies in the Palladian style. The original plans for the area were never completed and the main lake was drained at the end of the eighteenth century.

Many of the conifers now in the park were planted by the Forestry Commission after the Second World War, but the more unusual trees were planted in the 1970's when Durham County Council acquired forty acres of the park. This is now maintained by them for the public to enjoy.

The following species were recorded on a Club visit led by Ian Lawrence on the 30th September 1996. Many of the trees are arranged in groups so that different species of the same genus can be compared. There are now over eighty species in the park.

Alnus cordata	Italian Alder	Pinus nigra ssp. laricio	Corsican Pine
A. glutinosa	Common Alder	Platanus x hispanica	London Plane
A. incana	Grey Alder	Populus nigra 'Italica'	Lombardy Poplar
Acer campestre	Field Maple	P. trichocarpa	Western Balsam Poplar
A. griseum	Paper Bark Maple	Prunus avium	Wild Cherry

A.platanoides	Norway Maple	P. pardus	Bird Cherry
A.platanoides	Purple Maple	P. pissardii	Purple Plum
ʻrubrum'		'Atropurpurea'	5.
Aesculus	Horse Chestnut	P. spinosa	Blackthorn
hippocastanum	011 D. 1		
Betula pendula	Silver Birch	Pterocarya	Caucasian Wing-nut
n 1	D D' 1	fraxinifolia	II 1 O 1
B. pubescens	Downy Birch	Quercus ilex	Holm Oak
Buxus sempervirens	Box	Q. petraea	Sessile Oak
Carpinus betulus 'fastigata'	Upright Hornbeam	Q. robur	English Oak
Castanea sativa	Sweet Chestnut	Salix caprea	Goat Willow
Corylus avellana	Hazel	S. cinerea	Grey Willow
Crataegus	Hawthorn	S. fragilis	Crack Willow
monogyna			
Fagus sylvatica	Beech	Sambucus nigra	Elder
'Dawyck Purple			
Fastigata'			
F. sylvatica	Cut-leaf Beech	S. niger 'Lacinata'	Fern-leaved Elder
'Heterophylla'			
F. sylvatica	Copper Beech	Sorbus aria	Whitebeam
'Purpurea'			
Fraxinus excelsior	Ash	S. aucuparia	Rowan
F. americana	American Ash	Sorbus x intermedia	Swedish Whitebeam
F. lanceolata	Green Ash	Sorbus x	Bastard Service
		thuringiaca	Tree
F. ornus	Manna Ash	S. torminalis	Wild Service Tree
F. pennsylvanica	N. American Red Ash	Syringia vulgaris	Lilac
Ilex aquifolium	Holly	Taxodium distichum	Swamp Cypress
Juglans cenerea	Butternut	Taxus baccata	Yew
Larix decidua	European Larch	Tilia cordata	Small-leaved Lime
L. kaempferi	Japanese Larch	T. platyphyllos	Large Leaved Lime
Liquidambar orientalis	Oriental Sweet Gum	T. tomentosa	Silver Lime
Liriodendron tulipifera	Tulip Tree	Tilia x vulgaris	Common Lime
Metasequoia	Dawn Redwood	Ulmus carpinifolia	Cornish Elm
glyptostoboides		var. 'stricta'	
Northofagus	Antarctic Beech	U. glabra	Wych Elm
antarctica			
Northofagus obliqua	Roble Beech	Viburnum lantana	Wayfaring Tree
Picea abies	Norway Spruce	V. opulus	Guelder Rose
P. sitchensis	Sitka spruce	Zelcovia serrata	Keaki
Pat Wood			

Summary of the Molluscs and Non-insect Arthropods on Field Meetings 1996

	Beast Cliff	Deepdale Wood	Whitecliff Wood	Kildale Wood	Sinning- ton area	Hawnby area
Freshwater Molluscs						
Potamopyrgus jenkinsi				*		*
Lymnaea truncatula	*	*		*		
L. peregra					*	
Ancylus fluviatalis				*		
Pisidium casertanum					*	
P. personatum						*
P. hibernicum	*					
Terrestrial Molluscs						
Acicula fusca	/					
Carychium minimum	*		*	*		
C. tridentatum	*		*	*		
Oxyloma pfeifferi				*		
Cochlicopa lubrica	*	*	*	*		
Columella edentula	*		*	*		
Leiostyla anglica	*					
Lauria cylindracea	*		*	*	*	
Acanthinula aculeata	/		*	*		
Spermodea lamellata	*		*	*		
Punctum pygmaeum	*		*	*		
Discus rotundatus	/		*	*	*	*
Arion ater	/	*	*	*		*
A. subfuscus		*	*	*		
A. circumscriptus	/	*	*	*		
A. silvaticus				*	*	
A. fasciatus		*				
A. distinctus		*	*	*		*
A. intermedius	*		*	*		*
Vitrina pellucida	/		S	*		
Vitrea crystallina	*		*	*		*
Nesovitrea hammonis	/	*	*	*		
Aegopinella pura	*		*	*		
A. nitidula	*		*	*	*	
Oxychilus cellarius	*		*	*		*
O. alliarius	/		*	*	*	*
Zonotoides excavatus				*		
Boetgerilla pallens			*			
Limax maximus	/			*		*

L. marginatus	*					
Deroceras laeve	*	*		*		
D. reticulatum		*	*	*	*	
D. caruanae		*	*			
Euconulus alderi				*		
E. fulvus	*		*	*		
Cochlodina laminata	*	*	*			*
Clausilia bidentata			*	*	*	*
Balea perversa					*	
Cernuella virgata					*	*
Monacha cantiana					*	*
Ashfordia granulata		*	*			
Trichia striolata	1	*	*		*	*
T. hispida	*			*	*	*
Arianta arbustorum	/	*	*		*	
Cepaea nemoralis	/	-			*	
C. hortensis	/		*		•	*
	/		•		*	
Helix aspersa Millingdes and Continuous					•	
Millipedes and Centipedes			*	*		*
Glomeris marginata	/		*	*		*
Nanogona polydesmoides						
Ommatoiulus sabulosus	*	*	*			*
Tachypodoiulus niger	*	*	*	*	*	*
Cylindroiulus punctatus		*		-	*	
Julus scandinavius	*		*	*		*
Polydesmus angustus			*	*		
Strigamia acuminata	*				_	
Geophilus carpophagus					*	
Lithobius forficatus		*	*			
L. macilentus				*		
L. crassipes	*					
L. curtipes				*		
Woodlice						
Trichoniscus pusillus	*		*			
Oniscus asellus	1	*	*	*	*	*
Philoscia muscorum	*	*	*	*	*	*
Armadillidium vulgare		*				
Porcellio scaber			*	*		
Harvestmen						
Nemastoma bimaculatum	/			*		*
Paroligolophus agrestis	/					
Rilaena triangularis	*					
Leiobunum rotundum	/				*	

/=records collected 31.8.94 s=molluscan record for empty shells only
I am grateful to Dr. M. P. Kerney, Natural History Museum of London for identifying
species of *Pisidium*, and to Mr. D. Richardson, myriopod recorder for the Yorkshire
Naturalists' Union, for confirming identification of specimens of the centipedes *Lithobius*curtipes and *L. macilentus*

References

Barber A.D.and Keay A. N., *Provisional Atlas of the Centipedes of the British Isles, Institute of Terrestrial Ecology*, Abbots Ripton, 1988

Holyoak D.T., 'Effects of Atmospheric Pollution on the Distribution of Balea perversa (Linnaeus) in Southern Britain', J. Conch., London, 29: 319-323, 1978

Kerney M. P., Atlas of the non-marine Mollusca of the British Isles, Institute of Terrestrial Ecology, Abbots Ripton, 1976

Moore A. J., 'Acicula lineata (Drap.) at Beast Cliff, near Hayburn Wyke, Scarborough', Naturalist, London, 649:108, 1911

Wynne G., 'Biodiversity Challenge: an Agenda for Conservation in the UK, RSPB, Sandy, 1993

Tony Wardhaugh

Prey Eaten by Tawny Owls at Flatts Lane, Ormesby

Tony Wardhaugh

Introduction

On 8th May, 1996 a CNFC meeting was held in the Flatts Lane area near Ormesby (NZ54-17-). Tawny Owls (*Strix aluco*) have inhabited this area since at least 1965 and club members were shown two roost sites during the visit. These birds eat a wide variety of prey, chiefly small mammals, birds, earthworms and other invertebrates. However, they are unable to digest parts such as fur, feathers and bones due to their stomachs secreting relatively little acid and the opening leading from the stomach to the intestine being proportionately small. Consequently, much undigested matter is regurgitated in the form of pellets. Several pellets were present on the ground beneath one of the roost sites visited on the field meeting. Prior to this, pellets had been collected from this site on a regular basis and their contents identified.

Method

The roost site (grid ref. NZ547164) was first located on 20th December, 1992. It is a Corsican Pine (*Pinus nigra* var. *maritima*) approximately 10m tall. The tree is one of the largest in a small conifer plantation of mostly larch (*Larix* sp.) with some Corsican Pine. Nearby habitat includes gorse scrub, hawthorn scrub, secondary deciduous woodland and cattle pasture. All pellets at the site were collected on the above date and at monthly intervals for the following two years. As is typical of Tawny Owls, the bird or birds

present roosted high in the tree, resulting in cast pellets often fragmenting as they hit the ground. Hence numbers of pellets were recorded as whole pellets together with the estimated equivalent in fragments. For most of the samples collected the volume was measured; something which has not been done in previous published studies as far as could be determined. This was done in order to compare number of prey items present per unit volume, rather than per pellet, the former being more precise given the problem of fragmentation noted above. Volume was measured by displacement. First, a mixture of the pellet sample and dry sand was placed in a measuring cylinder and the volume noted. The mixture was then separated by sieving. The volume of sand was then measured and the volume of the pellet sample determined by subtraction. The pellets were then teased apart. Skulls, lower jaws and any other bones of note were extracted and identified as far as possible, using Yalden (1977), Brown et al. (1987) and by comparison with reference material. Minimum numbers of prey species represented were determined. For small mammals this was based very largely on the numbers of lower jaws present.

Results

Collection dates, numbers and volumes of pellets and the number of owls observed at the roost are indicated in Table 1. A monthly record of prey items identified is provided in Table 2, the information for the two years being summarised in Table 3. Pellet collection was discontinued at the end of 1994 due to apparent abandonment of the roost. However, occasional visits to the site in 1995 and 1996 revealed intermittent use by owls.

Popular accounts of Tawny Owls correctly portray them as territorial but this can imply that outside the breeding season they are solitary. However, Mead (1987) states that pairs may be found roosting together, which concurs with the present study (Table 1). Here, it should be pointed out that the tree canopy at this roost site is quite dense and consequently, motionless roosting tawny owls were often difficult to spot. Hence the numbers recorded in Table 1 are the numbers of birds seen and may not necessarily be the number of birds actually present. In total, 241 prey items were identified from the pellets, representing an estimated 4kg of prey. The prey species recorded were Bank Vole (Clethrionomys glareolus), Short-tailed Vole (Microtus agrestis), Wood Mouse (Apodemus sylvaticus), Common Shrew (Sorex araneus), Pygmy Shrew (Sorex minutus), Mole (Talpa europaea), Brown Rat (Rattus norvegicus) and Rabbit (Oryctolagus cuniculus). Here, two assumptions have been made; that for reasons of known distribution in Britain, all remains of mice identified were of Wood Mouse and not Yellow - necked Mouse (A. flavicollis) and all rats were Brown Rats not Black Rats (R. rattus). Table 2 indicates no obvious seasonal pattern, with the Bank Vole being the most numerous species represented in most months. Conversion of prey numbers to mass (Table 3) is based on mean masses for the various species provided by Yalden (1977) When expressed as percentages, the two sets of data do not show any major differences. Care must be taken in the interpretation of these percentages; the figures represent the proportions of prey species identified in pellet samples and no more. They may or may not be a reliable indication of what the Tawny Owls present have actually eaten, as is the case for any such study. Problems with interpreting such data have been discussed elsewhere (e.g. Wardhaugh, 1983 and Altringham et al. 1994). They include the complication that pellets may be from more than one bird (which is very likely in the

present study) and the possibilities that prey may be incompletely eaten or shared by two owls. Furthermore, the bones of some prey species may be digested more easily than those of others. In addition, these figures take no account of invertebrate prey, which probably forms a significant part of the diet of Tawny Owls, the quantity of which is extremely difficult to estimate from pellet analysis. Thus, for example, by using infrared binoculars, Macdonald (1976) observed Tawny Owls eating significant numbers of earthworms. In general, the data suggests a diet typical of that for Tawny Owls inhabiting woodlands elsewhere in Britain (e.g. Southern, 1954 and Mead, 1987). However, diet can vary considerably and Tawny owls living in Holland Park in London were found to eat mainly birds rather than mammals (Bevan 1964). Small scale studies of pellets from other Tawny Owl roosts in the Cleveland area suggest a similar degree of variation in diet (Table 4).

References

Altringham, J.D., O'Brien, S. & Julian, S. (1994) Feeding ecology of the little owl (*Athene*

noctua) an an upland site in northern England. Naturalist 119: 81-94.

Bevan, G. (1964) The food of tawny owls in London. London Bird Report 29: 56-72.

Brown, R., Ferguson, J., Lawrence, M. & Lees, D. (1987) *Tracks and Signs of the Birds of Britain and Europe*. Christopher Helm, London.

Macdonald, A.W. (1976) Nocturnal observations of tawny owls (*Strix aluco*) preying upon earthworms. *Ibis* **118**: 579-80.

Mead, C. (1987) Owls. Whittet, London.

Southern, H.N. (1954) Tawny owls and their prey. *Ibis* **96**: 384-410.

Wardhaugh, A.A. (1983) Owls of Britain and Europe. Blandford, Poole.

Yalden, D.W. (1977) *The Identification of Remains in Owl Pellets*. The Mammal Society, London,

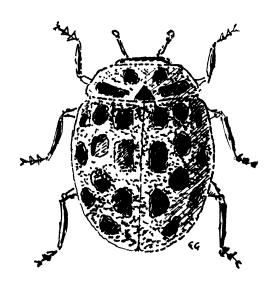


Table 1:Monthly Record of Pellets Collected and Presence of Owls at Roost

Collection Date	No. of Pellets	Volume (cm ³)	No. of Owls Seen
24. 1. 93	17	-	1
19. 2. 93	12	-	2
27. 3. 93	16	127	0
21. 4. 93	20	138	0
22. 5. 93	14	77	0
21. 6. 93	7	39	0
22. 7. 93	16	104	0
22. 8.93	0	0	0
25. 9. 93	1	5	0
25.10.93	1	4	2
20.11.93	6	38	2
20.12. 93	14	82	2
22. 1. 94	7	29	1
20. 2. 94	6	30	0
26. 3. 94	32	187	1
24. 4.94	15	103	0
23. 5. 94	1	6	0
22. 6.94	1	3	0
25. 7.94	1	6	0
22. 8. 94	0	0	0
25. 9.94	0	0	0
26.10.94	0	0	0
19.11.94	0	0	0
22.12.94	1	6	0
TOTAL	159	984	-

Table 2:Monthly Record of Prey Items

Collection Date	Bank Vole	Short- tailed Vole	Wood Mouse	Common Shrew	Pygmy Shrew	Other
24. 1. 93	26	2	18	0	1	1 bird
19. 2.93	12	0	5	0	0	
27. 3. 93	14	4	8	1	0	
21. 4. 93	9	5	4	2	1	1 probable rat
22. 5.93	4	5	2	3	0	
21. 6.93	2	3	2	0	0	
22. 7.93	9	2	3	2	0	
22. 8.93	0	0	0	0	0	
25. 9. 93	1	0	0	0	0	
25.10.93	1	0	0	0	0	1bird
20.11. 93	7	2	0	0	0	
20.12. 93	7	1	8	2	0	
22. 1.94	4	0	1	0	0	
20. 2. 94	3	2	1	0	0	
26. 3. 94	4	11	6	2	4	1 bird (robin?) 1 young rabbit
24. 4. 94	4	6	1	2	0	1 probable young rabbit*
23. 5.94	0	0	0	0	0	
22. 6. 94	0	1	0	0	0	
25. 7.94	1	0	0	0	0	
22. 8.94	0	0	0	0	0	
25. 9.94	0	0	0	0	0	
26.10.94	0	0	0	0	0	
19.11.94	0	0	0	0	0	
22.12.94	2	0	0	0	0	
TOTAL	111	43	59	14	6	rat 1, rabbit 2 mole 2, bird 3
NO. PER100 cm ³ **	7.42	4.17	3.66	1.42	0.61	

^{*}Remains of rabbits found in pellets collected on 26.3.94 and 24.4.94 could be from the

same individual but here counted as two.

** For March 1993 to December 1994 inclusive. (Pellet volumes not recorded January and February 1993).

Total number of prey items identified: 241

Number of prey items per 100cm³ (all species): 17.99

Table 3: Summary of Prey Items Identified

Species	Number of Individuals		Mass Rep	oresented*
		(%)	g	(%)
Bank vole	111	(46.1)	1776	(43.6)
Short-tailed vole	43	(17.8)	903	(22.1)
Wood mouse	59	(24.5)	1062	(26.0)
Common shrew	14	(5.8)	112	(2.7)
Pygmy shrew	6	(2.5)	24	(0.6)
Mole	4	(0.8)	140	(3.4)
Probable Rat	1	(0.4)	60	(1.4)
Probable Rabbit	2	(0.8)	-	-
Bird	3	(1.2)	-	-
Total	241	4077	-	-

^{*} Based on figures for mean mass of each prey species provided in Yalden (1977)

For rabbit and birds there were insufficient remains to estimate size and therefore mass hence these species were not included in the calculation of percentage mass.



Table 4:Prey Items Identified in Tawny Owl Pellets from elsewhere in the Cleveland Area

Site	Date	Prey Items	Comments
Cross Wood, Flatts Lane (NZ 543169)	Spring 1967	short-tailed vole 1 bank vole 3 bird 1	Roost site approx. 0.6 km NW of site of present study; beech tree cavity. Unrecorded small no. of pellets.
Wood at Ormesby Hall (NZ 530171)	5.4.1971	wood mouse 4 common shrew 1 house sparrow 10	Roost in a yew tree. Unrecorded small no.of pellets.
Plantation near incline, Ingleby Greenhow (NZ 602025)	2.4.1978	short-tailed vole 2 bird 5	Roost in a holly tree. Unrecorded small no. of pellets.
Wood at Teesside High School (NZ 425149)	9. 6.93	birds 2	48 cm ³ of pellets
(5. 7.93 6.12.93	birds 4 wood mouse 4 brown rat 2	50cm ³ of pellets 50 cm ³ of pellets Pellets collected from a variety of sites within the wood



Vegetation Management at Guisborough Branch Walkway

Since the appointment of a Countryside Warden in September 1995 extensive vegetation management has taken place, especially in the wetland area.

The site was designated a Local Nature Reserve in April 1996 which gives it some protection. A management prescription has been drawn up for the site to ensure continuity and stability of management. Without a plan the site is vulnerable to inconsistent management which can result in a waste of resources or worse, in the loss of the special interest of the site. All work taking place on the site is done according to the management plan

The 2.9 hectare wetland area contains fourteen ponds linked with streams and marsh areas. It has seen little management since its creation in 1993. Species such as reedmace, phragmites, canadian pondweed and water parsnip were introduced when the ponds were created and have colonized rapidly. They now require intensive management.

Water parsnip was cleared from two ponds on the track bed and several small willows were removed from the edges last winter. This has allowed light through to the ponds and over the summer there was a notable increase in the number of invertebrates using the ponds, especially water boatmen, whirligig beetles, water shrimps and dragon and damselflies. As these ponds are quite small they need intensive management in the future to maintain equilibrium.

The main concentration of vegetation management has taken place in the largest pond in the wetland meadow. This has been almost entirely colonized by reed-mace and has silted up by over one metre in the centre around the small island,. Because of the silt, machinery cannot be used and cutting has proved unsuccessful in the past, so areas of reed-mace have been hand pulled, creating areas of open water. It will take several years to remove sufficient reed-mace to reach a point when it is easily controlled with one or

two days management a year. The installation of sluice gates to control water levels in the wetlands should halt further colonization while the problem is controlled. Several patches of reeds will be retained to provide cover for breeding birds.

Another major undertaking this year has been the clearance of spear thistle from the rough grassland areas. It is very invasive and large areas have been repeatedly cut over the summer months to prevent the thistles seeding. Small areas were left as the flowers are an excellent source of nectar for the many species of invertebrate in the meadow.

Areas of willow-herbs and nettles have been retained to provide cover and nectar. Tussocks of rush between the ponds have remained undisturbed as these provide a habitat for hibernating amphibians and invertebrates.

Future management in the wetland include a late summer cut of the drier areas of rank grassland to decrease the nutrient content and allow traditional meadow species such as vetches, clovers, harebells and betony to flourish, so providing a perfect habitat for many species.

On the walkway itself, small stands of willow have been coppied to open up areas of ground where spring flowers such as primrose, cowslip, and violets can proliferate. Coppicing is a traditional management technique for trees like willows and hazel. It is hoped that the 'withies' obtained from the stools in the future will be used for projects on site.

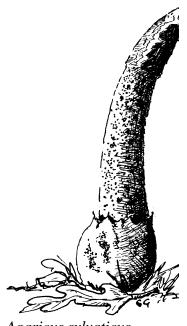
Most woodland management takes place in the winter and during January and February hedge laying will take place on a mature hawthorn/blackthorn hedge at the Nunthorpe end of the Walkway. This produces a thick dense hedge, which is an invaluable habitat for birds and small mammals. Trees and other small sections of hedge will be planted in the next few months. Monitoring will take place throughout next summer to chart the progress of the work done in 1996 and to review management policies.

Bryony Serginson

Fungi in the Forest adjacent to the Walkway

The following fungi were observed in the woodland adjacent to the walkway during a fungus-foray held in the late summer.

Scaly Wood-mushroom



Agaricus sylvaticus
Amanita fulva Tawny Grisette
Amanita muscaria Fly Agaric
Armillaria mellea Honey Fungus

Auricularia auricula-

judae

Collybia butyracea Butter Cap

Collybia confluensClustered Tough-shankCollybia peronataWood Woolly-footCollybia radicataRooting-shank

Jew's Ear

Coriolus versicolor Many-zoned Polypore Corprinus micaceus Glistening Ink-cap

Daedalea quercina Maze-gill

Fistulina hepatica Beefstake Fungus Hygrophoropis False Chanterelle

aurantiaca

Hypholoma fasiculareSulphur TuftMutinus caninusDog StinkhornPaxillus involutusBrown Roll-rimPhallus impudicusStinkhorn

Pleurotus ostreatusOyster MushroomPolyporus squamosusDryad's Saddle

Russula ochroleuca Common Yellow Russula

Pat Wood

Moths at Cowpen Bewley

The majority of the following species were trapped in a Heath Trap, which was left out overnight on ten different occasions. Others were casual observations. All records are from the recently established Cowpen Bewley Woodland Park; an area of land around Cowpen Bewley and the old Cowpen brick pit.

Diarsia rubi Autographa gamma	Small Square Spot Silver Y	Orthosia incerta Agrostis exclamationis	Clouded Drab Heart and Dart
Autographa pulchrina	Beautiful Golden Y	Apamea unanimis	Small Clouded Brindle
Caradrina morpheus	Mottled Rustic	Apamea monoglypta	Dark Arches
Xestia c-nigrum	Setaceous Hebrew Character	Apamea remissa	Dusky Brocade
Mythimna ferrago	The Clay		Large Yellow Underwing
Mesapamea secalis	Common Rustic	Hypena probo scidalis	The Snout
Mythimna furca	Brown Line Bright Eye	Luperina testacea	Flounced Rustic
Spilosoma lubricipeda	White Ermine	Hepialus lupulinus	Common Swift
Xanthorhoe montanata montanata	Silver Ground Carpet	Scotopteryx chenopidiata	Shaded Broad Bar
Lomaspilis marginata	Clouded Border	Eulithis pyraliata	Barred Straw
Costaconvexa bilineata bilineata	Yellow Shell	Abraxus grossulariata	The Magpie
Xanthorhoe fluctuata	Garden Carpet	Philudoria potatoria	The Drinker
Laothoe populi	Poplar Hawk	Zygaena trifolii	Five-spot Burnet Smokey Wainscot

Agapeta hamana

The Small Clouded Brindle (*Apamea unanimis*) is of note as the records from Durham in Dunn and Parrack are rather localised in the Team valley, lower Wear valley, Hamsterly Forest and Waldridge Fell. Other records are isolated and were made in the 1930's at Barnard Castle and Norton (by Heslop-Harrison). It prefers wet meadows particularly where Reed Grass (*Phalaris arundinacea*) and *Carex* spp. grow.

Gwynn Williamson

The Knopper Gall

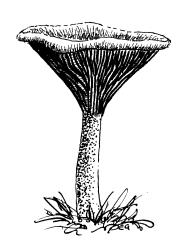
The Knopper Gall is found on the acorns of the English Oak (*Quercus robur*). It consists of a mass of rigid tissue, which forms between the cup and the acorn. Often more than one gall can form on each acorn so that the whole structure becomes concealed. At first the galls are bright green and sticky but later turn hard and brown. They are caused by a small gall wasp *Andricus quercuscalieis* belonging to the *Cynipidae* family. The galls were first seen in Britain over forty years ago when they arrived from the continent.

The insect has two stages in its life history. One generation forms galls on acorns in the summer and autumn, the second generation on the catkins of the Turkey Oak (*Quercus cerris*). If the gall is to survive the two species of oak must be present. The Turkey Oak was first introduced into England in 1735 as an ornamental tree and was planted in parks and gardens.

Inside each gall is a large chamber with a small round inner gall at the base, which contains the larvae of the wasp. Usually other small wasps become resident in the gall. These are known as inquilines and usually do not harm the wasp larvae but parasites also occur which will attack and kill the larvae. Gradually the gall wasp has moved northwards. A B.S.B.I. study showed that by 1991 it had already reached Alnwick in Northumberland. As it moves northwards new parasites and inquilines may become adapted to living in the gall. It already appears to have become well established into our area. We have recorded it in Stewarts Park, Albert Park, Locke Park, Preston Park, Thornaby Green, and West Cemetery (Darlington). One tree was covered in galls in Stewarts Park in 1996.

It would be interesting to know the gall's distribution in this area and to find out if it is increasing and becoming a pest. Please look out for these galls next summer and autumn. Make a record of where they are found and an estimate of the number of acorns affected. Also check if there are any Turkey Oaks growing nearby.

Pat Wood



Marton West Beck and Sandy Flatts

The Marton West Beck

Marton West Beck rises in the undulating land, which lies between the Cleveland Hills and the River Tees. It forms a corridor of natural habitat, which stretches deep into urban Middlesbrough.

The valley, bordered for much of its length by housing developments, contains areas of deciduous and mixed woodland and natural grassland and shrubland, which supports a diversity of flora and fauna. Throughout its course, the beck is flowing over glacial material, predominantly clay, with varying amounts of coarse glacial deposits.

It flows northwards through the following tetrads:

NZ 51H Bonnygrove area

51C Gunnergate - Marton area

51D Easterside area

Municipal golf Course - Newham Bridge area - and thence through urban

Middlesbrough towards the Tees.

This valley, along with part of the Newham beck Valley (which flows in parallel to the M.W.B. immediately to the west and eventual joins up with it near Newham Bridge), is the most interesting botanically of all the becks south of Middlesborough which flow into the Tees.

Its immediate banks have been very little interfered with and so they support many of the native species which have not survived elsewhere due to the intense cultivation and landscaping which is a feature of the surrounding countryside.

The following plants still survive on the slopes of the steep valley in the Marton/Tollesby stretch of the Beck known locally as Primrose Valley although primroses no long grow there:

Alchemilla vulgarise (Xanthochlora) Lady's mantle

Betonica officinalisBetonyCampanula rotundifoliaHarebellGalium cruciataCrosswortGlechoma hederaceaGround IvyLathyrus montanusBitter VetchPotentilla erectaTormentilPrimula verisCowslip

Ranunculus bulbosusBulbous buttercupSuccisa pratensiDevil's-bit ScabiousStellaria gramineaLesser Stitchwort

Trifolium medium Zig-zag clover Viola riviniana Dog Violet

and in the moist valley bottom amongst the coarser grasses and plants which tend to dominate unless controlled (such as hogweed, bramble, rosebay willow-herb and meadow-sweet) are:

Ajuga reptans Bugle Conopodium majus Pignut

Geranium pratense Meadow Cranes-bill

by the beck itself is to be found:

Scrophularia aquatic Water figwort
Stellaria neglecta* Greater Chickweed

Epilobium hirsutam Greater Hairy Willow_herb

The latter dominates a large stretch of the beck. There is also the remnants of some woodland and hawthorn scrub with plants such as

Moehringia trinerva Three-veined sandwort

Geum urbanum Wood Aven
Dryopteris felix-mas Male Fern

From Brass Castle Lane to Emerson Avenue the scenery changes quite dramatically. The Bonnygrove Valley is still remote from the urban population and retains much of its natural state whereas the central part at Gunnergate is very much a recreation area being surrounded by housing estates. Here, at this stage, is woodland, which is semi-natural and still contains much of its original flora. To the north of Primrose Valley and Ladgate Lane the stream enters the Tees plain proper and as it winds its way from Ladgate Lane to Newham Bridge, known locally as Devil's Bridge, the eastern banks remain virtually untouched. Indeed, in spite of much human pressure, the adjacent sloping areas still support a wealth of flowers some of great interest. On the west side is the Middlesborough Municipal Golf Course.

North of the ancient blackthorn/hawthorn hedge at Newham Bridge the Beck then flows through well manicured grassland, with it's network of cycle tracks, as it enters suburban Middlesborough. Even here the management policy allows much of the beckside flora to survive and a large well-established patch of Russian *Comfrey (Symphytum x uplicandum)* has been allowed to spread its range.

It is also possible to follow a track along the Beck from Emerson Avenue and continue southwards with a few difficult stretches, as far as Brass Castle Lane. Some of the other interesting plants along this stretch of the beck are:

+Anemone nemorosa Wood Anemone

Arum maculatum Wild Arum (Cuckoo pint)

Cardamine flexuosa Wavy Bittercress
Barbarea vulgaris Common Wintercress

Carex hirta Hairy Sedge

C. sylvatica

Circaea lutetiana

Chrysosplerium oppositifolium

Dactylorhiza fuchsii*

Hypericum androsaemum

H. hirsutum
H. maculatum**
H. tetrapterum

+Mercurialis perennis

Galium verum
+Orchis mascula
+Oxalls acetosella
Senecio aquaticus
+Veronica montana
V. hederifolia
Sanguisorba minor

S. officinalis

Pimpinella saxifraga

Viola hirta* V. odorata Plantago media* Wood Sedge

Enchanter's Nightshade

Golden Saxifrage Spotted Orchid

Tutsan

Hairy St. John's-wort

Inperforate St. John's-wort Square-stalked St. John's-wort

Dog's Mercury
Lady's Bedstraw
Early Purple Orchid

Wood Sorrel Marsh Ragwort Wood Speedwell Ivy-leaved Speedwell

Salad Burnet Great burnet Burnet saxifrage

Hairy Violet (prob. extinct)

Sweet Violet Hoary Plantain

Prunua cerasifera (Cherry Plum) has long been established where the Slip Inn car park is now. Malva moschata (Musk Mallow) seems to have disappeared from its site (1987) since a tree fell across the particular bankside where it flourished. Euphorbia corallioides*** (Coral Spurge) first found in 1984 seems to have also suffered - by trampling of young Beck-jumpers! One plant appears to have survived (1996). This plantis known from only one locality in G.B. where it has survived at least 100 years. The origin of this colony is uncertain. A colony of French Cranes-bill (Geranium endressii) seems to be increasing nearby.

Ian Lawrence

North of Slip Inn, East bank

Lichens on Crack Willow Evernia prunastri Parmelia sulcata

⁺ indicates a plant of natural woodland

^{**} a rare plant in the County

^{*} an unusual Plant for the area

Moths

Xanthorhoe montanata Semiothisa clathrata Camptogramma bilineata Aphelia paleana/unitana Agriphila tristella Chrysotuechia culmella Agapeta hamana Silver Ground Carpet Latticed Heath Yellowshell

Hook Marked Conch Large Yellow Underwing

Butterflies

Noctua pronuba

	Parkway-	Gunnergate	Stainton	Marton	Woodland
	Gunnergate	Lane-	Way (and	West Beck-	edge to
	Lane	Stainton	open areas	Cross Steps	Bonny
		Way	South)		Grove Farm
Comma				*	*
(Polygonia c-					
album)					
Peacock		*		*	*
(Inachis io)					
Tortoiseshell	*	*	*	*	
(Aglais urticae)					
Red Admiral	*	*		*	
(Vanessa					
atalanta)					
Painted Lady	*	*	*		*
(Cynthia					
cardui)					
Orange Tip	*		*	*	*
(Anthocharis					
cardamines)					
Green veined	*	*	*	*	
White					
(Pieris napi)					
Large White	*	*	*	*	*
(Pieris					
brassicae)					
Small White	*		*	*	*
(Pieris rapae)					
Meadow Brown	*	*	*	*	
(Maniola					
jurtina)					

	Parkway-	Gunnergate	Stainton	Marton	Woodland
	Gunnergate	Lane-	Way (and	West Beck-	edge to
	Lane	Stainton	open areas	Cross Steps	Bonny
		Way	South)		Grove Farm
Common Blue	*		*		
(Polyommattus					
icarus)					
Large Skipper		*	*	*	
(Ochlodes					
venata)					
Small Skipper		*	*		*
(Thymelicus					
sylvestris)					
Ringlet		*	*		*
(Aphantopushyp					
erantus)					
Small Copper			*		*
(Lycaena					
phlaeas)					

White Letter Hairstreak (*Strymonidia w-album*) is notable by its absence from previously known colonies.

Eric Gendle

MammalsNotable BirdsFox (with two cubs)KingfisherSparrowhawk

Sandy Flatts

Adalia 10-punctata10-spot LadybirdThea 22-punctata22-spot LadybirdAgapeta hamanaHook Marked Conch

Crambus lathionellus Crysoteuchia culmella Aphelia paleana/unitana

Xanthorhoe montanata Silver Ground Carpet

Oyster fungus on dead elm

Freshwater Molluscs Millipedes

Lymnaea stagnalis Tachypodoiulus niger Terrestrial Molluscs Polydesmus angustus

Lauria cylindraceaWoodliceAegopinella nitidulaOniscus asellusDeroceras reticulatumPhiloscia muscorum

Helix aspersa

Tony Wardhaugh

Field Meetings 1997

Full details of the walks and their starting points are given below. If you require further details about a walk or in the event of inclement weather and possible cancellation please contact the leader of the walk. Please carry suitable refreshment with you! This will be necessary for the walks that start on a morning and it may well be appropriate to take tea on an afternoon walk. The meetings where detailed recording of species will take place are marked on this programme \mathscr{P} . At certain town sites a security guard will be with the parked cars; such sites are marked \mathscr{P} . The charge by the Club will be 50 pence *per person*.

Presidents message to members and potential members

I hope that you will find outings to your taste from this varied programme. To any prospective new members I should like to say 'do come along'. You will find our members friendly and helpful. I have found the field-trips a splendid way of learning more about the natural history of the area.

Pam Law

Saturday 12th April, 11.00am, leader Darroll Fryer 201287 635778

G.R. SE984876. Raincliffe Woods. We shall walk from the Forge Valley to Throxenby Mere. Park in the car park at the north end of the valley; the first on the right when approaching from Hackness and Everley.

Saturday 26th April, 11.00am, leader Eric Gendle 2 01642 324360

G.R. TA010947. Cloughton. Meet at the north end of the village near the sharp bend in the A171. We shall then drive to a coastal parking area and walk to and from the Hayburn Wyke Nature Reserve by a circular route.

G.R. NZ453156. The Holmes and Bassleton Wood. Cars will be parked at the Harold Wilson Centre Car Park at the corner of Bader Avenue and Thornaby Road.

Saturday 10th May, 2.00pm, leader Maurice Ward 2 01642 711028

G.R. SE469993. Sheepwash car park. The walk will be in the Osmotherly area.

Wednesday 14th May, 7.00pm, leader Pat Wood 201642 484983

G.R. NZ633194. Upleatham Village. The walk in the Upleatham area will include a visit to Soapwell Wood.

Wednesday 21st May, 7.00pm, leader Ian Lawrence 2 01642 818212

G.R. NZ274139. Outside the main gates of the West Cemetery, Carmel Road North, Darlington. The purpose of the visit is to look at the tree-blossom; the wide variety of trees was noted in a visit last year.

Sunday 1st June, 11.00am, leader Vincent Jones 2 01642 722814

G.R. SE539917. We shall meet at Moorgate for a walk initially in the Hawnby Hill access area. This will be followed by a walk in Ladhill Gill to the east of Hawnby Hill.

Wednesday 4th June, 7.00pm, leader Chris Lowe 201642 701832

G.R. NZ416235. Parking at Low Middlefield Farm for a visit to the Thorpe Thewles area.

A route to the farm, not the shortest, is from Thorpe Thewles. Drive south east through the village, turning north to drive under the A177. Turn right at a minor crossroad, the farm is on the left.

№ Wednesday 11th June, 7.00pm, leader Malcolm Birtle **2** 01642 558055

G.R. NZ453228. Billingham Beck Ecology Park. The area that is to be recorded throughout the season is the area of meadow to the north of the railway line.

Sunday 15th June, 11.00am, leader Neil Baker **2** 01325 361016

G.R. NY947254. Middleton in Teesdale. Meet at the car park at the far end of the village. This will be a linear walk with some cars left in the village and others being parked at the Bowlees car park.

Wednesday 18th June, 7.00pm, leader Angela Cooper 2 01347 868051

G.R. NZ528273. Seal Sands area. We shall park at the Field Centre car park near the power station and will visit an adjoining coastal area. If approaching from Port Clarence along the A178, turn right at the second roundabout. There is a field centre sign at this junction..

Sunday 22nd June, 11.00am, leader Pam Law **2** 01287 636976

G.R. SE570480. OS Map 105, Askham Bog Reserve. The reserve is 2 miles south west of York just off the A64, near Askham Bryan. It is a little difficult to locate. Pam will provide further details nearer the time.

Wednesday 25th June, 7.00pm, leader Russell McAndrew 🖀 01429 277291

G.R. NZ484362. The Hart/Haswell Walkway. Park at Hart Station that is at the junction of Hartville Road and Ocean Road.

Saturday 28th June, 11.00am, leader Colin Chatto 201642 599616

G.R. SE847854. Ellerburn Banks Nature Reserve. Turn down the Dalby Forest road a mile north of Thornton-le-Dale on the road leading to Whitby. Cars can be parked shortly before the 'toll-gate' near a forest track junction. There may be a member of the reserve committee to guide us round the reserve.

Wednesday 2nd July, 7.00pm, leader Malcolm Birtle 201642 558055

G.R. NZ352137, The Whinneys Nature Reserve, Middleton St. George. Take the south east exit at the roundabout on the A67 at the Middleton St. George by pass. It is a left turn when travelling from the airport to Darlington. **Take care** when parking as the parking-area is adjacent to the roundabout.

Wednesday 9th July, 7.00pm, leader Rob Scaife (Vincent Jones 01642 722814) G.R. NZ465114, Brewsdale Wildlife Trust Reserve. Park near the 'Falcon', Hilton Village.

Sunday 13th July, 11.00am, leader Pat Wood **2** 01642 484983

G.R. NZ632194. We shall walk in an area between Lythe and the coast. Park in the village adjacent to the road that leads to Ugthorpe.

G.R. NZ461161. Stainsby Beck. We shall park **behind** the Asda supermarket, Thornaby.

Saturday 19th July, 10.30am, leader John Blackburn 🖀 01642 583815

G.R. SE952976. Castlebeck Farm, Harwood Dale, where cars may be parked in the farmyard. This is a YNU visit to the Jugger Howe area.

Saturday 26th July, 11.00am, leaders Joan Bradbury & Norma Pagdin ☎ 01429 268416

G.R. NY995393. We shall meet and possibly park in the car park of the information centre at Stanhope. The walk in the area will be up to 8 miles in length with an alternative shorter return-route.

Sunday 3rd August, 2.00pm, leader Chris Lowe 201642 701832

G.R. NZ669141. We shall park in the car park at Lockwood Beck reservoir for a walk on Lockwood Beck moor.

✓ Saturday 16th August, 11.00am, leaders Tony Wardhaugh & Malcolm Birtle © 01642 558055

G.R. NZ453228. Billingham Beck Ecology Park. There will be a Freshwater Workshop in the centre to investigate material gathered on site.

Sunday 31st August, 11.00am, leader Andrew Astbury 🕿 01642 823114

- G.R. NZ826054. We shall meet in the car park at the bottom of the bank on the outskirts of Grosmont and take a circular walk between Grosmont and Sleights. In 1996 there were return trains to Grosmont at 1615 and 1724hrs.

Sunday 28th September, 11.00am, leader Eric Gendle 01642 324360 G.R. SE853937. The Hole of Horcum car park. The walk will be in Newtondale. Saturday 11th October, 11.00am, leader Alick Hunter 01642 818871 G.R. SE564890. Newgate Bank car park, Bilsdale. The walk will be in the Newgate

Bank area.

MEETINGS OF THE YORKSHIRE NATURALISTS' UNION

MEETINGS OF THE NORTHERN NATURALISTS' UNION

Details are available from Malcolm Birtle.

Details are available from John Blackburn.