

# LAND AT MILL LANE GISBURN LANCASHIRE

**HEDGEROW SURVEY** 

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# **HEDGEROW SURVEY**

# A report for

# **Avalon Chartered Town Planning**

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# **HEDGEROW SURVEY**

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# **PART 1 INTRODUCTION:**

#### 1.1 REASONS FOR SURVEY:

PENNINE *Ecological* have been commissioned by Avalon Chartered Town Planning and Architectural Consultancy, to undertake a Hedgerow Survey on land off Mill Lane, Gisburn, Lancashire.

The survey is required to determine if the hedgerow on the site is important as defined by the Hedgerow Regulations 1997.

The study also includes a general evaluation of the ecological features of the site.

The surveys are required due to a proposed small residential housing development on the site.

## **1.2 SITE LOCATION:**

The location of the hedgerow surveyed is shown on Map 1 in the Appendix.

The hedgerow surveyed is the only hedgerow on the site.

## 1.3 SURVEY METHODOLOGY:

# 1.3.1 Hedgerow Regulations Survey:

(Refer to Map 1 for hedgerow location)

The hedgerow on the boundary of the site was surveyed using The Hedgerow Regulations (1997) methodology. The full survey methodology is explained at length in document *The Hedgerow Regulations 1997 – A Guide to the Law and Good Practice (Department of the Environment, Transport and the Regions)*, further information is provided in the 1997 Act No. 1160 The Hedgerow Regulations 1997, Schedules 1 - 3.

The survey data presented here only relates to the Wildlife and Landscape criteria as detailed in (Part II Criteria of Schedule 1) of the above act. This schedule is included as an appendix to this report.

## 1.3.2 Survey Constraints:

The survey was subject to minor constraints only and relates primarily to survey timing which was at the very beginning of the spring flowering period of woodland species. This means that some species wouldn't have been visible at the time of the survey.

# PART 2 SURVEY RESULTS:

## **2.1 HEDGEROW SURVEY RESULTS:**

The completed Hedgerow Regulation Survey Proforma with full hedgerow details is provided below.

<b>BASELINE DATA:</b>			
Project: Mill Lane, Gisburn		Surveyor: Ian Ryding	<b>Date:</b> 19 / 02 /14
Hedge No: H1	Grid Ref (centre):	Local Authority:	Total Hedge Length:
	SD 8234 4903	Ribble Valley	238m.
		•	•

#### WILDLIFE / LANDSCAPE:

**Scheduled Protected or RDB Species:** None.

# Woody Species (Sample/s Only):

No. of samples = 3

(Nb. Species in brackets are not included in Schedule 3 of the regulations as 'woody species')

Sample 1: Hawthorn, Dog Rose, Guelder Rose, Blackthorn, Ash.

Sample 2: Hawthorn, Dog Rose, Guelder Rose. Sample 3: Hawthorn, Dog Rose, Guelder Rose.

			Average Woody Sp. =3.6
0- 30m count all	>30 - <100m count in control 30m	100 - < 200m treat as 2x 100m	>200m treat as 3x100m

## Woodland Ground Flora: Species within 1m of hedge canopy (whole hedge)

Woodland ground flora species recorded: Lords and Ladies, Wood Avens

Other species recorded; Red Campion, Lesser Celandine, Ground Ivy, Garlic Mustard, Yorkshire-fog, Great Willowherb, Creeping Thistle, Cleavers, Common Nettle.

ASSOCIATED FEATURES:				
Standard Trees (Whole Hedge):	Y	N	Connections ≤ 10m: () = Score	Score
$\leq$ 50m = average 1		*	Other Hedges (1 per hedge)	0
$> 50 \le 100$ m = average $\ge 2$		*	Broadleaved Woodland (2 per wood)	0
$> 100$ m = average $\ge 1$ per 50m		*	Pond (2 per pond)	0
Other Criteria:	Y	N	Additional Information:	
Total of Gaps < 10%		*	Average Height:	1.2m
Bank or Wall ≥ ½ Length	*		Average Width:	1.2m
Ditch ≥ ½ Length		*	Laid (Past or recent):	Yes
Parallel Hedge ≤ 15m		*	Gaps in Bottom (Approx %):	50%
Adjacent to Road / ROW	*		Additional Fencing:	Yes
OTHER COMMENTS:				

#### OTHER COMMENTS:

The hedgerow had been coppiced in the last few years, the current hedge is composed of relatively light regrowth of the original hedge. The hedgerow is currently managed by flail cutting.

Photographs showing the general condition of the hedgerow are provided below.



Photograph 1: Hedgerow looking from east to west.



Photograph 2: Hedgerow looking from west to east.

#### 2.2 OTHER ECOLOGICAL ISSUES:

## 2.2.1 Badgers:

During the survey the whole site was walked and examined for evidence of badger activity, particularly in the adjacent railway cutting and in the hedge bank itself.

No evidence of badger activity was noted and there were no constraints to survey.

## 2.2.2 Bats:

The three on-site trees\* were checked for holes and fissures that could be potential bat roosts.

The examination found no evidence of bat roost potential in the three trees. There were no constraints to survey.

## 2.2.3 Great Crested Newt:

There are no ponds on site and the nearest pond is an ornamental feature associated with Ribblesdale Park Holiday Village to the north of Mill Lane. The pond is of recent origin and created sometime after 2003.

There are no other ponds within 250m of the site.

## 2.2.4 Birds:

The trees and hedgerow on site have potential to support breeding birds. In addition groundnesting birds might potentially use the arable land for nesting.

## **2.2.5** Habitats:

The land most directly affected by the proposals is an arable field currently under winter cereals. Given the very simple nature of the habitats on the site, a full Extended Phase 1 Habitat survey wasn't considered necessary. However a simple map showing all of the habitats on the site has been produced and is included in the appendix.

Apart from the hedgerow, the most notable feature of the site are two veteran sycamore trees. These trees are described in detail in the arboriculturist's report.\*

\*See Tree Survey – Bowland Tree Consultancy Limited (21.01.2014)

# PART 3 ECOLOGICAL EVALUATION:

#### 3.1 EVALUATION OF SURVEY FINDINGS:

## 3.1.1 Hedgerows:

The following section considers the hedgerow in respect of the Hedgerow Regulations, the qualifying criteria for important hedgerows in respect of Schedule 1 are not included here but are provided in the appendix as a reference.

The hedgerow is approximately 238m in length and was surveyed in three samples to its end points. The hedge is not stockproof and the hedgerow has a light open structure on account of the level of regrowth since coppicing.

The woody species diversity of the hedge appears to be low-moderate with an average score from three samples of 3.6 woody species. The hedge is dominated by hawthorn with a lower frequency of rose species, ash, blackthorn and guelder rose. A single scots pine is situated outside of the sample points.

The hedge bottom supports a poor diversity of woodland ground flora species (2 species recorded), including; lords and ladies and wood avens.

The hedge has a bank along at least half its length.

The hedge has no connections with other hedges and no other associated features.

Based on the survey undertaken the hedgerow fails to qualify as important under the Regulations, the following points are relevant in that respect.

- The hedgerow has less than four woody species and has only two associated features.
- To qualify the hedge must have at least four woody species and at least four associated features.

## **3.1.2 Other Ecological Issues:**

Full surveys for other species groups were not undertaken during the hedgerow survey, however a basic assessment of potential ecological issues was undertaken as a precaution.

The key issues identified were nesting bird potential in the hedgerow, trees and cereal crop and the presence of two veteran sycamore trees which require special consideration in respect of the National Planning Policy Framework (2012).

# PART 4 REFERENCES:

#### 4.1 REFERENCES:

DEFRA (2007) Hedgerow Survey Handbook. A standard procedure for local surveys in the UK 2nd Edition. DEFRA, London.

DEFRA (2006) Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 - Habitats and Species of Principal Importance in England. DEFRA/Natural England

English Nature (2001) Great Crested Newt Mitigation Guidelines, English Nature.

Hundt, L (2012) Bat Surveys: Good Practice Guidelines, 2<sup>nd</sup> Edition. Bat Conservation Trust.

Lancashire County Planning Department, (1998) *Biological Heritage Sites. Guidelines for Selection*. Lancashire County Council

Nature Conservancy Council (1990) *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit.* Nature Conservancy Council.

Pyefinch, R. & Golborn, P. (2001) *Atlas of the Breeding Birds of Lancashire and North Merseyside 1997-2000*. Lancashire Bird Club/Lancashire and Cheshire Fauna Society.

Roper, T. J, (2010) *Badger*. New Naturalist Library – Collins.

Rose, F. (1981) The Wildflower Key. Warne.

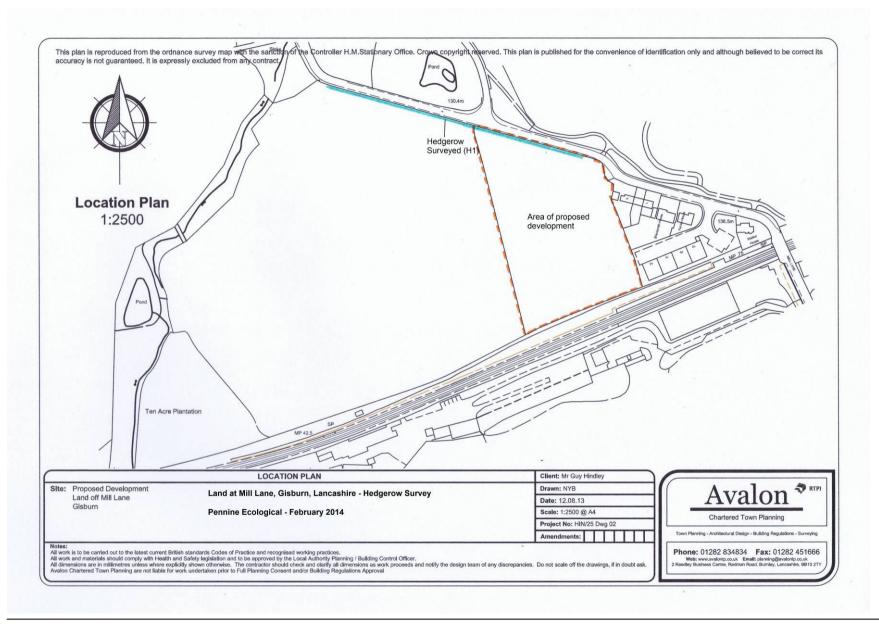
RSPB Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. (RSPB et al 2009)

Stace, C., (1997) New Flora of the British Isles (Second edition). Cambridge University Press.

# **APPENDIX:**

Map 1: Hedgerow Survey Map

Additional Criteria for Determining 'Important' Hedgerows Part 1



#### SCHEDULE 1

Regulations 2(3) and 4

# ADDITIONAL CRITERIA FOR DETERMINING "IMPORTANT" HEDGEROWS

#### **PART I**

## **INTERPRETATION**

In this Schedule -

"building" includes structure;

- "Record Office" means -
- (a) a place appointed under section 4 of the Public Records Act 1958[29] (place of deposit of public records),
- (b) a place at which documents are held pursuant to a transfer under section 144A(4) of the Law of Property Act 1922[30] or under section 36(2) of the Tithe Act 1936[31], including each of those provisions as applied by section 7(1) of the Local Government (Records) Act 1962[32], or
- (c) a place at which documents are made available for inspection by a local authority pursuant to section 1 of the Local Government (Records) Act 1962;
- "relevant date" means the date on which these Regulations are made;
- "Sites and Monuments Record" means a record of archaeological features and sites adopted -
- (a) by resolution of a local authority within the meaning of the Local Government Act 1972[33], or
- (b) in Greater London, by the Historic Buildings and Monuments Commission[34];
- "standard tree" -
- (a) in the case of a multi-stemmed tree, means a tree which, when measured at a point 1.3 metres from natural ground level, has at least two stems whose diameters are at least 15 centimetres:
- (b) in the case of a single-stemmed tree, means a tree which, when measured at a point 1.3 metres from natural ground level, has a stem whose diameter is at least 20 centimetres;

"woodland species" means the species listed in Schedule 2; and "woody species" means the species and sub-species listed in Schedule 3, and any hybrid, that is to say, any individual plant resulting from a cross between parents of any species or sub-species so listed, but does not include any cultivar; and

references to the documents in paragraph 6(3)(b) and (4) are to those documents as at the relevant date, without taking account of any subsequent revisions, supplements or modifications.

#### **PART II**

#### **CRITERIA**

## **Archaeology and history**

- 1. The hedgerow marks the boundary, or part of the boundary, of at least one historic parish or township; and for this purpose "historic" means existing before 1850.
  - 2. The hedgerow incorporates an archaeological feature which is -
    - (a) included in the schedule of monuments compiled by the Secretary of State under section 1 (schedule of monuments) of the Ancient Monuments and Archaeological Areas Act 1979[35]; or
    - (b) recorded at the relevant date in a Sites and Monuments Record.
  - 3. The hedgerow -
    - (a) is situated wholly or partly within an archaeological site included or recorded as mentioned in paragraph 2 or on land adjacent to and associated with such a site; and
    - (b) is associated with any monument or feature on that site.
  - 4. The hedgerow -
    - (a) marks the boundary of a pre-1600 AD estate or manor recorded at the relevant date in a Sites and Monuments Record or in a document held at that date at a Record Office; or
    - (b) is visibly related to any building or other feature of such an estate or manor.
  - 5. The hedgerow -
    - (a) is recorded in a document held at the relevant date at a Record Office as an integral part of a field system pre-dating the Inclosure Acts[36]; or
    - (b) is part of, or visibly related to, any building or other feature associated with such a system, and that system -
      - (i) is substantially complete; or
      - (ii) is of a pattern which is recorded in a document prepared before the relevant date by a local planning authority, within the meaning of the 1990 Act[37], for the purposes of development control within the authority's area, as a key landscape characteristic.

## Wildlife and landscape

- 6. (1) The hedgerow -
  - (a) contains species listed or categorised as mentioned in sub-paragraph (3); or
  - (b) is referred to in a record held immediately before the relevant date by a biological record centre maintained by, or on behalf of, a local authority within the meaning of the Local Government Act 1972[38], and in a form recognised by the Nature Conservancy Council for England, the Countryside Council for Wales[39] or the Joint Nature Conservation Committee[40], as having contained any such species -
    - (i) in the case of animals and birds, subject to sub-paragraph (2), within the period of five years immediately before the relevant date.
    - (ii) in the case of plants, subject to sub-paragraph (2), within the period of ten years immediately before the relevant date;
- (2) Where more than one record referable to the period of five or, as the case may be, ten years before the relevant date is held by a particular biological record centre, and the more (or most) recent record does not satisfy the criterion specified in sub-paragraph (1)(b), the criterion is not satisfied (notwithstanding that an earlier record satisfies it).
  - (3) The species referred to in sub-paragraph (1) are those -
    - (a) listed in Part I (protection at all times) of Schedule 1 (birds which are protected by special penalties), Schedule 5 (animals which are protected) or Schedule 8 (plants which are protected) to the Wildlife and Countryside Act 1981[41];
    - (b) categorised as a declining breeder (category 3) in "Red Data Birds in Britain" Batten LA, Bibby CJ, Clement P, Elliott GD and Porter RF (Eds.), published in 1990 for the Nature Conservancy Council and the Royal Society for the Protection of Birds (ISBN 0 85661 056 9); or
    - (c) categorised as "endangered", "extinct", "rare" or "vulnerable" in Britain in a document mentioned in sub-paragraph (4).
  - (4) The documents referred to in sub-paragraph (3)(c) are -
    - (a) of the books known as the British Red Data Books:
      - 1. "Vascular Plants" Perring FH and Farrell L, 2nd Edition, published in 1983 for the Royal Society for Nature Conservation (ISBN 0 902484 04 4);
      - 2. "Insects" Shirt DB (Ed.), published in 1987 for the Nature Conservancy Council (ISBN 0 86139 380 5); and
      - 3. "Invertebrates other than insects" Bratton JH (Ed.), published in 1991 for the Joint Nature Conservation Committee (ISBN 1 873701 00 4); and

(b) of the books known as the Red Data Books of Britain and Ireland:

"Stoneworts" Stewart NF and Church JM, published in 1992 for the Joint Nature Conservation Committee (ISBN 1873701241).

- 7. (1) Subject to sub-paragraph (2), the hedgerow includes -
  - (a) at least 7 woody species;
  - (b) at least 6 woody species, and has associated with it at least 3 of the features specified in sub-paragraph (4);
  - (c) at least 6 woody species, including one of the following -

black-poplar tree (Populus nigra ssp betulifolia);

large-leaved lime (Tilia platyphyllos);

small-leaved lime (*Tilia cordata*);

wild service-tree (Sorbus torminalis); or

(d) at least 5 woody species, and has associated with it at least 4 of the features specified in sub-paragraph (4),

and the number of woody species in a hedgerow shall be ascertained in accordance with sub-paragraph (3).

- (2) Where the hedgerow in question is situated wholly or partly in the county (as constituted on 1st April 1997) of the City of Kingston upon Hull, Cumbria, Darlington, Durham, East Riding of Yorkshire, Hartlepool, Lancashire, Middlesbrough, North East Lincolnshire, North Lincolnshire, Northumberland, North Yorkshire, Redcar and Cleveland, Stockton-on-Tees, Tyne and Wear, West Yorkshire or York[42], the number of woody species mentioned in paragraphs (a) to (d) of sub-paragraph (1) is to be treated as reduced by one.
  - (3) For the purposes of sub-paragraph (1) (and those of paragraph 8(b)) -
    - (a) where the length of the hedgerow does not exceed 30 metres, count the number of woody species present in the hedgerow;
    - (b) where the length of the hedgerow exceeds 30 metres, but does not exceed 100 metres, count the number of woody species present in the central stretch of 30 metres;
    - (c) where the length of the hedgerow exceeds 100 metres, but does not exceed 200 metres, count the number of woody species present in the central stretch of 30 metres within each half of the hedgerow and divide the aggregate by two;
    - (d) where the length of the hedgerow exceeds 200 metres, count the number of woody

species present in the central stretch of 30 metres within each third of the hedgerow and divide the aggregate by three.

- (4) The features referred to in sub-paragraph (1)(b) and (d) (which include those referred to in paragraph 8(b)) are -
  - (a) a bank or wall which supports the hedgerow along at least one half of its length;
  - (b) gaps which in aggregate do not exceed 10% of the length of the hedgerow;
  - (c) where the length of the hedgerow does not exceed 50 metres, at least one standard tree;
  - (d) where the length of the hedgerow exceeds 50 metres but does not exceed 100 metres, at least 2 standard trees;
  - (e) where the length of the hedgerow exceeds 100 metres, such number of standard trees (within any part of its length) as would when averaged over its total length amount to at least one for each 50 metres;
  - (f) at least 3 woodland species within one metre, in any direction, of the outermost edges of the hedgerow;
  - (g) a ditch along at least one half of the length of the hedgerow;
  - (h) connections scoring 4 points or more in accordance with sub-paragraph (5);
  - (i) a parallel hedge within 15 metres of the hedgerow.
- (5) For the purposes of sub-paragraph (4)(h) a connection with another hedgerow scores one point and a connection with a pond or a woodland in which the majority of trees are broad-leaved trees scores 2 points; and a hedgerow is connected with something not only if it meets it but also if it has a point within 10 metres of it and would meet it if the line of the hedgerow continued.

## 8. The hedgerow -

- (a) is adjacent to a bridleway or footpath, within the meaning of the Highways Act 1980[43], a road used as a public path, within the meaning of section 54 (duty to reclassify roads used as public paths) of the Wildlife and Countryside Act 1981[44], or a byway open to all traffic, within the meaning of Part III of the Wildlife and Countryside Act 1981[45], and
- (b) includes at least 4 woody species, ascertained in accordance with paragraph 7(3) and at least 2 of the features specified in paragraph 7(4)(a) to (g).

## **SCHEDULE 2**

Regulation 2(3) and Schedule 1, Part I

## WOODLAND SPECIES

Barren strawberry (Potentilla sterilis) Bluebell (Hyacinthoides non-scriptus) Broad buckler fern (*Dryopteris dilatata*) Broad-leaved helleborine (Epipactis helleborine) Bugle (*Ajuga reptans*) Common cow-wheat (*Melampyrum pratense*) Common dog violet (Viola riviniana) Common polypody (*Polypodium vulgare*) Dog's mercury (Mercurialis perennis) Early dog violet (Viola reichenbachiana) Early purple orchid (Orchis mascula) Enchanter's nightshade (Circaea lutetiana) Giant fescue (Festuca gigantea) Goldilocks buttercup (Ranunculus auricomus) Great bell-flower (Campanula latifolia) Greater wood-rush (Luzula sylvatica) Hairy brome (Bromus ramosus) Hairy woodrush (Luzula pilosa) Hard fern (Blechnum spicant) Hard shield fern (*Polystichum aculeatum*) Hart's tongue (Asplenium scolopendrium)

Heath bedstraw (Galium saxatile)

Herb paris (Paris quadrifolia)
Herb-robert (Geranium robertianum)
Lady fern (Athyrium filix-femina)
Lords-and-ladies (Arum maculatum)
Male fern (Dryopteris filix-mas)
Moschatel (Adoxa moschatellina)
Narrow buckler-fern (Dryopteris carthusiana)
Nettle-leaved bell-flower (Campanula trachelium)
Oxlip (Primula elatior)
Pignut (Conopodium majus)
Primrose (Primula vulgaris)
Ramsons (Allium ursinum)
Sanicle (Sanicula europaea)
Scaly male-fern (Dryopteris affinis)
Small cow-wheat (Melampyrum sylvaticum)
Soft shield fern (Polystichum setiferum)
Sweet violet (Viola odorata)
Toothwort (Lathraea squamaria)
Tormentil (Potentilla erecta)
Wild strawberry (Fragaria vesca)
Wood anemone (Anemone nemorosa)
Wood avens/Herb bennet (Geum urbanum)
Wood false-brome (Brachypodium sylvaticum)
Wood horsetail (Equisetum sylvaticum)
Wood meadow-grass (Poa nemoralis)

Wood melick (Melica uniflora)
Wood millet (Millium effusum)
Wood sage (Teucrium scorodonia)
Wood sedge (Carex sylvatica)
Wood sorrel (Oxalis acetosella)
Wood speedwell (Veronica montana)
Wood spurge (Euphorbia amygdaloides)
Woodruff (Galium odoratum)
Yellow archangel (Lamiastrum galeobdolon)
Yellow pimpernel (Lysimachia nemorum)
SCHEDULE 3 Regulation 2(3) and Schedule 1, Part I  WOODY SPECIES
Alder (Alnus glutinosa)
Apple, crab (Malus sylvestris)
Ash (Fraxinus excelsior)  Ash (Fraxinus excelsior)
Ash (Fraxinus excelsior)
Ash (Fraxinus excelsior) Aspen (Populus tremula)
Ash (Fraxinus excelsior) Aspen (Populus tremula) Beech (Fagus sylvatica)
Ash (Fraxinus excelsior)  Aspen (Populus tremula)  Beech (Fagus sylvatica)  Birch, downy (Betula pubescens)
Ash (Fraxinus excelsior)  Aspen (Populus tremula)  Beech (Fagus sylvatica)  Birch, downy (Betula pubescens)  Birch, silver (Betula pendula)
Ash (Fraxinus excelsior)  Aspen (Populus tremula)  Beech (Fagus sylvatica)  Birch, downy (Betula pubescens)  Birch, silver (Betula pendula)  Black-poplar (Populus nigra sub-species betulifolia)

Buckthorn (Rhamnus cathartica)
Buckthorn, alder (Frangula alnus)
Butcher's-broom (Ruscus aculeatus)
Cherry, bird (Prunus padus)
Cherry, wild (Prunus avium)
Cotoneaster, wild (Cotoneaster integerrimus)
Currant, downy (Ribes spicatum)
Currant, mountain (Ribes alpinum)
Dogwood (Cornus sanguinea)
Elder (Sambucus nigra)
Elm (Ulmus species)
Gooseberry (Ribes uva-crispa)
Gorse (Ulex europaeus)
Gorse, dwarf (Ulex minor)
Gorse, western (Ulex gallii)
Guelder rose (Viburnum opulus)
Hawthorn (Crataegus monogyna)
Hawthorn, midland (Crataegus laevigata)
Hazel (Corylus avellana)
Holly (Ilex aquilfolium)
Hornbeam (Carpinus betulus)
Juniper, common (Juniperus communis)
Lime, large-leaved (Tilia platyphyllos)
Lime, small-leaved (Tilia cordata)
Maple, field (Acer campestre)

Mezereon (Daphne mezereum)
Oak, pedunculate (Quercus robur)
Oak, sessile (Quercus petraea)
Osier (Salix viminalis)
Pear, Plymouth (Pyrus cordata)
Pear, wild (Pyrus pyraster)
Poplar, grey (Populus x canescens)
Poplar, white (Populus alba)
Privet, wild (Ligustrum vulgare)
Rose (Rosa species)
Rowan (Sorbus aucuparia)
Sea-buckthorn (Hippophae rhamnnoides)
Service-tree, wild (Sorbus torminalis)
Spindle (Euonymus europaeus)
Spurge-laurel (Daphne laureola)
Walnut (Juglans regia)
Wayfaring-tree (Viburnum lantana)
Whitebeam (Sorbus species)
Willow (Salix species)
Yew (Taxus baccata)