

Battlefield Line Wildlife Survey

Market Bosworth & District
Natural History Society

Editors G. L. Finch
& S. F. Woodward

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The Market Bosworth & District Natural History Society is a group of very active local natural history enthusiasts. The Society enjoys a comprehensive programme of both indoor and outdoor meetings. In addition the Society also manages a wildflower meadow on Bosworth Park. The Society was formed in January 1976 by twenty two local natural history enthusiasts. During the inaugural meeting it was agreed that the aims of the Society should be:-

- To cover every aspect of natural history, and cater for all interests.
- To hold monthly indoor meetings, and outdoor meetings wherever possible.
- To make detailed investigations, with records, of particular sites.

During the intervening years the Society has held closely to these aims and has grown to a current membership of around seventy. Indoor meetings are normally held on the third Tuesday of the month at 7:30pm at Market Bosworth Community College. Visitors are welcome, for the current programme see:

www.leicestershirevillages.com/marketbosworth/naturalhistorysociety.html

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FOREWORD

The stimulus for the Battlefield Line project was a proposal by the Leicestershire and Rutland Federation of Women's Institutes to carry out a Wildflower Survey in the two counties during the summer of 2007.

Wild flowers have declined dramatically over the past sixty years and approximately 98% of our traditional wildflower meadows have disappeared. This was partly due to the Second World War when many meadows were ploughed to grow food. Afterwards, more intensive farming and a change from hay production to silage saw more meadows disappear. Grass verges along roadsides, which held some of the last remnants of meadow flowers have suffered, and continue to suffer, from unsympathetic management.



Figure 1 Society members recording wildlife on the Battlefield Line

The aims of the WI survey were to encourage the membership to become involved in finding some of our more common wild flowers and to see how they were faring locally. Each volunteer was to be given an area to survey, and twelve common flowers to record, including Primrose, Cowslip, Bluebell and Meadowsweet. These were chosen as they were good habitat indicators and were easy to recognise.



Figure 2 Painted Lady on Common Knapweed

In 1999, Market Bosworth and District Natural History Society had created a very successful wildflower meadow on the Bosworth Country Park as a millennium project. The Society has always had close links with the local branch of the WI so it was thought appropriate to offer them support. Initially, the intention was to offer botanical expertise to help their members to improve their identification skills and to organise joint wild flower walks in the area of Market Bosworth, including visits to the Society wildflower meadow. As discussions progressed, the enthusiasm for the project grew and it was suggested in committee that we extended the survey to cover the Battlefield Railway Line. This offered a linear strip of relatively wild land, compared with the adjacent agricultural fields. It

had not, as far as we knew, been recently surveyed for its wild flowers. Initial enquiries indicated that access to the railway might be possible, and it was then just a short step towards a decision to widen the survey to cover any form of wildlife that the Society felt competent to record. We had moved a long way from the initial offer to help the WI with their survey, but we were confident that we had the will and the resources to tackle both projects.

We approached the Shackerstone Railway Society regarding access to the Battlefield Line to carry out a wildlife survey over the length from Carlton to Shenton Station. They very kindly gave permission and agreed to close the line on given dates and times so that we could have safe access.



It was a difficult summer in which to carry out the project. Variable weather conditions were endured, fluctuating between cold and very hot, with occasional torrential rain. One survey in particular will be remembered by all who attended; it started in glorious June sunshine but by mid-afternoon recorders were soaked to the skin and, with dramatic thunder and lightning all around, the survey was abandoned for the day. However, the dedication of two members of the team was so great that they returned later and completed their assignment. The unseasonable weather of 2007 did have an effect on the project as the records show; insects and fungi especially were low in numbers. Nevertheless the survey was enjoyed by those taking part and many gained tremendous insight into new natural history subjects by working with others having differing specialist knowledge.

Ros Smith

Chairman, MBDNHS

ACKNOWLEDGEMENTS

Ros Smith would like to thank all the volunteers who gave up their time to participate in this survey and to prepare the results. Leicestershire County Council Community Heritage Initiative kindly provided maps for our use. Grateful thanks are also due to the Shackerstone Railway Society, through David Weightman, for allowing us access to the "Battlefield Line".

The survey participants acknowledge with thanks the enormous contribution of our Chairman, Ros Smith. Not only did she first propose that the Society supported the WI with their wild flower survey, she also liaised with them throughout, made all the arrangements for access to the railway, planned and organised the logistics of each visit and enthused and encouraged all those recorders who contributed throughout the duration of the survey. We would like to thank Michael Jeeves, county plant recorder, for checking the plant list.

Photographs have been provided by Peter Sykes, Graham Finch, Stephen Woodward and Stephen Smith.



Figure 4 Treble-bar moth

INTRODUCTION

The Battlefield Line is the last remaining part of the former Ashby & Nuneaton Joint Railway which was opened in 1873. It runs from Shackerstone via Market Bosworth to Shenton and is now operated by the Shackerstone Railway Society (see www.battlefield-line-railway.co.uk).

The section of the Battlefield Line surveyed was between Carlton (SK384047) in the north and Shenton Station (SK396004) in the south, a total length of 4.8 km. This fell within six 1 kilometre grid squares on the Ordnance Survey map, so these were adopted as our recording units. The 1 km squares are, from north to south, SK3804, 3904, 3903, 3902, 3901 and 3900. The length of line in 3904 was only 0.3 km, significantly shorter than the other squares. The line runs through the civil parishes of Carlton, Market Bosworth and Sutton Cheney, all in the Leicestershire Borough of Hinckley and Bosworth.

The underlying solid geology along the entire line is of Mercia Mudstone - a red-brown mudstone interspersed with areas of finer grained siltstone - formed during an arid period of the late Triassic Period, about 220 million years ago. The distinctive colour of this mudstone is reflected in the red fertile soils of the area, but the rock itself does not appear to outcrop at any point along the line as it is covered by various Quaternary (recent) drift deposits. These deposits are, to the north and south of the survey line (squares 3903 and 3900) derived from lake sediments and more recent river and stream alluvium. The central squares (3901 and 3902) are covered by boulder clay, sand

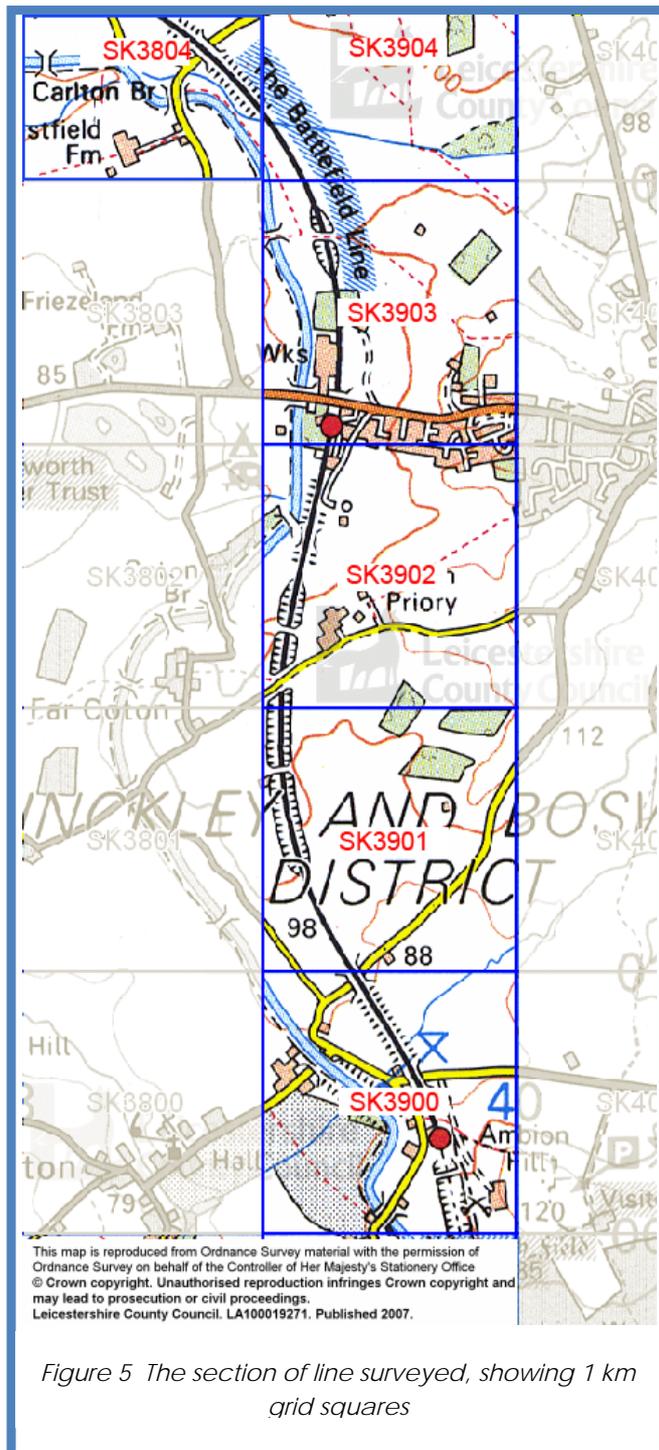


Figure 5 The section of line surveyed, showing 1 km grid squares

and gravel. The original pattern of this glacial deposition has been disrupted during the construction of the line by soil movement - the clay and sand, removed from cuttings, being transported to the sections requiring embankments. The soils along the track are expected to be variable but in the main mildly acidic (we did not test the soils). The track itself is mainly laid on concrete sleepers bedded into coarse granodiorite gravel, presumed to be from local Leicestershire quarries.

During the first of six visits, we found that it was impracticable to survey adequately the whole length of line during the five or so hours available to us. We therefore made it more manageable by recording over half the length on each visit, so the north and south halves were each covered three times between March and August 2007. Exceptions were mammals, birds and butterflies, for which the whole length was walked on all six visits. Lichens, which are equally visible throughout the year, were recorded progressively along the length during a series of visits. The surveys were done on Friday afternoons on 30 March, 27 April, 25 May, 15 June, 27 July and 24 August. With the numbers of individuals working on the survey the logistics required careful planning, with car movements arranged so that recorders could be dropped off and picked up again at varying times and places. The recorders were:

Steve and Ros Smith	Peter and Janet Sykes	Richard Iliffe
Graham and Anona Finch	David and Mary Penton	John and Monika Walton
Stephen Woodward	Ivan Pedley	Ray Morris

The recorders convened at the end of each fieldwork session for refreshments and to resolve identification queries on specimens or digital photos. Nearly all of the records were entered into the biological recording program *MapMate* on the same day. Recorders were not assigned to individual records, as we worked in a number of small groups. At the end of the year, the records were exported as spreadsheets for incorporation into this report.

The records are organised into taxonomic sections: Vascular plants, Bryophytes, Lichens, Fungi, Birds, Moths and Butterflies, and Other Groups. The records in each section are preceded by some introductory text by the recorder(s) responsible for checking them. The tables of records show, with an asterisk or other symbol, where each species was found, generally resolved to the 1 km grid square. A sketch map is provided above the grid square columns to help locate them. The tables do not show the date(s) on which a record was made; this is available in the *MapMate* data.

VASCULAR PLANTS

This group consists of the flowering plants, including trees, grasses, sedges and rushes, along with the ferns and horsetails.

Railways are exciting places for the botanist, as they embrace a wide range of habitats and provide open spaces where unexpected plants can spring up. In the immediate vicinity of the track, vegetation is kept to a minimum by regular cutting or the use of herbicide, so any long-lived plant more than a couple of inches high will not last long. Many smaller plants, however, typically annuals, seem to thrive in the absence of competition from larger plants. A number of plants specialise in the railway ballast habitat: the best example is Small Toadflax *Chaenorhinum minus*. In the *Flora of Leicestershire* (Primavesi & Evans 1988), 94% of all records came from railway ballast. Other typical ballast plants found on the Battlefield Line are the Horsetails *Equisetum*, Thyme-leaved Sandwort *Arenaria serpyllifolia*, Sticky Groundsel *Senecio viscosus*, Fairy Flax *Linum catharticum*, Black Medick *Medicago lupulina*, Thale Cress *Arabidopsis thaliana* and the annual fescues *Vulpia*. One of the surprises in this habitat was a colony of Common Cornsalad *Valerianella locusta* (Fig. 6) - one of the species listed in the *Leicestershire and Rutland Rare Plant Register* (Jeeves 2007).



Figure 6 Common Cornsalad

A metre or so beyond the track, the ballast is less harshly treated and is usually covered over with grassy vegetation, locally cropped short by rabbits. Here, the typical plants include Three-nerved Sandwort *Moehringia trinervia*, Common Mouse-ear *Cerastium fontanum*, Sticky Mouse-ear *Cerastium glomeratum*, Wall Speedwell *Veronica arvensis*, Common Centaury *Centaureum erythraea* (Fig. 7), Hop Trefoil *Trifolium campestre*, Creeping Cinquefoil *Potentilla reptans* and Scarlet Pimpernel *Anagallis arvensis*. A tiny flower of the Pea family, Bird's-foot *Ornithopus perpusillus* was a good find in this zone, being another locally rare plant (Jeeves 2007).

Where the vegetation is allowed to grow for more than a year, tall herbaceous plants including biennials and perennials become established at the expense of the annuals. As well as the ubiquitous thistles, nettles and coarse grasses, characteristic railway plants found here include the St. John's Worts *Hypericum*, Weld *Reseda luteola*, Agrimony *Agrimonia eupatoria*, Great Burnet *Sanguisorba officinalis*, Tall Melilot *Melilotus altissimus*, Rosebay Willowherb *Chamerion angustifolium*, Burnet-saxifrage *Pimpinella saxifraga*, Greater Burnet-saxifrage *Pimpinella major*, Great Mullein *Verbascum thapsus*,



Figure 7 Common Centaury

Wild Teasel *Dipsacus fullonum* and Mugwort *Artemisia vulgaris*. Garden escapes tend to occur in this zone, among which was a striking yellow patch of Leopard's-bane *Doronicum pardalianches*, Dotted Loosestrife *Lysimachia punctata*, a single plant of Soft Comfrey *Symphytum orientale* and a small colony of one of the Goldenrods from North America, *Solidago* sp. More garden plants were noticed at Market Bosworth Station, but were not counted as "wild" plants unless they had clearly escaped.

Many species can be found in these grassy areas, but they will not all co-exist for long. The more aggressive ones will out-compete the weaker ones. Woody species such as Blackthorn *Prunus spinosa* and Hawthorn *Crataegus monogyna* will eventually take hold and shade out most of the herbaceous species. The diversity will decline due to the natural process of succession. On a working railway such as the Battlefield Line, this cannot be allowed to proceed close to the track. It is the regular management of the trackside vegetation that keeps it open and suitable for small plants. Paradoxically, most disused railways (including those designated as nature reserves) have lost many wild flowers through neglect, whereas a sympathetically-managed working railway can maintain its botanical interest.



Figure 8 Himalayan Honeysuckle

Furthest from the track, the line is typically bounded by a line of shrubs and trees. Its composition is similar to typical hedgerows in the district, but with perhaps a greater proportion of willows *Salix* spp. Among the unusual shrubs we found was a new county record - Himalayan Honeysuckle *Leycesteria formosa* (Fig. 8), no doubt originating from a seed in a bird-dropping - from a garden rather than the Himalayas! In the shade of this cover grow woodland and wood-edge species, including Garlic Mustard *Alliaria petiolata*, Herb

Bennet *Geum urbanum*, Enchanter's-nightshade *Circaea lutetiana*, Herb-Robert *Geranium robertianum*, Hedge Woundwort *Stachys sylvatica* and Lords-and-Ladies *Arum maculatum*.

Drainage ditches provide suitably damp sites for Wavy Bitter-cress *Cardamine flexuosa*, Great Willowherb *Epilobium hirsutum* and Water Figwort *Scrophularia auriculata*. Even wetland and aquatic species such as Brooklime *Veronica beccabunga*, Duckweed *Lemna minor* and Broad-leaved Pondweed *Potamogeton natans* each managed to find somewhere to grow.

Brick-built railway bridges are always worth inspecting carefully, as they harbour special ferns and other plants that are rarely found elsewhere. Several bridges over the Battlefield Line support populations of Black Spleenwort *Asplenium adiantum-nigrum*, Maidenhair Spleenwort *A. trichomanes* and Wall-rue *A. ruta-muraria*. Our best find, on the vertical walls

of a bridge near Far Coton, was a thriving population of Wall Lettuce *Mycelis muralis* (Fig. 9). This is another species in the *Leicestershire and Rutland Rare Plant Register 2007*.

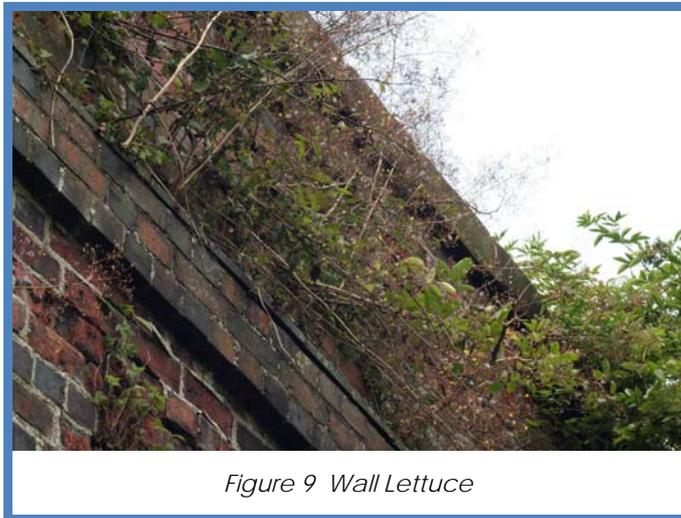
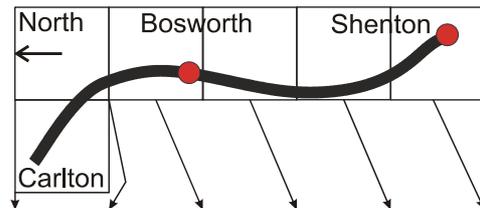


Figure 9 Wall Lettuce

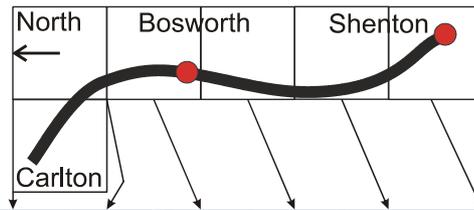
In the following table, plant names are in accordance with Stace (1997). The entries are presented in taxonomic sequence, so that closely related species are together. In total, the number of plant species recorded is 217. RPR = *Leicestershire and Rutland Rare Plant Register 2007*.

Stephen Woodward



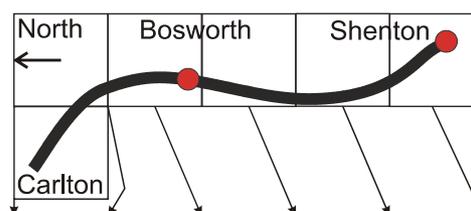
VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
Equisetaceae	Horsetail family						
<i>Equisetum arvense</i> Frequent, a typical railway plant.	Field Horsetail	*	*		*		*
<i>Equisetum palustre</i> Typically a plant of marshes, but has a curious liking for railways as well.	Marsh Horsetail	*					*
<i>Equisetum telmateia</i> Poorly drained areas.	Giant Horsetail	*			*		*
Aspleniaceae	Spleenwort family						
<i>Phyllitis scolopendrium</i>	Hart's-tongue				*		
<i>Asplenium adiantum-nigrum</i> This and the other two spleenworts are probably more commonly found in the county on railway bridges than any other habitat.	Black Spleenwort				*		



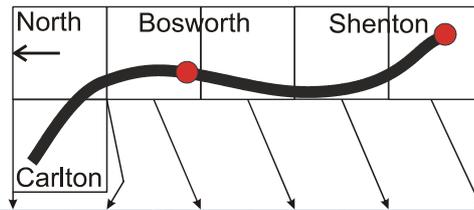
VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Asplenium trichomanes</i> On bridge	Maidenhair Spleenwort					*	
<i>Asplenium ruta-muraria</i> On bridge	Wall-rue	*		*	*		*
Dryopteridaceae	Buckler-fern family						
<i>Dryopteris filix-mas</i>	Common Male Fern				*	*	
Ranunculaceae	Buttercup family						
<i>Ranunculus acris</i>	Meadow Buttercup		*			*	
<i>Ranunculus repens</i>	Creeping Buttercup		*	*	*	*	
<i>Ranunculus sceleratus</i>	Celery-leaved Buttercup				*		
<i>Aquilegia vulgaris</i> A garden escape	Columbine			*			
Papaveraceae	Poppy family						
<i>Papaver somniferum</i> A weed of disturbed places, a garden escape	Opium Poppy			*	*		
<i>Papaver dubium</i>	Long-headed Poppy				*		
Urticaceae	Nettle family						
<i>Urtica dioica</i>	Common Nettle	*	*	*	*	*	*
Fagaceae	Beech family						
<i>Quercus robur</i>	Pedunculate Oak	*	*	*		*	*
Betulaceae	Birch family						
<i>Betula pendula</i>	Silver Birch	*					*
Caryophyllaceae	Pink family						
<i>Arenaria serpyllifolia</i> At least some plants were ssp. <i>leptoclados</i> .	Thyme-leaved Sandwort			*	*		
<i>Moehringia trinervia</i> Common where the grassland meets the bare ballast.	Three-nerved Sandwort	*	*		*	*	*
<i>Stellaria media</i>	Common Chickweed	*			*		*



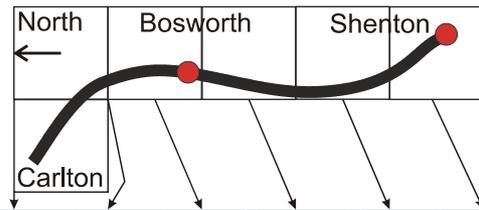
VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Stellaria graminea</i>	Lesser Stitchwort				*		
<i>Cerastium fontanum</i>	Common Mouse-ear	*	*		*		*
<i>Cerastium glomeratum</i>	Sticky Mouse-ear			*			
<i>Sagina procumbens</i>	Procumbent Pearlwort		*	*	*	*	
<i>Silene latifolia</i>	White Campion				*		
	Surprisingly rare, only one or two plants.						
<i>Silene dioica</i>	Red Campion	*	*	*	*	*	*
Polygonaceae	Knotweed family						
<i>Persicaria maculosa</i>	Redshank		*		*	*	
<i>Polygonum aviculare</i> agg.	Knotgrass				*		
<i>Rumex acetosella</i>	Sheep's Sorrel				*		
<i>Rumex crispus</i>	Curled Dock	*		*			*
<i>Rumex conglomeratus</i>	Clustered Dock		*				
<i>Rumex sanguineus</i>	Wood Dock				*		
<i>Rumex obtusifolius</i>	Broad-leaved Dock	*	*	*	*	*	*
Clusiaceae	St John's-wort family						
<i>Hypericum perforatum</i>	Perforate St. John's-wort	*	*	*	*	*	*
<i>Hypericum maculatum</i>	Imperforate St. John's-wort	*				*	*
	Scarce in Leicestershire (RPR).						
<i>Hypericum tetrapterum</i>	Square-stalked St. John's-wort	*				*	*
Violaceae	Violet family						
<i>Viola odorata</i>	Sweet Violet			*			
Salicaceae	Willow family						
<i>Populus tremula</i>	Aspen				*		
<i>Salix fragilis</i>	Crack Willow				*	*	
<i>Salix alba</i>	White Willow			*			
<i>Salix viminalis</i>	Osier			*			
	One tree						



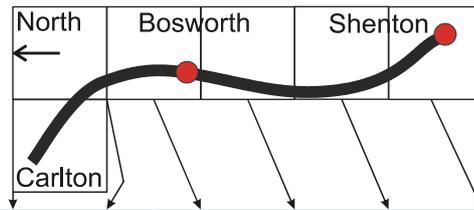
VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Salix caprea</i>	Goat Willow			*	*	*	
<i>Salix cinerea</i> ssp. <i>oleifolia</i>	Rusty Willow			*	*		
Brassicaceae	Cabbage family						
<i>Sisymbrium officinale</i>	Hedge Mustard				*		
<i>Alliaria petiolata</i>	Garlic Mustard	*	*	*	*		*
<i>Arabis thaliana</i> Very common on the ballast.	Thale Cress	*	*	*	*		*
<i>Barbarea vulgaris</i> A single plant on a hedgebank.	Common Winter Cress			*			
<i>Cardamine pratensis</i>	Cuckooflower					*	
<i>Cardamine flexuosa</i>	Wavy Bitter-cress	*			*		*
<i>Cardamine hirsuta</i> On ballast	Hairy Bitter-cress	*				*	*
<i>Erophila verna</i> On ballast	Common Whitlow-grass	*			*		*
<i>Capsella bursa-pastoris</i>	Shepherd's-purse	*			*		*
Resedaceae	Mignonette family						
<i>Reseda luteola</i> A few plants on the ballast.	Weld				*		
Primulaceae	Primrose family						
<i>Primula vulgaris</i>	Primrose			*			
<i>Primula veris</i>	Cowslip				*	*	
<i>Lysimachia nummularia</i>	Creeping-Jenny		*				
<i>Lysimachia punctata</i> Odd plants of this garden escape.	Dotted Loosestrife	*			*		*
<i>Anagallis arvensis</i>	Scarlet Pimpernel			*	*	*	
Saxifragaceae	Saxifrage family						
<i>Saxifraga tridactylites</i> Just a few plants on the ballast.	Rue-leaved Saxifrage				*		



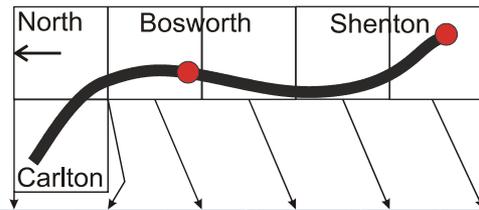
VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
Rosaceae	Rose family						
<i>Filipendula ulmaria</i>	Meadowsweet	*					
<i>Rubus idaeus</i>	Raspberry					*	
<i>Rubus fruticosus</i> agg.	Bramble	*	*	*	*	*	*
<i>Potentilla reptans</i>	Creeping Cinquefoil	*	*	*	*	*	*
<i>Potentilla sterilis</i>	Barren Strawberry					*	
<i>Fragaria vesca</i>	Wild Strawberry				*	*	
<i>Geum urbanum</i>	Herb Bennet		*	*	*	*	
<i>Agrimonia eupatoria</i>	Agrimony	*			*	*	*
<i>Sanguisorba officinalis</i>	Great Burnet	*		*			*
<i>Aphanes arvensis</i> agg. On ballast	Parsley Piert			*		*	
<i>Rosa arvensis</i>	Field Rose			*			
<i>Rosa canina</i> agg.	Dog Rose	*	*	*		*	*
<i>Prunus spinosa</i>	Blackthorn	*	*	*		*	*
<i>Malus domestica</i> Those that were checked carefully were not Crabs, but domestic apples.	Apple					*	
<i>Sorbus aria</i>	Whitebeam			*			
<i>Crataegus monogyna</i>	Hawthorn	*	*	*	*	*	*
Fabaceae	Pea family						
<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil	*	*		*		*
<i>Ornithopus perpusillus</i> In short vegetation near the track. A new site for this rare plant (7 other sites listed in RPR).	Bird's-foot				*	*	
<i>Vicia cracca</i>	Tufted Vetch	*		*	*	*	*
<i>Vicia hirsuta</i>	Hairy Tare	*		*	*	*	*
<i>Vicia sepium</i>	Bush Vetch	*	*	*	*	*	*
<i>Vicia sativa</i>	Common Vetch	*		*	*		*



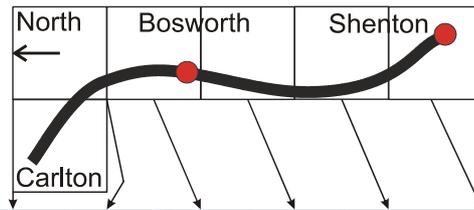
VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Lathyrus pratensis</i>	Meadow Vetchling	*		*	*	*	*
<i>Melilotus altissimus</i>	Tall Melilot				*		
<i>Medicago lupulina</i>	Black Medick Very common on ballast throughout.	*	*	*	*	*	*
<i>Trifolium repens</i>	White Clover		*		*		
<i>Trifolium campestre</i>	Hop Trefoil			*	*	*	
<i>Trifolium dubium</i>	Lesser Trefoil	*		*	*	*	*
<i>Trifolium pratense</i>	Red Clover	*		*	*		*
<i>Ulex europaeus</i>	Gorse	*					*
Onagraceae	Willowherb family						
<i>Epilobium hirsutum</i>	Great Willowherb Frequent, especially along ditches.		*	*	*	*	
<i>Epilobium parviflorum</i>	Hoary Willowherb					*	
<i>Epilobium montanum</i>	Broad-leaved Willowherb		*	*	*	*	
<i>Chamerion angustifolium</i>	Rosebay Willowherb	*	*	*	*	*	*
<i>Oenothera</i> sp.	Evening Primrose Keys out to <i>Oe. cambrica</i> but identity uncertain. Garden escape from Market Bosworth railway station.				*		
<i>Circaea lutetiana</i>	Enchanter's-nightshade			*	*		
Euphorbiaceae	Spurge family						
<i>Euphorbia helioscopia</i>	Sun Spurge			*			
<i>Euphorbia exigua</i>	Dwarf Spurge			*			
<i>Euphorbia peplus</i>	Petty Spurge All three spurges found on Bosworth Station platform.			*	*		
Linaceae	Flax family						
<i>Linum catharticum</i>	Fairy Flax				*		



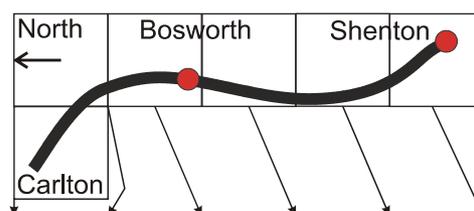
VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
Aceraceae	Maple family						
<i>Acer platanoides</i>	Norway Maple	*					*
<i>Acer campestre</i>	Field Maple					*	
<i>Acer pseudoplatanus</i>	Sycamore			*			
Geraniaceae	Crane's-bill family						
<i>Geranium dissectum</i>	Cut-leaved Crane's-bill				*	*	
<i>Geranium pyrenaicum</i>	Hedgerow Crane's-bill				*		
<i>Geranium molle</i>	Dove's-foot Crane's-bill				*		
<i>Geranium robertianum</i>	Herb-Robert	*	*	*	*	*	*
Araliaceae	Ivy family						
<i>Hedera helix</i>	Ivy	*	*	*		*	*
Apiaceae	Carrot family						
<i>Anthriscus sylvestris</i>	Cow Parsley	*		*	*	*	*
<i>Pimpinella major</i>	Greater Burnet-saxifrage	*		*		*	*
<i>Pimpinella saxifraga</i>	Burnet-saxifrage	*	*			*	*
<i>Angelica sylvestris</i>	Wild Angelica	*					*
<i>Heracleum sphondylium</i> subsp. <i>sphondylium</i>	Hogweed	*	*	*	*	*	*
<i>Heracleum mantegazzianum</i>	Giant Hogweed			*	*		
A couple of very large plants. This invasive species has taken hold in the Bosworth area, but it seems to prefer deep, moist soil.							
<i>Torilis japonica</i>	Upright Hedge-parsley	*		*	*	*	*
Gentianaceae	Gentian family						
<i>Centaurium erythraea</i>	Common Centaury			*	*		
Solanaceae	Nightshade family						
<i>Solanum dulcamara</i>	Bittersweet		*	*	*	*	



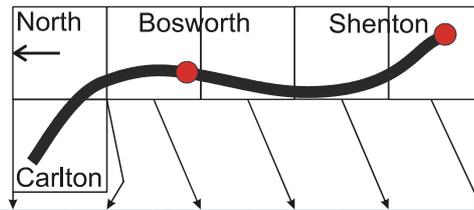
VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
Convolvulaceae	Bindweed family						
<i>Convolvulus arvensis</i>	Field Bindweed		*	*	*		
<i>Calystegia sepium</i>	Hedge Bindweed				*		
Boraginaceae	Borage family						
<i>Symphytum officinale</i>	Common Comfrey			*			
<i>Symphytum orientale</i>	Soft Comfrey			*			
Single plant at SK393033, a garden escape. Only one record in Primavesi & Evans, 1988.							
<i>Myosotis sylvatica</i>	Wood Forget-me-not	*				*	*
A native plant of woodland, but these railway plants are likely to be garden escapes.							
<i>Myosotis arvensis</i>	Field Forget-me-not	*	*	*	*	*	*
Lamiaceae	Deadnettle family						
<i>Stachys sylvatica</i>	Hedge Woundwort	*	*	*	*	*	*
<i>Lamium album</i>	White Dead-nettle	*	*	*	*	*	*
<i>Lamium purpureum</i>	Red Dead-nettle	*					*
<i>Galeopsis tetrahit</i>	Common Hemp-nettle				*	*	
<i>Glechoma hederacea</i>	Ground-ivy	*					
<i>Prunella vulgaris</i>	Selfheal		*	*	*	*	
<i>Mentha aquatica</i>	Water Mint				*		
Plantaginaceae	Plantain family						
<i>Plantago major</i>	Greater Plantain	*	*	*	*	*	*
<i>Plantago lanceolata</i>	Ribwort Plantain	*	*	*	*	*	*
Oleaceae	Ash family						
<i>Fraxinus excelsior</i>	Ash	*	*	*		*	*
Scrophulariaceae	Figwort family						
<i>Verbascum thapsus</i>	Great Mullein	*	*		*	*	*
<i>Scrophularia nodosa</i>	Common Figwort		*	*			
<i>Scrophularia auriculata</i>	Water Figwort				*		
Beside wet ditch.							



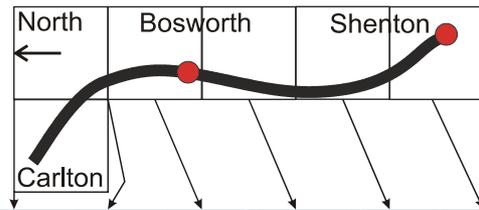
VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Chaenorhinum minus</i>	Small Toadflax A characteristic plant of railway ballast and infrequently found elsewhere in the county.		*	*	*		
<i>Linaria vulgaris</i>	Common Toadflax	*		*	*		*
<i>Linaria purpurea</i>	Purple Toadflax Both <i>Linarias</i> are characteristic railway species.			*	*		
<i>Digitalis purpurea</i>	Foxglove		*	*	*		
<i>Veronica serpyllifolia</i>	Thyme-leaved Speedwell					*	
<i>Veronica officinalis</i>	Heath Speedwell	*					*
<i>Veronica chamaedrys</i>	Germander Speedwell	*	*	*	*	*	*
<i>Veronica beccabunga</i>	Brooklime In a wet ditch.				*		
<i>Veronica arvensis</i>	Wall Speedwell			*	*		
<i>Euphrasia</i> sp.	Eyebright Not identified to species because the plants were not in fruit (though specimens and photos were taken) SK392027.				*		
<i>Veronica hederifolia</i>	Ivy-leaved Speedwell			*			
Rubiaceae	Bedstraw family						
<i>Sherardia arvensis</i>	Field Madder Uncommon in the county, in short vegetation near the track.				*		
<i>Galium verum</i>	Lady's Bedstraw	*				*	*
<i>Galium mollugo</i>	Hedge Bedstraw One patch in cutting at SK392037.			*			
<i>Galium aparine</i>	Cleavers	*	*	*	*	*	*
<i>Sambucus nigra</i>	Elder	*	*	*		*	*
Caprifoliaceae	Honeysuckle family						
<i>Viburnum opulus</i>	Guelder-rose				*		



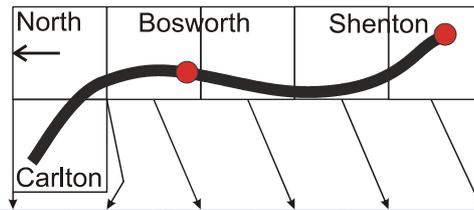
VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Leycesteria formosa</i> One shrub, presumably from bird-sown seed of garden origin. A first record for the county. Fig. 8.	Himalayan Honeysuckle					*	
<i>Lonicera periclymenum</i>	Honeysuckle		*				
Valerianaceae <i>Valerianella locusta</i> Abundant over a few square metres of track and on west-facing slope of cutting at SK391014, but a scarce plant in the county with only 7 other sites with a recent record (RPR). Fig. 6.	Valerian family Common Cornsalad					*	
Dipsacaceae <i>Dipsacus fullonum</i> A few plants near Bosworth Station.	Teasel family Wild Teasel			*	*		
<i>Knautia arvensis</i> Only a couple of plants, in tall grassland. Uncommon in this part of the county.	Field Scabious	*					*
Asteraceae <i>Arctium minus</i>	Daisy family Lesser Burdock				*	*	
<i>Cirsium vulgare</i>	Spear Thistle	*	*	*	*	*	*
<i>Cirsium arvense</i>	Creeping Thistle	*	*	*	*	*	*
<i>Centaurea nigra</i>	Common Knapweed	*			*	*	*
<i>Lapsana communis</i>	Nipplewort		*	*	*	*	
<i>Hypochaeris radicata</i>	Cat's-ear			*			
<i>Tragopogon pratensis</i>	Goat's-beard		*				
<i>Sonchus arvensis</i>	Perennial Sow-thistle				*	*	
<i>Sonchus oleraceus</i>	Smooth Sow-thistle	*			*		*
<i>Sonchus asper</i>	Prickly Sow-thistle	*	*	*	*	*	*
<i>Mycelis muralis</i> On the bridge at SK391023, 40 plants on the north side and one on the south. Only six other recent records from the county (RPR). Fig. 9.	Wall lettuce				*		
<i>Taraxacum</i> agg.	Dandelion	*	*	*	*	*	*



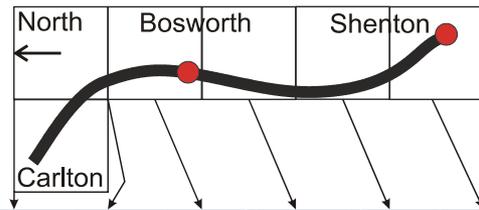
VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Crepis capillaris</i>	Smooth Hawk's-beard	*	*	*	*	*	
<i>Pilosella officinarum</i>	Mouse-ear-hawkweed		*	*	*	*	
<i>Pilosella aurantiaca</i> ssp. <i>carpathicola</i>	Fox-and-cubs			*			
<i>Hieracium</i> sp. Identification to species has not been attempted.	Hawkweed					*	
<i>Solidago</i> sp. A colony at SK392032. Is either <i>S. gigantea</i> or <i>S. canadensis</i> , both garden escapes.	Goldenrod			*			
<i>Bellis perennis</i>	Daisy	*			*		*
<i>Tanacetum vulgare</i>	Tansy (Fig. 3)	*					*
<i>Artemisia vulgaris</i>	Mugwort	*		*	*	*	*
<i>Achillea millefolium</i>	Yarrow	*	*	*	*	*	*
<i>Leucanthemum vulgare</i>	Oxeye Daisy	*	*	*	*	*	*
<i>Senecio jacobaea</i>	Common Ragwort	*	*	*	*	*	*
<i>Senecio squalidus</i>	Oxford Ragwort	*		*			*
<i>Senecio vulgaris</i>	Groundsel	*		*	*		*
<i>Senecio viscosus</i> Common, a typical railway ballast plant.	Sticky Groundsel	*	*	*	*		*
<i>Doronicum pardalianches</i> One colony of this garden escape at SK392029. Only 8 tetrads in Primavesi & Evans 1988.	Leopard's-bane				*		
<i>Tussilago farfara</i>	Colt's-foot			*	*		
Potamogetonaceae <i>Potamogeton natans</i> In stagnant ditch water.	Pondweed family Broad-leaved Pondweed				*		
Araceae <i>Arum maculatum</i>	Lords-and-Ladies family Lords-and-Ladies			*	*	*	



VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
Lemnaceae	Duckweed family						
<i>Lemna minor</i>	Common Duckweed				*	*	
Juncaceae	Rush family						
<i>Juncus bufonius</i>	Toad Rush				*		
<i>Juncus inflexus</i>	Hard Rush				*		
<i>Juncus effusus</i>	Soft Rush				*	*	
<i>Luzula campestris</i>	Field Wood-rush	*			*		*
Cyperaceae	Sedge family						
<i>Carex hirta</i>	Hairy Sedge	*	*	*	*		*
<i>Carex flacca</i>	Glaucous Sedge			*	*		
Poaceae	Grass family						
<i>Festuca arundinacea</i>	Tall Fescue	*					*
<i>Festuca rubra</i> agg.	Red Fescue	*	*	*	*	*	*
<i>Vulpia bromoides</i>	Squirrel-tail Fescue				*		
<i>Vulpia myuros</i>	Rat's-tail Fescue			*	*	*	
The two <i>Vulpias</i> are typical railway ballast grasses.							
<i>Poa annua</i>	Annual Meadow-grass	*	*	*	*		*
<i>Poa trivialis</i>	Rough Meadow-grass		*	*	*	*	
<i>Poa pratensis</i>	Smooth Meadow-grass	*			*	*	*
<i>Dactylis glomerata</i>	Cock's-foot	*	*	*	*	*	*
<i>Arrhenatherum elatius</i>	False Oat-Grass		*	*	*	*	
<i>Trisetum flavescens</i>	Yellow Oat-grass	*		*			*
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	*		*	*		*
<i>Holcus lanatus</i>	Yorkshire-fog	*	*	*	*	*	*
<i>Aira caryophylla</i>	Silver Hair-grass				*		
A tiny annual, near the track.							
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass		*		*	*	



VASCULAR PLANTS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Agrostis capillaris</i>	Common Bent Possibly under-recorded, as its flowering season is short and is inconspicuous at other times.					*	
<i>Agrostis stolonifera</i>	Creeping Bent	*		*	*	*	*
<i>Alopecurus myosuroides</i>	Black-grass				*	*	
<i>Bromus hordeaceus</i> agg.	Soft-brome			*		*	
<i>Bromopsis ramosa</i>	Hairy Brome					*	
<i>Anisantha sterilis</i>	Barren Brome	*	*	*	*	*	*
<i>Brachypodium sylvaticum</i>	Wood False-brome	*			*	*	*
<i>Elytrigia repens</i>	Common Couch					*	
Typhaceae	Bulrush family						
<i>Typha latifolia</i>	Bulrush or Great Reedmace				*	*	
Liliaceae	Lily family						
<i>Hyacinthoides non-scripta</i>	Bluebell			*			
<i>Hyacinthoides x massartiana</i>	Hybrid Bluebell			*			
Dioscoreacea	Black Bryony family						
<i>Tamus communis</i>	Black Bryony	*				*	*

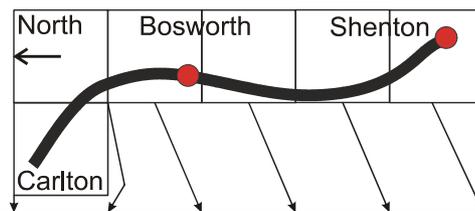
BRYOPHYTES

Bryophytes are the mosses and liverworts, plants that generally require damp conditions. The design and construction of the railway, with its strong emphasis on the removal of surface water and the use of fast draining ballast, limits the bryophyte flora both in the total number of plants and in their diversity. Bryophytes were not recorded as thoroughly as some other groups. They were observed while searching for lichens so there is a bias towards those that survive dry, exposed habitats such as tree boles, bridge parapets and roofing slates — although a limited number were found in the deep shade of the trackside scrub vegetation. All are common in Leicestershire and the Battlefield Line is not remarkable as far as bryophytes are concerned.

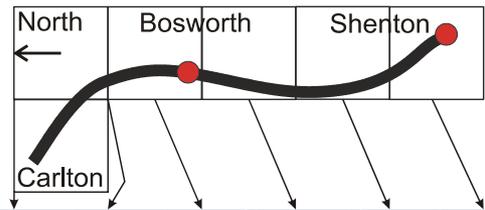
Eleven mosses and no liverworts were recorded. Their names are in accordance with Blockeel and Long (1998).

Ivan Pedley

BRYOPHYTES



Scientific name	Habitat	3804	3904	3903	3902	3901	3900
<i>Fissidens bryoides</i>	Bank side						*
<i>Tortula muralis</i> var. <i>muralis</i>	On brick bridges and platform	*		*			*
<i>Grimmia pulvinata</i> var. <i>pulvinata</i>	On brick bridges and platform	*		*			*
<i>Funaria hygrometrica</i>	On bonfire sites (Fig. 10)			*		*	*
<i>Bryum capillare</i> var. <i>capillare</i>	On concrete and brick			*			*
<i>Bryum argenteum</i>	On mortar	*	*	*			*
<i>Bryum bicolor</i>	On brick, soil and mortar	*		*			*
<i>Brachythecium rutabulum</i>	On soil and among grass	*		*			*
<i>Rhynchostegium confertum</i>	Among grass			*			



BRYOPHYTES

Scientific name	Habitat	3804	3904	3903	3902	3901	3900
<i>Eurhynchium praelongum</i>	On soil and among grass	*		*			*
<i>Hypnum cupressiforme</i>	On soil and among grass (Fig. 11)	*		*			



Figure 10 *Funaria hygrometrica*



Figure 11 *Hypnum cupressiforme*

LICHENS

The lichen flora of the Battlefield Line is both surprising and pleasing. Surprising, because on first appearances, the line does not seem to possess the necessary environmental conditions that encourage lichen growth, i.e. clean air (free from smoke, acid rain etc.), ancient trees in open situations, or natural rock outcrops; and pleasing, because in spite of these limitations lichens are present in quantity and have found habitats to colonise and in which to thrive.

Lichens are combinations of single celled green algae (or sometimes bacteria called cyanobacteria) living inside various fungi. The algae, or cyanobacteria, photosynthesise in sunlight and provide chemical energy, in the form of sugars, for the fungus partner. The fungus, in turn, provides the algae with protection and nutrients in the form of essential minerals. Understanding the role of the photosynthetic partner indicates that generally there is a need for lichens to grow in places where light levels are good. With respect to lichens that grow as epiphytes on trees, the deep shade cast by the dense thickets of young saplings covering many of the embankments and cuttings does little to encourage lichen colonisation. Also the trees themselves are too immature to have offered the long period of ecological continuity necessary for a diverse flora to have developed. Having said this, there are a small number of older trees remaining in open areas that have been cleared by fire, also some growing in the station car park at Shenton. These do have a young developing lichen flora.

The presence of these recent colonisers on the trees also indicates that air pollution along the line is minimal—presumably the volume of steam traffic, with its associated emissions of smoke and acidic gases, is too low to negate the present rapid national improvement in air quality to which these colonisers are responding.



Figure 12 *Xanthoria parietina*

The bridges, the station buildings and the concrete sleepers have, together, more than compensated for the lack of rock outcrops, particularly as they offer surfaces (substrata) for colonisation: from the acid sandstone caps on the bridge parapets to the basic mortar and concrete used as binding materials. The remarkable diversity of lichens growing on these built structures is the most important aspect of the total lichen flora of the line.

Other interesting habitats include those associated with the worked timber structures: the posts and rails and, particularly, the timber rolling stock. A flat bed carriage parked close to the Market Bosworth station supports five species of the genus *Cladonia*, a degree of diversity that is unusual for a single Leicestershire site.

The lichen records are presented in two tables, both of which provide information about the substratum on which the lichen was growing. The first table covers the

saxicolous species, i.e. those that grow on rocks and built structures. They were surveyed by concentrating on particular structures – bridges and stations – so the table columns reflect that. Lichens growing on tree bark and cut timber are described as corticolous and lignicolous, respectively. They are covered in the second table, whose columns represent grid squares. Six species appear in both lists.

The total number of lichen species was 76, a remarkable number for a Leicestershire site.

Substrata: Mo = Mortar; Br = Brick; Co = Concrete; Sd = Sandstone

Syc = Sycamore; Pos = Post; Car = Railway Carriage

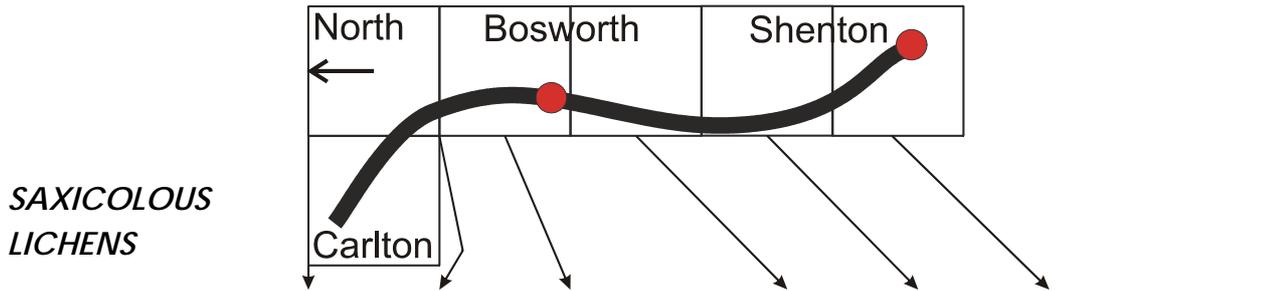
Species names are in accordance with Coppins (2002).

Ivan Pedley

SAXICOLOUS LICHENS

Scientific name	3804	3904	3903		3902	3901	3900		
	Bridge	Bridge	Bridge	Station	Bridge	Bridge	Bridge	Bridge	Station
	387045	390042	392038	392031	390021	391018	393009	395006	396004
<i>Acarospora fuscata</i>	Sd							Sd	
<i>Acarospora smaragdula</i>	Sd				Sd				
<i>Aspicilia calcarea</i>					Mo			Mo	Mo
<i>Aspicilia contorta</i> subsp. <i>hoffmanniana</i>	Mo			Co					Mo
<i>Botryolepraria lesdainii</i>	Mo								
<i>Buellia aethalea</i>	Sd	Br			Sd		Br		Br
<i>Buellia ocellata</i>					Sd/Br				
<i>Caloplaca arcis</i>	Mo			Co	Mo	Mo			

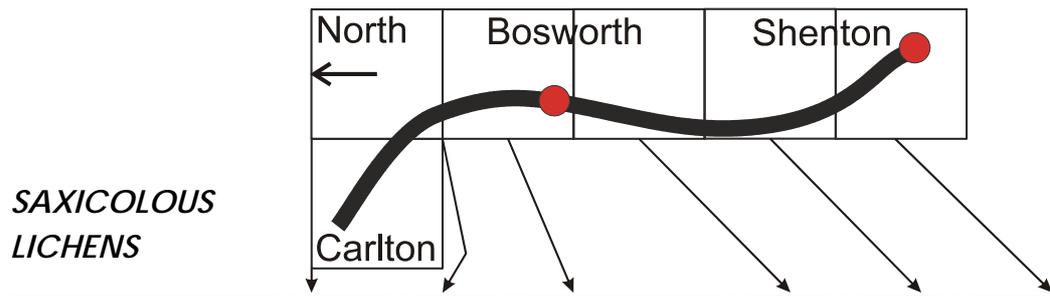
BATTLEFIELD LINE WILDLIFE SURVEY



**SAXICOLOUS
LICHENS**

Scientific name	3804	3904	3903		3902	3901	3900		
	Bridge 387045	Bridge 390042	Bridge 392038	Station 392031	Bridge 390021	Bridge 391018	Bridge 393009	Bridge 395006	Station 396004
<i>Caloplaca citrina</i>	Mo	Mo	Mo	Co	Mo		Mo	Mo	Mo
<i>Caloplaca crenulatella</i>	Co			Co					
<i>Caloplaca flavescens</i>					Mo				
<i>Caloplaca flavocitrina</i>	Mo				Mo		Mo	Mo	
<i>Caloplaca holocarpa</i>	Mo	Mo	Mo		Mo				Mo
<i>Caloplaca saxicola</i>	Mo		Mo		Mo				
<i>Candelariella aurella</i> f. <i>aurella</i>	Mo	Mo	Mo		Mo		Mo	Mo	Mo
<i>Candelariella vitellina</i> f. <i>vitellina</i>	Sd				Sd				Br
<i>Catillaria chalybeia</i> var. <i>chalybeia</i>		Br	Br/Sd						Br
<i>Catillaria lenticularis</i>					Mo				Mo
<i>Lecanora albescens</i>	Mo	Mo			Mo	Mo	Mo	Mo	Mo
<i>Lecanora campestris</i>				Co					
<i>Lecanora crenulata</i>					Mo				Mo
<i>Lecanora dispersa</i>	Mo	Mo			Mo	Mo	Mo	Mo	Mo
<i>Lecanora flotoviana</i>	Mo		Mo		Mo				
<i>Lecanora muralis</i>		Mo		Co	Mo				Br
<i>Lecanora polytropa</i>	Sd		Br/Sd		Sd		Br	Sd	Br
<i>Lecanora soralifera</i>								Br	
<i>Lecidea fuscoatra</i>	Sd	Sd			Sd		Sd	Sd	Br
<i>Lecidea lithophila</i>									Br
<i>Lecidella scabra</i>	Sd				Mo				Mo
<i>Lecidella stigmatea</i>	Mo	Mo			Mo				Mo

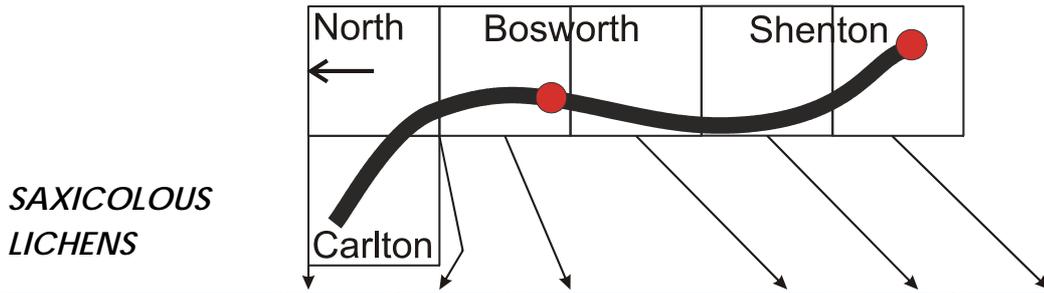
BATTLEFIELD LINE WILDLIFE SURVEY



SAXICOLOUS LICHENS

Scientific name	3804	3904	3903		3902	3901	3900		
	Bridge 387045	Bridge 390042	Bridge 392038	Station 392031	Bridge 390021	Bridge 391018	Bridge 393009	Bridge 395006	Station 396004
<i>Lepraria incana</i>	Sd	Br	Sd		Sd	Sd			
<i>Phaeophyscia orbicularis</i>									Br
<i>Physcia adscendens</i>					Sd				
<i>Physcia caesia</i>									Br
<i>Placynthium nigrum</i>									Mo
<i>Porpidia crustulata</i>	Sd								
<i>Porpidia soledizodes</i>	Sd				Sd				Br
<i>Porpidia tuberculosa</i>	Sd	Br			Sd		Sd	Sd	Br
<i>Protoblastenia rupestris</i>				Co					
<i>Rhizocarpon reductum</i> (Fig. 13)	Sd								Br
<i>Rinodina gennarii</i>			Mo		Mo				
<i>Rinodina teichophila</i>									Br
<i>Sarcogyne regularis</i>	Mo							Mo	
<i>Toninia aromatica</i>						Mo			
<i>Trapelia glebulosa</i>					Sd				
<i>Trapelia placodioides</i>								Sd	
<i>Verrucaria elaeina</i>	Br				Br				
<i>Verrucaria macrostoma</i> f. <i>macrostoma</i>		Mo			Mo				
<i>Verrucaria muralis</i>	Mo				Mo			Mo	Mo
<i>Verrucaria nigrescens</i>	Mo	Mo	Mo						Mo
<i>Verrucaria viridula</i>	Mo								

BATTLEFIELD LINE WILDLIFE SURVEY



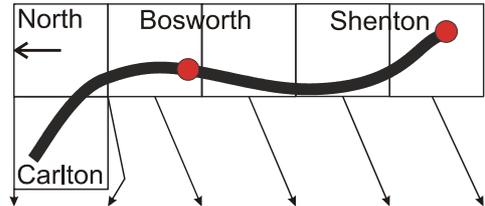
**SAXICOLOUS
LICHENS**

Scientific name	3804	3904	3903		3902	3901	3900		
	Bridge 387045	Bridge 390042	Bridge 392038	Station 392031	Bridge 390021	Bridge 391018	Bridge 393009	Bridge 395006	Station 396004
<i>Xanthoparmelia mougeotii</i>									Br
<i>Xanthoria calcicola</i>					Br				
<i>Xanthoria elegans</i>					Mo				Br
<i>Xanthoria parietina</i>	Mo/Br	Br	Mo						
<i>Xanthoria polycarpa</i>					Br/Sd				



Figure 13 *Rhizocarpon reductum*

CORTICOLOUS & LIGNICOLOUS LICHENS



Scientific name	Remarks	3804	3904	3903	3902	3901	3900
<i>Cladonia chlorophaea</i>			Car				
<i>Cladonia coniocraea</i>			Car				
<i>Cladonia fimbriata</i>			Car				
<i>Cladonia digitata</i>			Car				
<i>Cladonia pyxidata</i>			Car				
<i>Cyrtidula quercus</i>					Oak		
<i>Evernia prunastri</i>						Ash	
<i>Hypogymnia physodes</i>					Oak		
<i>Hypogymnia tubulosa</i>					Oak		
<i>Lecanora chlorotera</i>		Ash				Pos	Ash
<i>Lecanora compallens</i>						Ash	
<i>Lecanora conizaeoides</i>			Car				
<i>Lecanora expallens</i>					Oak	Syc	
<i>Lecanora polytropa</i>						Pos	
<i>Lepraria incana</i>				Ash			
<i>Micarea denigrata</i>						Pos	
<i>Parmelia sulcata</i>					Oak		
<i>Phaeophyscia orbicularis</i>						Ash	
<i>Physcia adscendens</i>				Ash			
<i>Physcia tenella</i>						Ash	
<i>Physconia grisea</i>					Oak		
<i>Porina aenea</i>						Ash	
<i>Rinodina genarii</i>						Pos	
<i>Trapeliopsis flexuosa</i>			Car				
<i>Xanthoria parietina</i>	See Fig. 12			Ash		Pos	
<i>Xanthoria polycarpa</i>		Oak			Oak	Ash	Oak

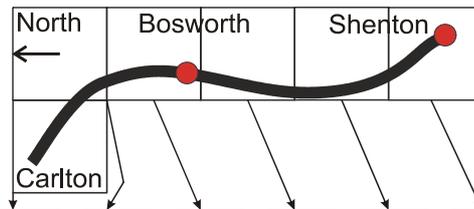
FUNGI

Railways are well-drained engineering structures and do not offer an ideal habitat for fungi. The soils beside the track were generally dry, inhibiting the grassland species, and woodland fungi that associate with mature trees would not normally be expected near a railway. We did, in fact, find examples of both of these types of fungi, together with some that were growing on dead wood in the boundary hedges. The majority of our rather sparse records (16 species) were micro fungi, rusts and mildews that live on dead vegetation or on leaves of herbaceous plants and shrubs.

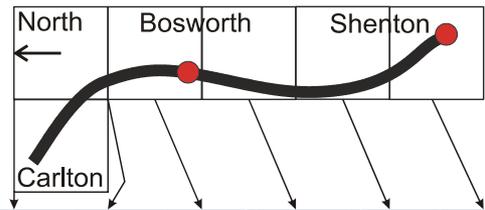
Species names are in accordance with Legon & Henrici (2005) and Ellis & Ellis (1997).

Richard Iliffe

FUNGI



Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Agaricus silvicola</i> On soil on embankment with Ash	Wood Mushroom					*	
<i>Anthracobia macrocystis</i> On soil (old bonfire site) on embankment						*	
<i>Athelia arachnoidea</i> On bark of Ash							*
<i>Bolbitius titubans</i> (= <i>Bolbitius vitellinus</i>) On soil among grasses	Yellow Fieldcap			*			
<i>Calloria neglecta</i> On dead stems of Nettle			*		*	*	
<i>Conocybe apala</i> (= <i>Conocybe lactea</i>) On soil among grasses							*
<i>Daedaleopsis confragosa</i> On fallen branch fragment of Willow	Blushing Bracket				*		
<i>Diatrypella quercina</i> On fallen twig of Oak	Old Barkspot						*



FUNGI

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Erysiphe asperifoliorum</i> On stems of Field Forget-me-not	A powdery mildew			*			
<i>Kuehneola uredinis</i> On fresh leaves of Bramble	Pale Bramble Rust					*	*
<i>Leptosphaeria acuta</i> On dead stems of Nettle	Nettle Rash		*	*	*	*	
<i>Melampsora caprearum</i> On leaves of Goat Willow	Rust on Goat Willow				*		
<i>Phragmidium violaceum</i> On old leaves of Bramble	Bramble Rust				*		*
<i>Puccinia pulverulenta</i> Aecia on fresh leaves of Willowherb	Willowherb Rust				*		
<i>Puccinia urticata</i> s.l. (= <i>Puccinia caricina</i> s.l.) Aecia on fresh leaves of Nettle	Nettle Rust				*		
<i>Trametes versicolor</i> On fallen branch fragment of Oak, also on fallen wood. Fig. 14.	Turkeytail			*	*	*	



Figure 14 Turkeytail

BIRDS

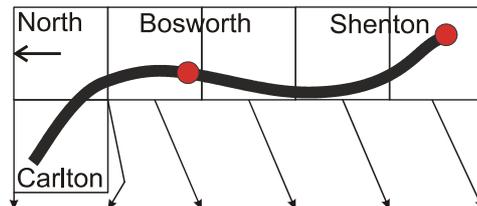
Bird recording was achieved by two observers walking the full survey length on each visit. The start and finish points were alternated each time so that there was no pattern arising from the timing of the walks or from observer fatigue. Numbers of any one species in a given square were not noted unless of particular interest. Birds were recorded if seen or heard singing or calling on or from the rail track and the adjacent verges, banks, cuttings, boundary hedges, shrubs and trees, poles and wires. Birds in flight over the track were counted only if they were low flying Barn Swallows taking insects, or Common Kestrels hovering above the track. A Common Buzzard was seen flying low above the line through three recording squares on one occasion. Birds flying over at a higher level were ignored.

Thirty-eight species were identified. They represent the common birds of the area and include no surprises.

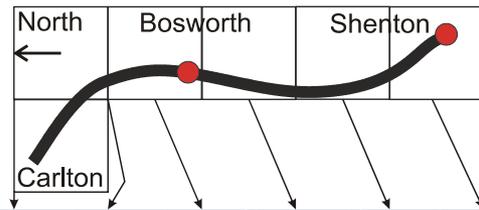
Species names are in accordance with Dudley *et al.* (2006).

David Penton and Richard Iliffe

BIRDS



Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Buteo buteo</i>	Common Buzzard				*	*	*
<i>Falco tinnunculus</i>	Common Kestrel		*	*	*		*
<i>Phasianus colchicus</i>	Common Pheasant				*	*	*
<i>Columba palumbus</i>	Common Wood Pigeon	*	*	*	*	*	*
<i>Streptopelia decaocto</i>	Eurasian Collared Dove	*		*	*	*	
<i>Apus apus</i>	Common Swift					*	
<i>Picus viridis</i>	Green Woodpecker	*		*	*	*	*
<i>Dendrocopos major</i>	Great Spotted Woodpecker				*	*	*
<i>Hirundo rustica</i>	Barn Swallow	*			*	*	*
<i>Delichon urbica</i>	House Martin			*	*		
<i>Motacilla alba yarrellii</i>	Pied Wagtail		*				



BIRDS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Troglodytes troglodytes</i>	Winter Wren	*	*		*	*	*
<i>Prunella modularis</i>	Hedge Accentor	*			*	*	*
<i>Erithacus rubecula</i>	European Robin	*	*	*	*	*	*
<i>Turdus merula</i>	Common Blackbird	*	*	*	*	*	*
<i>Turdus philomelos</i>	Song Thrush		*	*	*	*	*
<i>Sylvia curruca</i>	Lesser Whitethroat			*	*		
<i>Sylvia communis</i>	Common Whitethroat				*	*	*
<i>Sylvia atricapilla</i>	Blackcap	*				*	*
<i>Phylloscopus collybita</i>	Common Chiffchaff	*			*		*
<i>Regulus regulus</i>	Goldcrest			*			
<i>Muscicapa striata</i>	Spotted Flycatcher						*
<i>Aegithalos caudatus</i>	Long-tailed Tit	*		*		*	*
<i>Parus montanus</i>	Willow Tit				*		
<i>Parus caeruleus</i>	Blue Tit	*		*	*	*	*
<i>Parus major</i>	Great Tit	*	*	*	*	*	*
<i>Pica pica</i>	Black-billed Magpie	*			*	*	*
<i>Corvus monedula</i> <i>spermologus</i>	Jackdaw			*	*	*	*
<i>Corvus frugilegus</i>	Rook			*	*		
<i>Corvus corone</i>	Carrion Crow	*		*		*	
<i>Sturnus vulgaris</i>	Common Starling			*	*		*
<i>Passer domesticus</i>	House Sparrow					*	
<i>Fringilla coelebs</i>	Chaffinch	*		*	*	*	*
<i>Carduelis chloris</i>	European Greenfinch	*	*	*	*	*	*
<i>Carduelis carduelis</i>	European Goldfinch	*	*	*	*		*
<i>Carduelis cannabina</i>	Common Linnet				*		
<i>Pyrhula pyrrhula</i>	Common Bullfinch				*	*	*
<i>Emberiza citrinella</i>	Yellowhammer	*		*	*	*	*

MOTHS AND BUTTERFLIES

Recording the moths for this survey took the form of two methods. The first was to record the species that could be located during the designated monthly walks. The few adults that were disturbed from vegetation were netted and identified. This method yielded all the butterfly records. Numerous species of the micro moths, however, are more reliably recognised from their early feeding stages: leaf mines, spinnings or larvae. The second method involved the use of light traps with 125 W mercury vapour bulbs powered by a portable generator. The equipment used consisted of 3 box traps, a single bulb suspended over a white sheet, plus six 50 metre cable reels. All this, plus auxiliary equipment,



Figure 15 Green Carpet



Figure 16 Leopard Moth

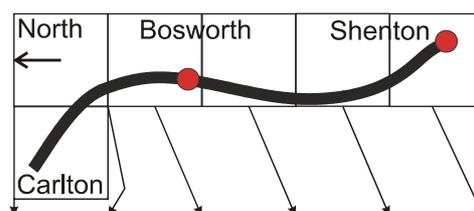


Figure 17 *Pyrausta aurata*

presented the problem of transportation from the cars on the roadside down into the railway cutting. There was really only one practical area for access to the cutting and that was at Far Coton (SK390021), where there is a slightly overgrown sidetrack from the bridge. Luckily, this point of entry just happened to allow us access to approximately 500 metres of probably the most varied habitat on the whole length of the survey area. We were able to cover an area rich in wild flowers and grasses with willow scrub to the north and established hedgerow habitat to the south. The same site was used throughout the four evening moth trapping sessions (24 April, 25 May, 27 July and 24 August). As with most invertebrate recording, moth trapping is almost totally reliant on the weather conditions, and 2007 proved to be a very disappointing year, particularly throughout the whole of the summer. Unfortunately, we had less than reasonable conditions on all four nights and were unable to set up the traps at all in June due to the inclement weather. In total we recorded 21 species of butterfly and 154 species of moths, including both micro and macro moths.

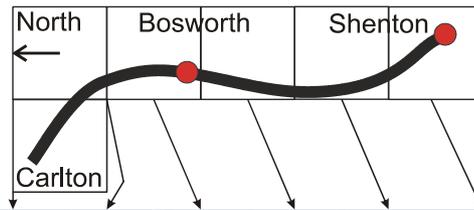
Species names are in accordance with Bradley (2000).

Graham Finch



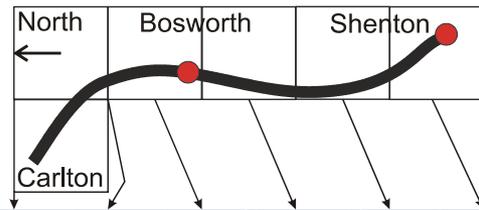
MOTHS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Hepialus lupulinus</i>	Common Swift				*		
<i>Stigmella aurella</i>					*		
<i>Zeuzera pyrina</i>	Leopard Moth (Fig. 16)				*		
<i>Ypsolopha scabrella</i>					*		
<i>Plutella xylostella</i>	Diamond-back Moth				*		
<i>Batia lunaris</i>					*		
<i>Batia unitella</i>					*		
<i>Carcina quercana</i>					*		
<i>Metzneria lappella</i>					*	*	
<i>Eulamprotes atrella</i>					*		
<i>Helcystogramma rufescens</i>					*		
<i>Blastobasis adustella</i>					*		
<i>Limnaecia phragmitella</i>					*		
<i>Cochylimorpha straminea</i>					*		
<i>Agapeta hamana</i>					*		
<i>Agapeta zoegana</i>					*		
<i>Aethes rubigana</i>					*		
<i>Cochylis atricapitana</i>					*		
<i>Pandemis corylana</i>	Chequered Fruit-tree Tortrix				*		
<i>Pandemis cerasana</i>	Barred Fruit-tree Tortrix				*		
<i>Archips podana</i>	Large Fruit-tree Tortrix				*		
<i>Clepsia spectrana</i>	Cyclamen Tortrix				*		
<i>Epiphyas postvittana</i>	Light Brown Apple Moth				*		
<i>Ditula angustiorana</i>	Red-barred Tortrix				*		
<i>Pseudargyrotoza conwagana</i>					*		
<i>Acleris forsskaleana</i>					*		



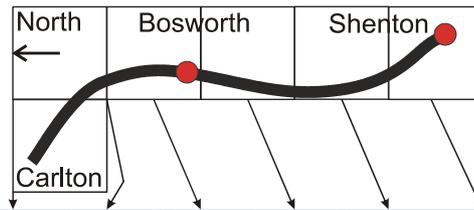
MOTHS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Acleris laterana/comariana</i>					*		
<i>Acleris variegana</i>	Garden Rose Tortrix				*		
<i>Celypha lacunana</i>					*		
<i>Apotomis betuletana</i>					*		
<i>Epinotia nisella</i>					*		
<i>Epinotia brunnichana</i>					*		
<i>Epiblema uddmanniana</i>	Bramble Shoot Moth				*		
<i>Eucosma campoliliana</i>					*		
<i>Eucosma cana</i>					*		
<i>Spilonota ocellana</i>	Bud Moth				*		
<i>Pammene rhediella</i>	(Fig. 22)			*			
<i>Cydia splendana</i>					*		
<i>Calamotropha paludella</i>					*		
<i>Chrysoteuchia culmella</i>	Garden Grass-veneer				*		
<i>Crambus lathoniellus</i>					*		
<i>Agriphila straminella</i>					*		
<i>Agriphila tristella</i>					*		
<i>Catoptria falsella</i>					*		
<i>Dipleurina lacustrata</i>					*		
<i>Evergestis forficalis</i>	Garden Pebble				*		
<i>Pyrausta aurata</i> (Fig. 17)					*		
<i>Eurrhyncha hortulata</i>	Small Magpie				*		
<i>Phlyctaenia coronata</i>					*		
<i>Udea lutealis</i>					*		
<i>Udea olivalis</i>					*		
<i>Pleuroptya ruralis</i>	Mother of Pearl				*		
<i>Hypsopygia costalis</i>	Gold Triangle				*		



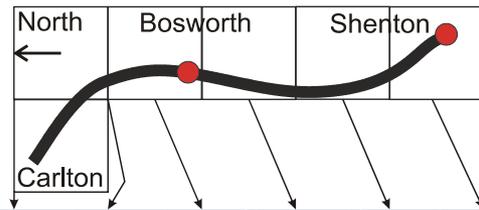
MOTHS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Conobathra repandana</i>					*		
<i>Numonia advenella</i>					*		
<i>Trachycera advenella</i>					*		
<i>Phycita roborella</i>					*		
<i>Myelois circumvoluta</i>	Thistle Ermine				*		
<i>Euzophera pinguis</i>					*		
<i>Euthrix potatoria</i>	Drinker				*		
<i>Watsonalla binaria</i>	Oak Hook-tip				*		
<i>Cilix glaucata</i>	Chinese Character				*		
<i>Thyatira batis</i>	Peach Blossom				*		
<i>Cyclophora punctaria</i>	Maiden's Blush				*		
<i>Timandra comae</i>	Blood-vein				*		
<i>Scopula imitaria</i>	Small Blood-vein				*		
<i>Idaea biselata</i>	Small Fan-footed Wave				*		
<i>Idaea dimidiata</i>	Single-dotted Wave				*		
<i>Idaea aversata</i>	Riband Wave		*		*		
<i>Idaea aversata</i> ab. <i>remutata</i>	Riband Wave, non-banded form				*		
<i>Xanthorhoe designata</i>	Flame Carpet				*		
<i>Xanthorhoe quadrfasiata</i>	Large Twin-spot Carpet				*		
<i>Xanthorhoe montanata montanata</i>	Silver-ground Carpet		*	*	*		
<i>Scotopteryx chenopodiata</i>	Shaded Broad-bar				*		
<i>Epirhoe alternata alternata</i>	Common Carpet				*		
<i>Lampropteryx suffumata</i>	Water Carpet				*		
<i>Ecliptopera silaceata</i>	Small Phoenix				*		
<i>Chloroclysta siterata</i>	Red-green Carpet		*	*	*		



MOTHS

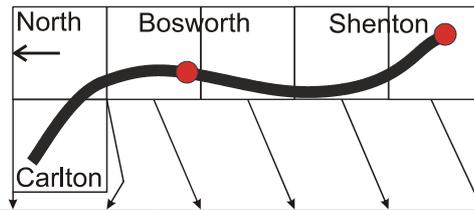
Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Chloroclysta truncata</i>	Common Marbled Carpet			*	*		
<i>Thera britannica</i>	Spruce Carpet				*		
<i>Electrophaes corylata</i>	Broken-barred Carpet				*		
<i>Colostygia pectinataria</i>	Green Carpet (Fig. 15)		*	*	*		
<i>Perizoma affinitata</i>	Rivulet				*		
<i>Perizoma alchemillata</i>	Small Rivulet				*		
<i>Perizoma flavofasciata</i>	Sandy Carpet				*		
<i>Perizoma didymata didymata</i>	Twin-spot Carpet				*		
<i>Eupithecia exiguata exiguata</i>	Mottled Pug				*		
<i>Eupithecia vulgata</i>	Common Pug				*		
<i>Eupithecia tripunctaria</i>	White-spotted Pug				*		
<i>Eupithecia abbreviata</i>	Brindled Pug				*		
<i>Eupithecia dodoneata</i>	Oak-tree Pug				*		
<i>Pasiphila rectangulata</i>	Green Pug				*		
<i>Gymnoscelis rufifasciata</i>	Double-striped Pug				*		
<i>Aplocera plagiata plagiata</i>	Treble-bar (Fig. 4)			*	*		
<i>Abraxas grossulariata</i>	Magpie Moth			*	*		
<i>Chiasmia clathrata clathrata</i>	Latticed Heath				*		
<i>Opisthograptis luteolata</i>	Brimstone Moth				*		
<i>Selenia dentaria</i>	Early Thorn				*		
<i>Biston betularia</i>	Peppered Moth				*		
<i>Menophra abruptaria</i>	Waved Umber				*		
<i>Peribatodes rhomboidaria</i>	Willow Beauty				*		
<i>Lomographa temerata</i>	Clouded Silver				*		



MOTHS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Notodonta ziczac</i>	Pebble Prominent				*		
<i>Ptilodon capucina</i>	Coxcomb Prominent				*		
<i>Calliteara pudibunda</i>	Pale Tussock				*		
<i>Euproctis similis</i>	Yellow-tail				*		
<i>Eilema griseola</i>	Dingy Footman				*		
<i>Eilema complana</i>	Scarce Footman				*		
<i>Eilema depressa</i>	Buff Footman				*		
<i>Eilema lurideola</i>	Common Footman				*		
<i>Spilosoma lubricipeda</i>	White Ermine				*		
<i>Phragmatobia fuliginosa fuliginosa</i>	Ruby Tiger				*		
<i>Nola cucullatella</i>	Short-cloaked Moth				*		
<i>Nola confusalis</i>	Least Black Arches				*		
<i>Agrotis exclamationis</i>	Heart and Dart				*		
<i>Agrotis puta puta</i>	Shuttle-shaped Dart				*		
<i>Axylia putris</i>	Flame				*		
<i>Ochropleura plecta</i>	Flame Shoulder				*		
<i>Noctua pronuba</i>	Large Yellow Underwing				*		
<i>Noctua comes</i>	Lesser Yellow Underwing				*		
<i>Noctua janthe</i>	Lesser Broad-bordered Yellow Underwing				*		
<i>Diarsia rubi</i>	Small Square-spot				*		
<i>Xestia c-nigrum</i>	Setaceous Hebrew Character				*		
<i>Xestia sexstrigata</i>	Six-striped Rustic				*		
<i>Xestia xanthographa</i>	Square-spot Rustic				*		
<i>Lacanobia oleracea</i>	Bright-line Brown-eye				*		
<i>Hadena bicruris</i>	Lychnis				*		

BATTLEFIELD LINE WILDLIFE SURVEY



MOTHS

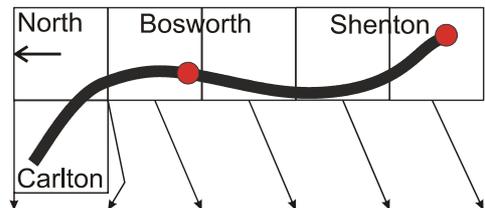
Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Orthosia gothica</i>	Hebrew Character				*		
<i>Mythimna ferrago</i>	Clay				*		
<i>Mythimna impura</i>	Smoky Wainscot				*		
<i>Mythimna pallens</i>	Common Wainscot				*		
<i>Acronicta megecephala</i>	Poplar Grey				*		
<i>Acronicta aceris</i>	Sycamore				*		
<i>Acronicta tridens/psi</i>	Dark / Grey Dagger aggregate				*		
<i>Amphipyra pyramidea</i>	Copper Underwing				*		
<i>Phlogophora meticulosa</i>	Angle Shades				*		
<i>Cosmia trapezina</i>	Dun-bar				*		
<i>Cosmia pyralina</i>	Lunar-spotted Pinion				*		
<i>Apamea monoglypha</i>	Dark Arches				*		
<i>Apamea sordens</i>	Rustic Shoulder-knot				*		
<i>Oligia strigilis</i> agg.	Marbled Minor agg.				*		
<i>Oligia fasciuncula</i>	Middle-barred Minor				*		
<i>Mesoligia furuncula</i>	Cloaked Minor				*		
<i>Mesapamea secalis</i> agg.	Common Rustic agg.				*		
<i>Hoplodrina alsines</i>	Uncertain				*		
<i>Hoplodrina blanda</i>	Rustic				*		
<i>Caradrina morpheus</i>	Mottled Rustic				*		
<i>Diachrysia chrysitis</i>	Burnished Brass				*		
<i>Plusia festucae</i>	Gold Spot				*		
<i>Autographa gamma</i>	Silver Y			*	*		
<i>Abrostola tripartita</i>	Spectacle				*		
<i>Scoliopteryx libatrix</i>	Herald				*		
<i>Rivula sericealis</i>	Straw Dot		*	*	*		
<i>Hypena proboscidalis</i>	Snout		*	*	*		



Figure 18 Brimstone Butterfly



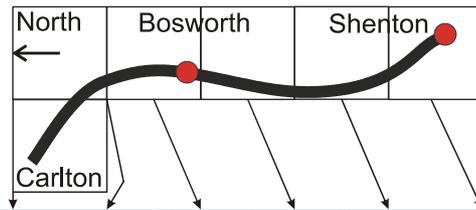
Figure 19 Essex Skipper



BUTTERFLIES

Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Thymelicus sylvestris</i>	Small Skipper			*	*	*	
<i>Thymelicus lineola</i>	Essex Skipper (Fig. 19)				*	*	*
<i>Ochlodes faunus</i>	Large Skipper	*				*	
<i>Gonepteryx rhamni</i>	Brimstone (Fig. 18)			*	*	*	
<i>Pieris brassicae</i>	Large White	*	*	*	*	*	
<i>Pieris rapae</i>	Small White	*		*	*	*	
<i>Pieris napi</i>	Green-veined White	*		*	*	*	*
<i>Anthocharis cardamines</i>	Orange-tip	*		*	*	*	*
<i>Lycaena phlaeas</i>	Small Copper			*	*		
<i>Aricia agestis</i>	Brown Argus				*		
<i>Polyommatus icarus icarus</i>	Common Blue			*	*		
<i>Celastrina argiolus</i>	Holly Blue			*		*	
<i>Vanessa atalanta</i>	Red Admiral	*	*	*	*	*	*
<i>Vanessa cardui</i>	Painted Lady (Fig. 2)	*	*	*	*		*
<i>Aglais urticae</i>	Small Tortoiseshell	*		*	*	*	*
<i>Inachis io</i>	Peacock	*	*	*	*	*	*
<i>Polygonia c-album</i>	Comma				*	*	
<i>Pararge aegeria</i>	Speckled Wood			*	*	*	*

BUTTERFLIES



Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Pyronia tithonus</i>	Gatekeeper / Hedge Brown	*	*	*	*	*	*
<i>Maniola jurtina</i>	Meadow Brown	*		*	*	*	
<i>Aphantopus hyperantus</i>	Ringlet				*	*	

OTHER GROUPS

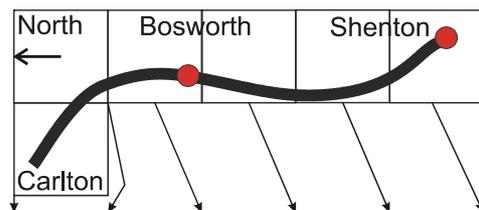
This heading covers records of small groups and casual records of larger groups that we did not set out to survey thoroughly. The numbers within each group do not justify a separate table. All survey participants contributed to these records and the appropriate specialist verified them.

The entries in the various insect orders are fewer than they should be, due to the cool and wet summer of 2007. The lists are obviously a tiny fraction of the species that actually occur. Many more groups are undoubtedly present – ants, springtails, earthworms, etc. – but we had neither the time nor the expertise to look at them.

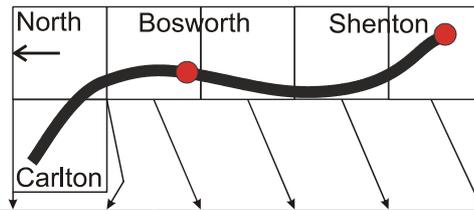
Species names are in accordance with the respective checklists or field guides quoted in the references section.

Graham Finch & Stephen Woodward

OTHER GROUPS



Scientific name	Common name	3804	3904	3903	3902	3901	3900
Insecta: Orthoptera	Grasshoppers						
<i>Tetrix subulata</i>	Slender Ground Hopper				*	*	
A small brown hopper of open places							
<i>Omocestus viridulus</i>	Common Green Grasshopper				*		
Insecta: Dermaptera	Earwigs						
<i>Forficula auricularia</i>	Common Earwig				*		
Insecta: Odonata	Damselflies & Dragonflies						
<i>Calopteryx splendens</i>	Banded Demoiselle	*					
<i>Pyrhosoma nymphula</i>	Large Red Damselfly				*		
<i>Coenagrion puella</i>	Azure Damselfly				*		



OTHER GROUPS

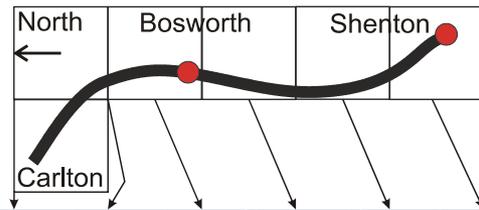
Scientific name	Common name	3804	3904	3903	3902	3901	3900
<i>Enallagma cyathigerum</i>	Common Blue Damselfly	*					
<i>Ischnura elegans</i>	Blue-tailed Damselfly	*				*	
<i>Aeshna mixta</i>	Migrant Hawker		*	*	*		
<i>Aeshna cyanea</i>	Southern Hawker				*	*	
<i>Aeshna grandis</i>	Brown Hawker	*	*	*	*		
<i>Sympetrum striolatum</i>	Common Darter		*	*	*		
Insecta: Coleoptera	Beetles						
<i>Propylea 14-punctata</i>	14-spot Ladybird					*	
<i>Coccinella 7-punctata</i>	7-spot Ladybird				*		
<i>Cassida viridis</i>	Green Tortoise Beetle				*		
<i>Oedemera nobilis</i>	Swollen-thighed Beetle				*		
Chrysomelidae Species not identified	Leaf beetle				*		
Insecta: Hemiptera	Bugs						
<i>Palomena prasina</i>	Green Shieldbug				*		*
<i>Eysacoris fabricii</i> (Fig. 20)	Woundwort Shieldbug				*		*
<i>Sigara falleni</i>	Lesser Water Boatman				*		
Flew into moth trap on 24 Aug 2007							



Figure 20 Woundwort Shieldbug

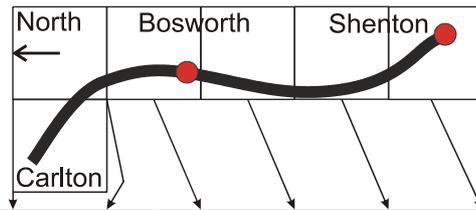


Figure 21 *Helophilus pendulus*



OTHER GROUPS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
Insecta: Diptera	Flies						
<i>Bibio marci</i>	St. Mark's Fly						*
<i>Jaapiella veronicae</i>	Gall Midge	*			*		
<i>Melanostoma scalare</i>	Hoverfly						*
<i>Epistrophe eligans</i>	Hoverfly					*	
<i>Episyrphus balteatus</i>	Hoverfly				*	*	
<i>Rhingia campestris</i>	Hoverfly	*	*		*	*	*
<i>Eristalis pertinax</i>	Hoverfly					*	
<i>Helophilus pendulus</i>	Hoverfly (Fig. 21)				*	*	*
<i>Mesembrina meridiana</i>	A fly						*
Insecta: Hymenoptera	Bees & Wasps						
<i>Vespa crabro</i>	The Hornet			*	*	*	
<i>Vespa germanica</i>	German Wasp			*			
<i>Anthophora plumipes</i>	Hairy Footed Flower Bee					*	
<i>Bombus lapidarius</i>	Large Red Tailed Bumble Bee			*	*	*	
<i>Bombus lucorum</i>	White-tailed Bumble Bee			*	*	*	*
<i>Bombus pascuorum</i>	Common Carder Bee		*		*	*	*
<i>Andricus kollari</i> , agamic Galls on oak buds	Marble Gall causer					*	
<i>Andricus quercuscalicis</i> , agamic Galls on acorns	Knopper Gall causer				*		
<i>Andricus fecundator</i> Galls on oak buds	Artichoke Gall causer				*		
<i>Neuroterus numismalis</i> Galls under oak leaves	Silk Button Gall causer				*		



OTHER GROUPS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
Tenthredinidae Many individuals of this unidentified species were mating on tall herbs on 24 Aug 2007. Fig. 22.	Sawfly				*		
Arachnida	Mites and Spiders						
<i>Phyllocoptes goniothorax</i> On hawthorn leaf	Gall Mite				*		
<i>Salticus scenicus</i>	Zebra Spider (Fig. 23)					*	
<i>Pisaura mirabilis</i>	Nursery Web Spider				*		



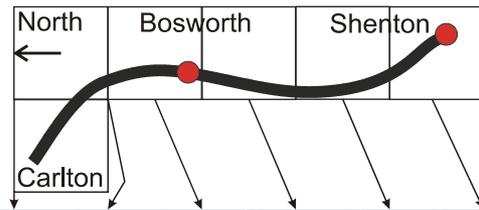
Figure 22 A sawfly of the family Tenthredinidae



Figure 23 Zebra spider capturing a micro-moth *Pammene rhediella*

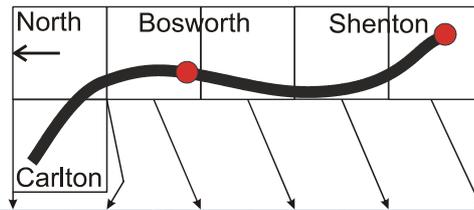


Figure 24 Yellow Slug



OTHER GROUPS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
Gastropoda	Slugs & snails						
<i>Discus rotundatus</i>	Rounded Snail	*			*		
<i>Milax budapestensis</i>	Budapest Slug	*			*		
<i>Oxychilus alliarus</i>	Garlic Snail	*		*		*	
<i>Trichia plebeia</i>	A snail	*				*	
<i>Cepaea nemoralis</i>	Grove or Brown-lipped Snail	*		*	*		
<i>Arion circumscriptus</i>	A slug	*					
<i>Arion subfuscus</i>	Dusky Slug					*	
<i>Deroceras reticulatum</i>	Field Slug				*	*	
<i>Pyramidula rupestris</i>	Rock Snail				*		
<i>Arion ater</i>	Large Black Slug				*		
<i>Limax maximus</i>	Great Grey Slug			*			
<i>Lehmannia marginata</i>	Tree Slug			*			
<i>Limax flavus</i>	Yellow Slug				*		
	Under discarded rail chair. Fig. 24.						
<i>Clausilia bidentata</i>	Common or Two-toothed Door Snail			*			
Diplopoda	Millipedes						
<i>Cylindroiulus punctatus</i>		*			*		
<i>Polydesmus angustus</i>		*			*		
<i>Ophiulus pilosus</i>					*		
<i>Tachypodoiulus niger</i>					*		
Chilopoda	Centipedes						
<i>Lithobius variegatus</i>					*		



OTHER GROUPS

Scientific name	Common name	3804	3904	3903	3902	3901	3900
Crustacea: Isopoda	Woodlice						
<i>Porcellio scaber</i>	Common rough woodlouse				*		*
<i>Armadillidium vulgare</i>	Common pill woodlouse				*	*	
<i>Oniscus asellus</i>	Common shiny woodlouse				*	*	
<i>Platyarthrus hoffmannseggi</i> In ant's nest under stone	Ant woodlouse				*		
<i>Trichoniscus pusillus</i>	Common pygmy woodlouse				*		
Amphibia	Amphibians						
<i>Rana temporaria</i>	Common Frog				*		
Mammalia	Mammals						
<i>Oryctolagus cuniculus</i>	Rabbit	*	*	*	*	*	
<i>Lepus europeus</i>	Brown Hare	*		*			
<i>Vulpes vulpes</i> Evidence of scat	Red Fox	*			*		
<i>Meles meles</i> Active sett	Badger				*	*	*
<i>Sciurus carolinensis</i>	Grey Squirrel		*	*			
<i>Clethrionomys glareolus</i>	Bank Vole			*			
<i>Rattus norvegicus</i>	Brown Rat				*		
<i>Pipistrellus pipistrellus 45kHz</i>	Common Pipistrelle 45kHz				*		
<i>Nyctalus noctula</i>	Noctule Bat				*		

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