

Wildlife Site Survey Report for: Devil's Dyke

Site Ref:	56/027	Site size (ha):	Approx 1ha		
District:	St Albans	Central Grid Ref:	TL182134		
Surveyors:	J. Cox, A. Harris. J. Williamson, J. Moss, M. Harris				
Spp list by:	J. Williamson	Form by:	M. Harris	Map by:	A. Harris
Date of survey:	25.4.13	Weather:	Sunny	Duration on site:	3.5hrs

Geology:	Bedrock:	Chalk
	Superficial Deposits:	Lowestoft formation Diamicton Anglian

Original criteria:	n/a	Habitat:	Woodland/banks/excavated 1973 earthwork from 2000 yr old earthwork
Criteria met	Ancient Woodland H.1.1.3 (20 AWIs)? Is showing on Bryant but note there was excavations of the earthwork in 1973. The site is shown on Bryant as the same shape and size as it is currently.		
Original Site Description:	None (note is ecosite 56/027)		
Overall General Site Description:	<p>A North-south linear woodland & historically Roman site also shown on Bryant, along a deeply excavated ditch with steep banks which rise above the surrounding area in the central section. A foot-path runs along the ditch bottom. Its western boundary is a hedge composed mainly of Holly (<i>Ilex aquifolium</i>) and Hawthorn (<i>Crataegus monogyna</i>). The site is bounded by arable land to the east. There are many mature standards of Hornbeam (<i>Carpinus betulus</i>), Beech (<i>Fagus sylvatica</i>), Ash (<i>Fraxinus excelsior</i>), Pedunculate Oak (<i>Quercus robur</i>) and Wild Cherry (<i>Prunus avium</i>) and also some relict Hornbeam coppice. The understory comprises mainly Holly thickets, some Elm (<i>Ulmus procera</i>) suckers, occasional saplings of Ash (<i>Fraxinus excelsior</i>), Beech (<i>Fagus sylvatica</i>) and Wild Cherry and some Bramble (<i>Rubus fruticosus</i> agg.) scrub.</p> <p>There are bare patches under the areas of deepest shade. The herb layer includes: Bluebell (<i>Hyacinthoides non-scripta</i>), Yellow Archangel (<i>Lamium galeobdolon</i>), Three Veined Sandwort (<i>Moehringia trinervia</i>), Pignut (<i>Conopodium majus</i>), Goldilocks Buttercup (<i>Ranunculus auricomus</i>), Wood Speedwell (<i>Veronica montana</i>), Broad Buckler Fern (<i>Dryopteris dilatata</i>), Wood Melick (<i>Melica uniflora</i>), Wood Sedge (<i>Carex sylvatica</i>) and Hairy Brome (<i>Bromopsis ramosa</i>) but is rather more diverse on the top of the bank than within the ditch. A few more ruderal species including Stinging Nettle (<i>Urtica dioica</i>) and Cow Parsley (<i>Anthriscus sylvestris</i>) are found at the northern and southern entrances and on the western margin.</p>		
Compartment 1: Ditch	The canopy is composed of mature standards of Hornbeam (<i>Carpinus betulus</i>), Ash (<i>Fraxinus excelsior</i>), Pedunculate Oak (<i>Quercus robur</i>), Beech (<i>Fagus sylvatica</i>) and Wild Cherry (<i>Prunus avium</i>). Hornbeam (much of which is relict coppice) dominates to the north but Pedunculate Oak is more frequent towards the southern end of the site. The Eastern margin of the woodland is mainly Elm (<i>Ulmus procera</i>), Hawthorn (<i>Crataegus monogyna</i>), Elder (<i>Sambucus nigra</i>) and Blackthorn (<i>Prunus spinosa</i>). The understory is mainly composed of Holly (<i>Ilex aquifolium</i>). Where there is dense shade		
Central Grid Ref: TL182134			

	<p>there are bare patches and also bare ground on one or two heavily trampled sites. Elsewhere the ground flora is mainly Bluebell, (both native (<i>Hyacinthoides non-scripta</i>) and hybrid (<i>H. x massartiana</i>)) and Bramble (<i>Rubus fruticosus</i> agg.). Other herbs include Enchanter's Nightshade (<i>Circaea lutetiana</i>), Greater Stitchwort (<i>Stellaria holostea</i>), Wood Speedwell (<i>Veronica montana</i>), and a very few specimens of Wood Sedge (<i>Carex sylvatica</i>) and Wood Melick (<i>Melica uniflora</i>).</p> <p>At the northern and southern entrances the ground flora is more ruderal and includes Stinging Nettle (<i>Urtica dioica</i>), Cow Parsley (<i>Anthriscus sylvestris</i>), Cleavers (<i>Galium aparine</i>) and Hogweed (<i>Heracleum spondylium</i>) together with Bracken (<i>Pteridium aquilinum</i>) at the Northern end. There are a few standing deadwood trees and rather more fallen timber, including a few uprooted tree stumps. There is some evidence of new growth of seedlings and saplings of Wild Cherry, Beech, Sycamore (<i>Acer pseudoplatanus</i>) and Ash together with suckers of Elm (<i>Ulmus procera</i>). There were 14 ancient woodland indicators recorded in this compartment.</p>
<p>Compartment 2: Western bank</p> <p>Central Grid Ref:TL182134</p>	<p>The bank top is slightly more diverse in species and contains more ancient woodland indicators but the species composition is similar to that of the ditch. The canopy is mainly Hornbeam, and Pedunculate Oak, with occasional Wild Cherry and some Horse Chestnut (<i>Aesculus hippocastanum</i>) standards at the northern end. There are more mixed areas of Hawthorn, Hazel, Blackthorn and some Field Maple at the southern end.</p> <p>The western margin is a mixed hedgerow with much Hawthorn and Holly and some Hazel and Field Maple (<i>Acer campestre</i>). There are also some cleared open areas which increase the diversity of species. There are some ruderal species such as Cow Parsley, Stinging Nettle and Hogweed, but also ancient woodland indicators such as several patches of Pignut (<i>Conopodium majus</i>), Yellow Archangel (<i>Lamastrium galeobdolon</i>), Three Veined Sandwort (<i>Moehringia trinervia</i>), Wood melick (<i>Melica uniflora</i>) and a small number of Wood Sedge (<i>Carex sylvatica</i>) and Hairy Brome (<i>Bromopsis ramosa</i>). Both hybrid and native Bluebell are present.</p> <p>At the far southern edge of the site there is a small plantation of western Hemlock (<i>Tsuga sp.</i>) and Norway Spruce (<i>Picea Abies</i>) together with some Beech and an understory of Elder and bramble at ground level.</p>

Fauna:	Birds:	Stock Dove, Buzzard, Jay, Goldcrest, Wren, Tits, Chaffinch, Chiffchaff, Blackcap, Thrush, Blackbird, Woodpecker holes
	Mammals:	Grey squirrel
	Invertebrates:	Beefly, Hoverflies, White-Tailed Bumblebee, Common Carder Bee, Speckled Wood, Brimstone, 7 Spot Ladybird, Solitary Bee nests
Invasive species:	Cherry Laurel (<i>Prunus laurocerasus</i>), Cyclamen hederifolia	
Current Management:	Appears well managed and woodland is in good condition. There is some coppicing and clearing to create open patches on bank top. Some dead wood (both standing and fallen) has been left.	
Recommended Management:		
	Compartment 1	Continue to leave trees as standing dead & fallen dead wood
	Compartment 2	Remove Cherry Laurel, Cyclamen and any other garden escapees. Control Horse Chestnut/non-native seedlings.
Surrounding landuse	Arable to East, urban to West.	

Table 1: Woodland habitat condition (this is broadly based on Natural England's Common Standards Monitoring 2005)		
Attributes	Targets for positive condition	detail
Structure and natural processes	UNDERSTOREY (2-5m) present over at least 20% of total stand area (NB: Beech (<i>Fagus sylvatica</i>) and Oak (<i>Quercus</i>) woods often have sparse shrub layer)	Yes, mainly holly
	CANOPY COVER present over 30-90% of stand area (Coppiced stands have lower canopy cover)	Yes, 75-90% cover
	AGE CLASSES (seedlings, saplings, young, semi-mature, early-mature, mature+) – list the age classes present, spread across the average life expectancy of the commonest trees	Some seedlings including Ash, Sycamore and Horse Chestnut. Ash, Beech, Sycamore and Wild Cherry saplings, suckering Elm. Many mature standards Ash, Beech, Pedunculate Oak and Hornbeam (relic coppice), mature, occasional Oak, Beech close to veteran size. Some wide diameter stumps
	OLD GROWTH FEATURES: Some areas of relatively undisturbed mature/old growth stands or a scatter of large trees allowed to grow to over maturity/death on site (e.g. min of 10% of the woodland or 5-10 trees/hectare)	Few (under 10%) of standing dead wood. Largest trees appear to have been felled down leaving only stumps.
	FALLEN DEAD WOOD: A minimum of 3 fallen lying trees >20cm diameter per ha and 4 trees per ha allowed to die standing	>3 fallen trees per hectare and other cut wood but <4 standing dead trees per hectare
Regeneration	Are there signs of seedlings and saplings growth by natural regeneration? – describe age classes (seedlings, saplings, young) and density	Yes, both seedlings and saplings and occasional young trees mainly Ash, Sycamore and Wild Cherry
	No more than 20% of areas regenerated by planting as opposed to natural regeneration?	Yes – only small plantation at southern end of site
	Are the new plantings all with natives?	Conifers in plantation
Composition: trees and shrubs	At least 95% of cover in any one layer of site native or acceptably naturalised species	Yes
	Death/destruction/damage of native woodland species through effects of deer/squirrels/Ash-die-back or other external unnatural factors (e.g fires/flytipping etc) not more than 10% of total area?	Yes – little evidence of damage



23/04/2013

Herts County boundary

Middlesex districts

HMWT Reserves

HCC Wildlife Sites

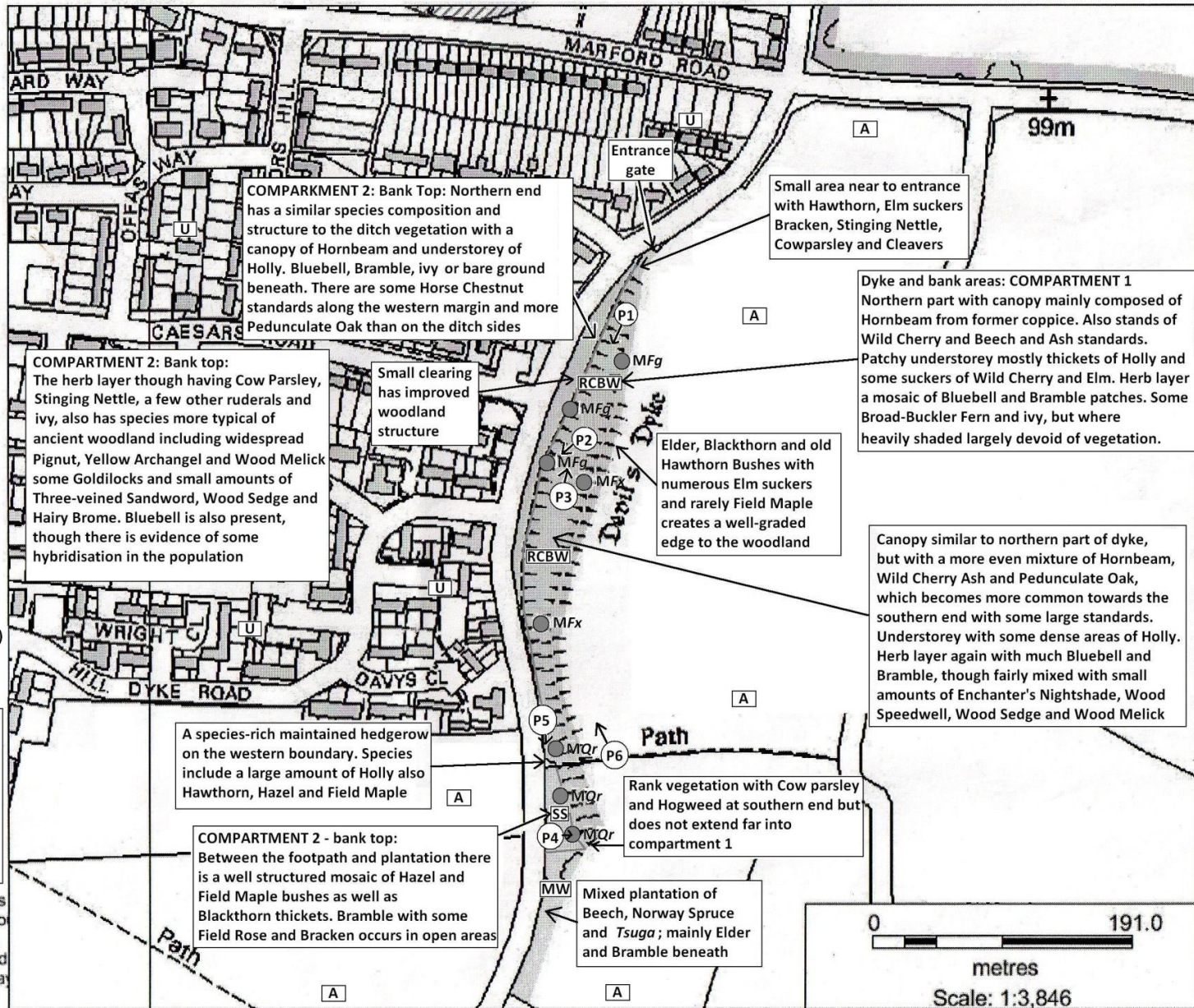


















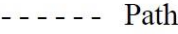
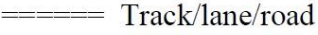



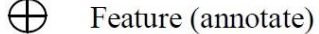
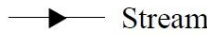
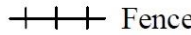



















Survey date: 25/04/2013
 Surveyors: Judith Cox, Andrew Harris (map)
 Margaret Harris, John Moss,
 Jean Williamson

LEGEND

- MFG Mature Beech (*Fagus sylvatica*)
- MFX Mature Ash (*Fraxinus excelsior*)
- MQR Mature Pedunculate Oak (*Quercus robur*)
- MW Mixed plantation woodland

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		WS boundary (NB use a red line to denote anywhere boundary changes should be made)	
W O O D L A N D & S C R U B		Semi-natural broadleaved woodland	 Coppiced broadleaved woodland
		Plantation broadleaved woodland	 Relict coppiced broadleaved woodland
		Plantation coniferous woodland	
		Mixed woodland	
		Dense-continuous scrub	
		Scattered scrub (NB: notate grassland type beneath)	
		Broadleaved Parkland/scattered trees (NB: notate grassland type beneath)	
		Coniferous Parkland/scattered trees (NB: notate grassland type beneath)	
		Mixed Parkland/scattered trees (NB: notate grassland type beneath)	
		Broadleaved recently felled woodland	
	Coniferous recently felled woodland		
	Mixed recently felled woodland		
G R A S S L A N D		Unimproved acid grassland	 Path  Track/lane/road  Hedgerow  Ditch  Bank  Feature (annotate)  Stream  Fence
		Semi-improved acid grassland	
		Unimproved calcareous grassland	
		Semi-improved calcareous grassland	
		Unimproved neutral grassland	
		Semi-improved neutral grassland	
		Improved grassland	
		Marsh/marshy grassland	
		Species-poor semi-improved grassland	
	Tall herb and fen		
		Scattered bracken (NB: notate grassland type beneath)	
		Tall ruderal vegetation	
		Non-ruderal vegetation (fen, e.g. reed/sweetgrass dominant stands)	
WATER		Standing water	
		Running water	
C U L T I V A T E D		Arable land	
		Amenity grassland	 Urban
		Ephemeral/short (e.g. herbal pioneer communities/weedy species)	
		Perennial introduced shrub (eg snowberry, rhododendron, laurel, cotoneaster, bamboo etc)	

SPECIES LIST:

56/027, 25/04/13, JW		WS inds (*a/n/c/w/f) & neg inds (-)	Comp1	Comp2
Scientific Name	Common Name		DAFOR	DAFOR
<i>Acer campestre</i>	Maple, Field	*	+	R
<i>Acer pseudoplatanus</i>	Sycamore		R	
<i>Aesculus hippocastanum</i>	Chestnut, Horse*		+	R
<i>Agrostis stolonifera</i>	Bent, Creeping			+
<i>Alliaria petiolata</i>	Mustard, Garlic			R
<i>Anthriscus sylvestris</i>	Parsley, Cow	- c/n/w	R	O
<i>Arum maculatum</i>	Lords-and-Ladies		R	R
<i>Bromopsis ramosa</i>	Brome, Hairy	*		+
<i>Carex sylvatica</i>	Sedge, Wood	*	+	+
<i>Carpinus betulus</i>	Hornbeam	*	F	O
<i>Chamerion angustifolium</i>	Willowherb, Rosebay	- a/c		R
<i>Circaea lutetiana</i>	Enchanter's-nightshade	*	R	
<i>Cirsium vulgare</i>	Thistle, Spear	- a/c/n/w		+
<i>Conopodium majus</i>	Pignut	*a/n		R
<i>Corylus avellana</i>	Hazel	*	R	R
<i>Crataegus monogyna</i>	Hawthorn		R	R
<i>Cyclamen hederifolia</i>	Cyclamen* (garden escape)			+
<i>Dactylis glomerata</i>	Cocksfoot	- a/c/n/w	R	R
<i>Dryopteris dilatata</i>	Fern, Broad Buckler	*	R	
<i>Dryopteris filix-mas</i>	Fern, Male		+	+
<i>Epilobium sp.</i>	Willowherb sp.			R
<i>Epilobium montanum</i>	Willowherb, Broad-leaved		+	
<i>Fagus sylvatica</i>	Beech		O	+
<i>Fraxinus excelsior</i>	Ash		O	+
<i>Galium aparine</i>	Cleavers	- c/n	R	R
<i>Geranium robertianum</i>	Herb Robert		R	R
<i>Geum urbanum</i>	Wood Avens		R	R
<i>Hedera helix</i>	Ivy		O	O
<i>Heracleum sphondylium</i>	Hogweed		R	R
<i>Holcus lanatus</i>	Yorkshire Fog	- a/c/n/w		+
<i>Holcus lanatus x H. mollis</i>	Yorkshire Fog x Creeping Soft-grass hybrid~		R	
<i>Hyacinthoides non-scripta</i>	Bluebell	*	O	R
<i>Hyacinthoides x massartiana</i>	Bluebell, hybrid		O	R
<i>Ilex aquifolium</i>	Holly	*	O	O
<i>Lamiastrum galeobdolon ssp montanum</i>	Archangel, Yellow	*	R	R
<i>Lolium perenne</i>	Rye-grass, Perennial	- a/c/n/w		+
<i>Lonicera periclymenum</i>	Honeysuckle		+	+
<i>Melica uniflora</i>	Melick, Wood	*	+	R
<i>Mercurialis perennis</i>	Dog's Mercury	*		R
<i>Moehringia trinervia</i>	Sandwort, Three-veined	*		R
<i>Picea abies</i>	Spruce, Norway* (Planted)			+
<i>Poa trivialis</i>	Meadow-grass, Rough	- w	R	R
<i>Prunus avium</i>	Cherry, Wild	*	O	R

56/027, 25/04/13, JW		WS inds (*a/n/c/w/f) & neg inds ('-')	Comp1	Comp2
Scientific Name	Common Name		DAFOR	DAFOR
<i>Prunus laurocerasus</i>	Laurel, Cherry* (Garden escape)			+
<i>Prunus spinosa</i>	Blackthorn		R	R
<i>Pteridium aquilinum</i>	Bracken		R	
<i>Quercus robur</i>	Oak, Pedunculate		O	O
<i>Ranunculus auricomus</i>	Buttercup, Goldilocks	*		R
<i>Ranunculus ficaria</i> subsp. <i>Verna</i>	Celandine, subsp. <i>Verna</i>		R	R
<i>Rosa arvensis</i>	Rose, Field	*	+	R
<i>Rosa canina</i> agg.	Rose, Dog, agg.			+
<i>Rubus fruticosus</i> agg.	Bramble		O	R
<i>Rubus idaeus</i>	Raspberry		R	+
<i>Rumex obtusifolius</i>	Dock, Broad-leaved	- c/n/w	R	
<i>Rumex sanguineus</i>	Dock, Wood		R	R
<i>Sambucus nigra</i>	Elder		R	R
<i>Sorbus aria</i>	Whitebeam, Common^ (probably natural)		+	
<i>Sorbus aucuparia</i>	Rowan / Mountain Ash		+	+
<i>Stachys sylvatica</i>	Woundwort, Hedge		R	R
<i>Stellaria holostea</i>	Stitchwort, Greater		R	R
<i>Taraxacum officinale</i> agg.	Dandelion family		+	R
<i>Taxus baccata</i>	Yew		+	+
<i>Tsuga</i> sp.	Western hemlock * (planted)			+
<i>Ulmus procera</i>	Elm, English		R	O
<i>Urtica dioica</i>	Nettle, Stinging	- a/c/n/w	R	R
<i>Veronica hederifolia</i>	Speedwell, Ivy-leaved			+
<i>Veronica montana</i>	Speedwell, Wood	*	R	
<i>Viola reichenbachiana</i>	Violet, Early Dog	*		R
<i>Viola riviniana</i>	Violet, Common Dog	*	R	+
*=planted/introduced/escape	per compartment totals:		50	60

Total species (all comp.s)		total indicators					
	69	20					
Comp1	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	14	0	0	0	0	0	0
Comp2	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	17	1	1	0	0	0	1
All Compartments:	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	20	1	1	0	0	0	1
Thresholds:	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	min size (ha)	1	0.25	0.25	0.25	0.25	0.25
	min indicators	10	8	5	8	5	12
Criteria met	Met						

DAFOR Scale:

D	Dominant	>75% cover
A	Abundant	51-75% cover
F	Frequent	26-50% cover
O	Occasional	11-25% cover
R	Rare	<11% cover, >=5 individual plants
+	Very Rare	<5 individual plants

LICHEN SPECIES LIST:

Grid Reference :TL 183 134	Date: 25/04/2013	Recorder: Andrew Harris
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The majority of Lichens were recorded on bark, but a few species were found on the gateposts *Caloplaca aff. Austrocitrina*, *Caloplaca flavocitrina*, *Lecanora albescens* and *Verrucaria nigrescens*. *Lecidella scabra* was the sole lichen on the inscribed plaques. The majority of other species occurred on the boughs and twigs on the margins on the woodland bordering agricultural land. Most were typical of nutrient enriched bark, the most common being the ubiquitous golden lichen *Xanthoria parietina* which covered large areas of Elder bushes particularly at the junctions of branches and rougher bark. On the smoother internodes the now typical assemblage of *Caloplaca cerinella*, *Lecania cyrtella* and *Lecanora hagenii* was sometimes found. Few lichens occurred in the heavily shaded areas in the base of the Dyke mainly the common *Lepraria incana*.

One lichen on the trunk of an ash in the bottom of the ditch with a rather warted thallus may have been a species such as *Pertusaria pertusa* suited to the stable environment conditions there which would be an interesting record, but it was too poorly developed to determine with certainty from a depauperate specimen of a common species.

A. T.

Harris

BLS no.	SPECIES	Small scale habitat/location
0212	<i>Amandinea punctata</i>	Twigs of blackthorn on woodland edge
0049	<i>Anisomeridium polypori</i>	Trunk of Elm and Ash
0069	<i>Arthonia radiata</i>	Twigs and small branches of marginal Field Maple, Hornbeam and Elder
2613	<i>Caloplaca aff austrocitrina</i>	Cement pointing and brick on Gateposts
0242	<i>Caloplaca cerinella</i>	Twigs of Elder on woodland edge
2315	<i>Caloplaca flavocitrina</i>	Cement pointing on Gateposts
0287	<i>Candelariella reflexa</i>	Marginal blackthorn
0375	<i>Cladonia coniocraea</i>	mossy base of tree
0511	<i>Evernia prunastri</i>	Well lit twig of Hawthorn
0987	<i>Flavoparmelia caperata</i>	Bough of Hawthorn on woodland edge
2468	<i>Hypotrachyna afrorevoluta</i>	Boughs of hawthorn on woodland edge
0613	<i>Lecania cyrtella</i>	Elder twigs
0627	<i>Lecanora albescens</i>	Cement pointing on Gateposts
0639	<i>Lecanora chlorotera</i>	Twigs and small branches of Ash, Oak and other trees
0621	<i>Lecanora hagenii</i>	Twig of Elder on woodland edge
0688	<i>Lecanora symmicta</i>	Ash twig
0797	<i>Lecidella elaeochroma</i>	Small branches and twigs mainly of Hornbeam
0802	<i>Lecidella scabra</i>	Sandstone plaque on gatepost
1974	<i>Lepraria incana</i>	Shaded bases of oak and hornbeam trunks in woodland interior
1629	<i>Lepraria lobificans</i>	Base of trunk of Hornbeam in ditch bottom
1022	<i>Parmelia sulcata</i>	Well lit bough of hawthorn. Oak boughs in mid/low-canopy of woodland
1107	<i>Phaeophyscia orbicularis</i>	Branch of Elder on woodland edge
1112	<i>Physcia adscendens</i>	Bough and small branches of hawthorn and other marginal bushes
1113	<i>Physcia aipolia</i>	Twig of blackthorn on woodland edge
1120	<i>Physcia tenella</i>	Twig of Field Maple on woodland edge
1989	<i>Punctelia jeckeri</i>	Field Maple twig, bough of Hornbeam
2070	<i>Punctelia subrudecta</i> s. str.	Twig of Field Maple on woodland edge
1234	<i>Ramalina farinacea</i>	Twig of Field Maple on woodland edge
1510	<i>Verrucaria nigrescens</i> f. <i>nigrescens</i>	Cement on gatepost
1530	<i>Xanthoria parietina</i>	Twigs and branches of trees particularly Field Maple and Elder on margin
1531	<i>Xanthoria polycarpa</i>	Ash twig
	Unidentified lichen with warted thallus	South side of trunk of semi-mature Ash in ditch bottom

PHOTO'S:



Photo 1: Compartment 1: relic Hornbeam coppice on dyke sides >S



Photo 2: Holly, Bramble (foreground) and Bluebell (background)



Photo 3: Large fallen tree left in situ; Beech standard at top of dyke



Photo 4: Large standard Pedunculate Oak on bank top

slope



Photo 5: Compartment 5: Scrub/well developed understorey. Cow parsley present in herb layer but also species such as Wood Melick (foreground) >S



Photo 6: Woodland edge on eastern boundary of site >N