A photograph of a small stream flowing through a lush woodland. The water is dark and reflects the surrounding greenery. The banks are covered in dense, vibrant green plants, including large-leafed species and ferns. Several tree trunks are visible, some leaning over the stream. The overall scene is a rich, natural habitat.

WOODLANDS IN PLUMPTON PARISH

JACQUI HUTSON
with PLUMPTON &
EAST CHILTINGTON
WILDLIFE GROUP

Woodlands in Plumpton Parish

by **Jacqui Hutson**
with **Plumpton & East Chiltington Wildlife Group**

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ACKNOWLEDGEMENTS

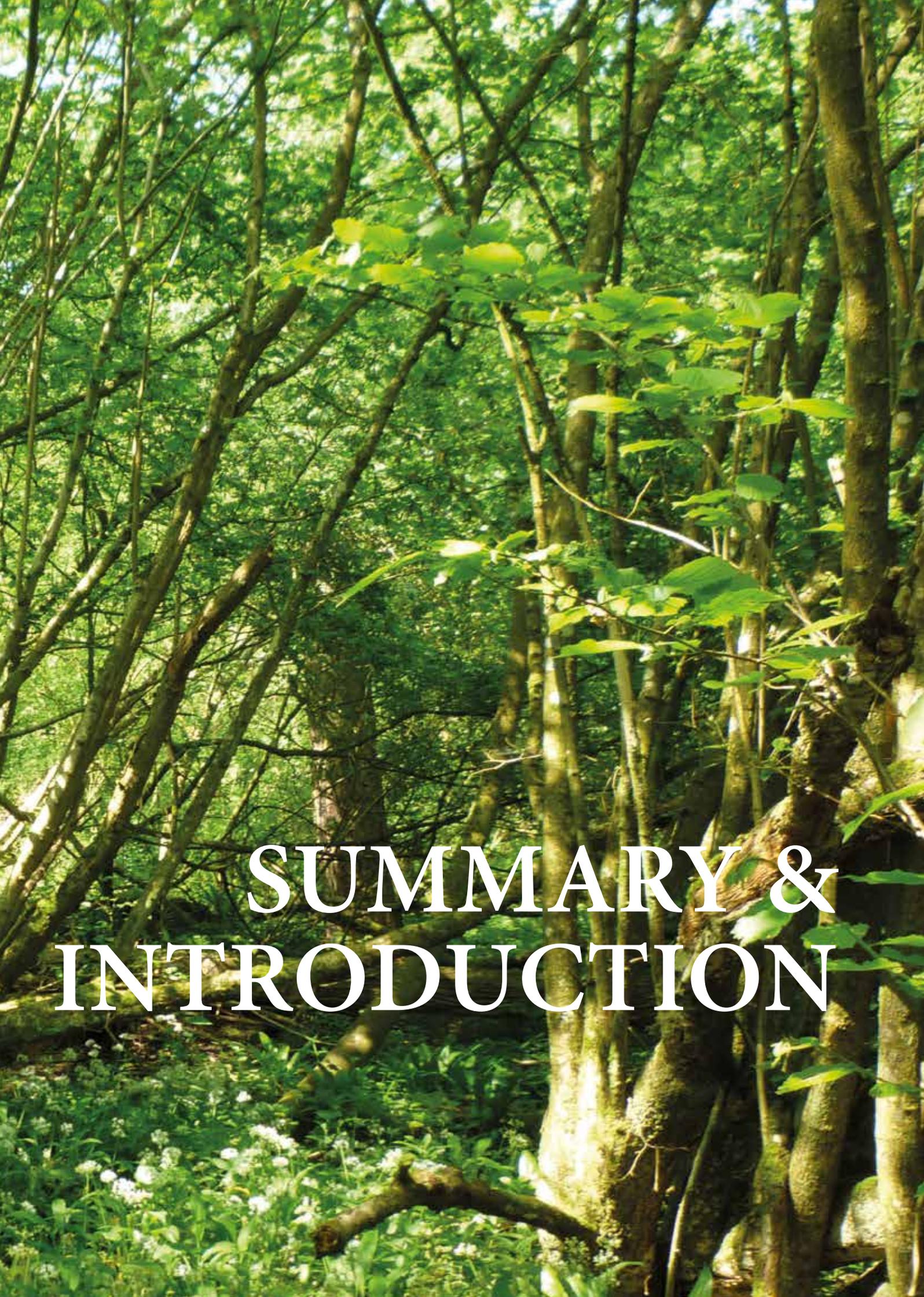
This report would not have been possible without the help of many people. The surveyors – Peter Baker, Lynn Baxter, the late Sue Bromage, Brigitte Christine, Kate Gold, Jo Graham, Tony Hutson, Catherine Jackson, Sandie Jackson, Judith Miller, Jeanie Muddle, Jane Traies, Anne Woodbridge, Jon Wood and Karine Wright – not only assisted with recording but their company made for enjoyable woodland explorations. The owners of all the woods were very generous in allowing us access and we are grateful to them. Special thanks are due to Kate Gold and Jeanie Muddle for their photographs and to Catherine Jackson for the design and presentation of the report. Thanks are due also to Lois Mayhew and Andrew Lawson of the Sussex Biodiversity Record Centre for supplying the maps.

Jacqui Hutson

Contents

5	SUMMARY & INTRODUCTION
8	1. METHODS
12	2. TYPES OF WOODLAND
27	REFERENCES
28	ANNEXES
30	MAP
32	ANNEX 1
52	ANNEX 2
54	ANNEX 3
68	ANNEX 4





SUMMARY & INTRODUCTION

Summary

This report describes the results of a survey of the woodlands in Plumpton Parish by the Plumpton and East Chilmington Wildlife Group (P&ECWG) between 2014 and 2016. It compares the findings with those of a survey by Robin Lang in 1986. A total of 247 species were recorded, of which 112 are true woodland species. In total, 61 plants that are Ancient Woodland Indicators (AWIs) were recorded.

The P&ECWG surveys suggest that two woods (Inholmes Farm Wood south and Chilmington Ferrings) should be classified as Ancient Woods, although they are not listed in either of the relevant ancient woodland inventories. It is also puzzling, given the low number of AWIs and small size, that Grassy Wood was included in the Revised Ancient Woodland Inventory for Lewes District.

Species common to all woodlands are Ash, Elder, Bluebell and Holly; trees and shrubs occurring in at least 14 woods are Hazel, Hawthorn and Pedunculate Oak. It is notable that all but three of the woods P&ECWG surveyed are present on the 1841 Tithe Map. While the two surveys are not strictly comparable because of slight differences in methodology, there is some evidence that the woodlands have become shadier over the last 30 years. This is a result of lack of management and fits with the national trend.

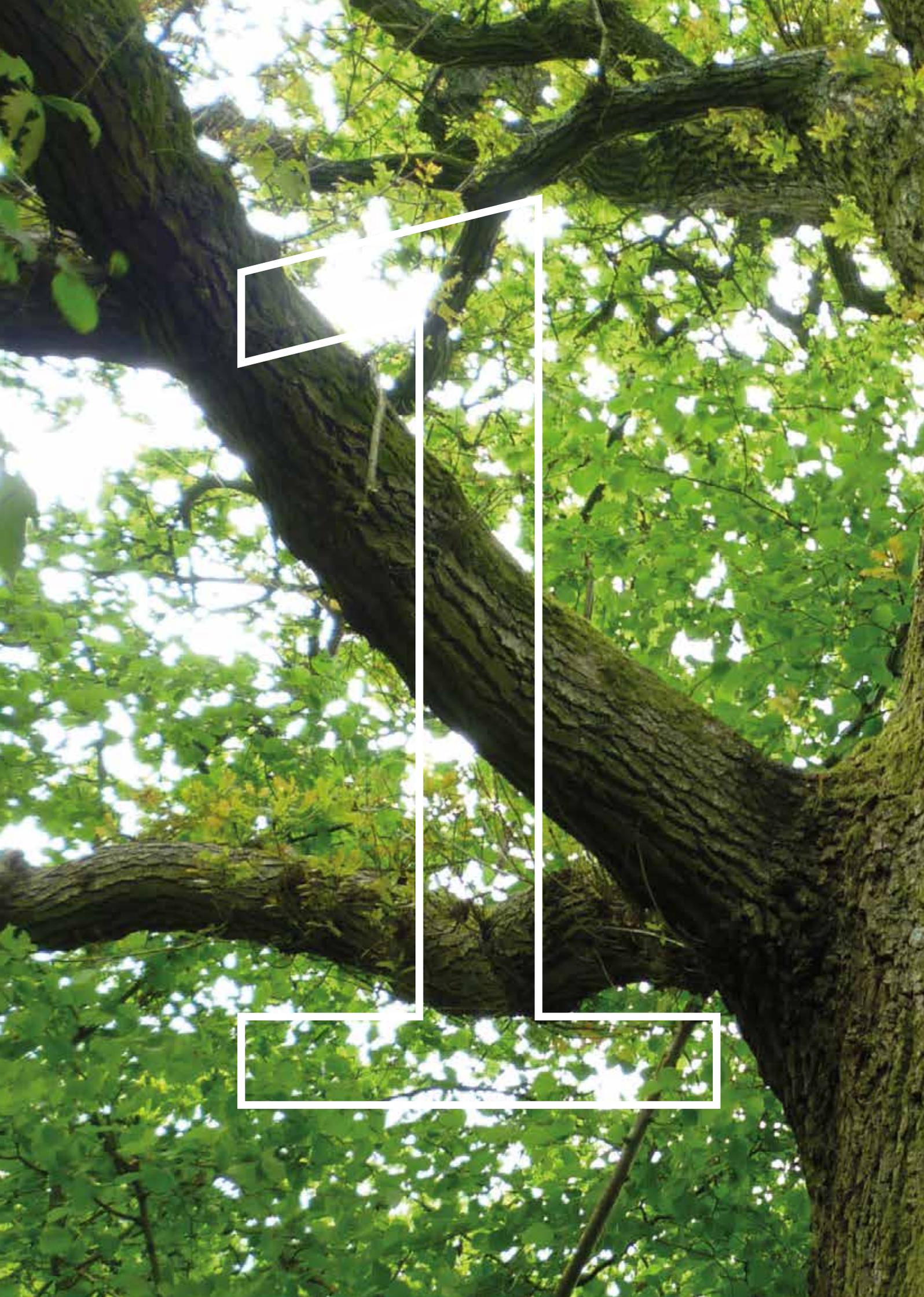
(Photo previous page) The Pines
© Jeanie Muddle

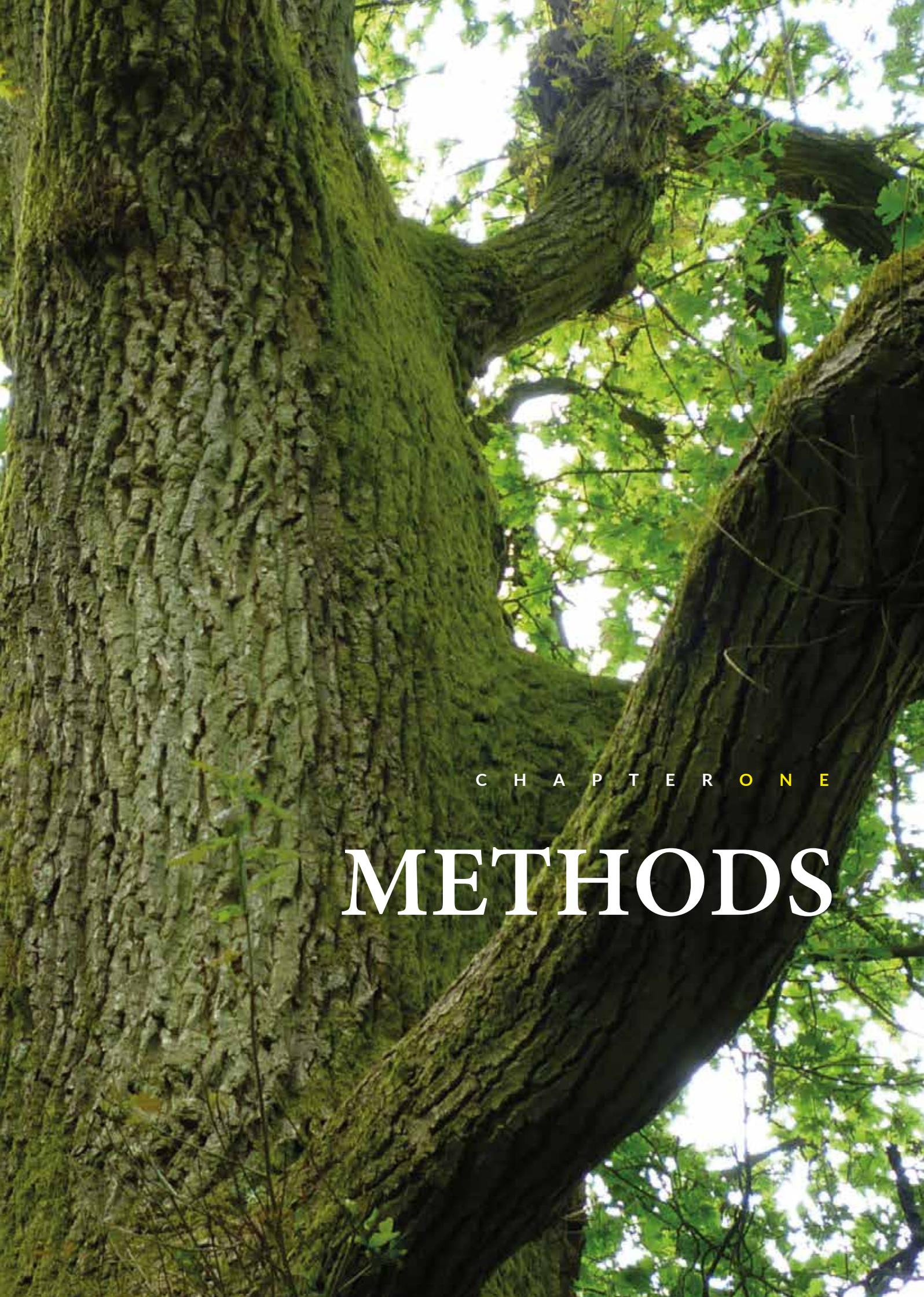
Introduction

There are 20 woods of more than 0.5 ha in Plumpton. Nineteen of these were surveyed by Robin Lang in 1986 on behalf of the Sussex Trust for Nature Conservation (now Sussex Wildlife Trust), with funding from the Nature Conservancy Council (now English Nature) and East Sussex County Council (Lang, 1986). It was a pilot survey to record biological information on woods and to assess the method by which future surveys would be done. The copy of the survey report used is an annotated draft (held by the Sussex Biodiversity Records Centre); a final copy, if one exists, could not be located. The only wood not surveyed at that time was Sedgebrook Hostel, because of difficulties of access and permission associated with change of ownership.

In 2004, members of what is now the Plumpton and East Chiltington Wildlife Group (P&ECWG) conducted a Phase 1 Habitat Survey of the parish, the results of which were published as Plumpton's Wildlife Habitats (Hutson, 2011). This contains additional information on Plumpton's woodlands.

Between 2014 and 2016, members of P&ECWG surveyed 18 woodlands, including Sedgebrook Hostel but not two others of those surveyed by Lang, in order to record changes since the 1986 survey and collect additional information. The woodlands surveyed are shown on the maps in Annex 1 (pp30-31). The numbering and names of the woods are those used by Lang.





C H A P T E R O N E

METHODS

(Previous page) Pedunculate Oak,
Plumpton Wood North
© Jeanie Muddle



Spindle with fruits
© Jacqui Hutson



Willow leaves © Jacqui Hutson

1. Methods

1.1 1986 survey by Robin Lang

The work was carried out during the months of May, June and July 1986. Each wood was either walked in between two and five transects, depending on the size of the wood or a random route was taken; between 0.5 and 4 hours were spent in each. If the wood was not named on the 1:10,000 OS map, the nearest place name was used within inverted commas. Additional information was recorded as follows: whether the wood was listed in the Ancient Woodland Inventory, its conservation status (SSSI or AONB) and access by public footpaths and bridleways.

Species lists were annotated using a the DAFOR scale, as follows: D = Dominant, more than 70% ground cover; A = Abundant; F = Frequent; O = Occasional; R = Rare. A note was made of those species considered to be Ancient Woodland Indicator species, following Hornby (1984).

1.2 Survey by Plumpton & East Chilton Wildlife Group, 2014–2016

There were several differences in methodology for the new survey. Time constraints meant that woods had to be surveyed at weekends over a period of three years (2014–2016), in order to involve volunteers. One of the objectives of this survey was to allow members of the Plumpton Wildlife and Habitat Group (as it was then named; it changed its name in 2016) to gain experience in plant identification. Thus, each survey usually took longer than Lang's. We also chose to survey in the months of April and May, in order to be able to record the spring flowers.

We listed species present and assigned relative abundance for each on the ACFOR scale, a different scale to that used by Lang, in accordance with current practice: A = Abundant, C = Common, F = Frequent, O = Occasional, R = Rare. It is subjective but a discussion between the volunteers present was used to arrive at a consensus. We felt that this scale was adequate to compare results of the two surveys.

We noted the presence of Ancient Woodland Indicator plants (AWIs) as listed for the South-East of England (collated by K. Kirby, English Nature, 2004, in Rose, 2006). The Hornby 1984 list that Lang used differs in a few respects from that published in Rose. For example, the Hornby list did not include Bluebell, Black Bryony and Holly, but included Wood Forget-me-not, which Kirby did not include. In calculating the numbers of AWIs for each wood, we used the Kirby list for both surveys (see Annex 1). The names of plants follow Stace, 2010.

1.3 General comments

Although the survey results are not strictly comparable because of the differences in methodology, some general observations can be made and some changes in the findings between the two surveys indicated.

In the following discussion where we compare the two surveys, we focus on only the 17 woods that were covered by both surveys, but in more general discussion we use the findings from the 19 woods that Lang surveyed and the 18 that we surveyed. A general description of each of the woods is given in Annex 1, and their locations and ages in Annex 2.

A total of 247 plant species were recorded in the surveys. Of these, 190 are true native species (those present at the time that the land bridge between Britain and the rest of Europe was severed by rising sea levels, at the close of the Ice Age) and 112 were true woodland species. Twenty-three are Neophytes (introduced into Britain after AD1500); 12 are Archaeophytes (not native but established before AD1500); 15 are Alien; three are native hybrids, and four are of uncertain status (ie. not clear whether or not they are true natives). A full list of all plant species recorded in the surveys is given in Annex 3. All the woodlands are on private property and only some have footpaths through them. An Annex of all species recorded in each wood has been compiled but is not included here for reasons of privacy. The full data are held by the Group and Sussex Biodiversity Record Centre at Woods Mill, Henfield.



Wood anemones and bluebells
© *Jacqui Hutson*



Primrose © *Jacqui Hutson*



Wild Cherry © *Jacqui Hutson*





C H A P T E R T W O

TYPES OF WOODLAND



Sedgebrook Hostel (Russet Wood)
© Jeanie Muddle

2. Types of Woodland

(Photo pp13–14) Plumpton Wood South © Jeanie Muddle

2.1 National Vegetation Communities

The National Vegetation Classification system (Rodwell, 1991) aims to describe all the vegetation communities of Great Britain. It describes 18 main woodland types, of which the two most common in Sussex are W8 Ash-Maple-Dog's Mercury woodland and W10 Pedunculate Oak-Bracken-Bramble woodland. The main differences between these two are shown in Table 1.

	W8 Ash-Field Maple-Dog's Mercury woodland	W10 Oak-Bracken-Bramble woodland
Soils	Calcareous soils where leaching is limited	Base-poor brown earths
Characteristic trees and shrubs	Ash, Field Maple, Hazel	Oak, Silver Birch, Hornbeam
Additional trees and shrubs	Dogwood, Elder, Guelder Rose, Hawthorn, Wild Privet, Spindle, Wayfaring Tree, Goat Willow, Grey Willow	Hazel, Hawthorn, Holly, Wild Cherry, Wild Service Tree, Crab Apple, Alder, Aspen
Frequent species of the field layer	Dog's Mercury, Lords-and-ladies, Enchanter's-nightshade, Wood Avens, Bluebell, Dog's Violet and Early Dog-violet	Bluebell, Wood Anemone, Bramble, Bracken, Honeysuckle
Less common species in the field layer	Moschatel, Wood Sedge, Pignut, Yellow Archangel, Sanicle, False Brome and Ivy	Broad Buckler-fern, Male-fern, Foxglove, Wood Millet, Greater Stitchwort

W10 woods occur on base-poor brown earths and are very variable. Ten woods (from Green Cross to the northern part of the parish) fit best into this community. Oak is the most characteristic tree. Of the two oaks native to Britain, Pedunculate Oak is commoner in South East England and it is this species that occurs in all our woods. However, we found Sessile Oak, more typical of western Britain, in one of the northern woods and hybrids between the two oaks in two more. Sessile Oak is more frequent on acid soils and has a very scattered distribution in Sussex. Hornbeam is common in these northern woods; the furthest south it occurs in the parish appears to be in Chilmington Ferrings. However, in the adjacent parish of East Chilmington, it is a dominant tree in Warningore Wood much further south. In the past it was coppiced for firewood and other uses, but this has largely been abandoned. Other trees characteristic of this community include Silver Birch, Ash, Holly, Wild Cherry, Wild Service Tree and Crab Apple, with Alder and Aspen on damper soils. All of these were recorded in at least some of these woods.

These are typical bluebell woods but with Wood Anemones replacing Bluebells on damper soils. Bramble, Bracken and Honeysuckle are common and there is a wide range of other species.

W8 woods, by contrast, occur on various types of calcareous soils and characteristically have Ash, Field Maple and Hazel. These species are more common in our southern woods, where the soil is base-rich. The presence of Dog's-mercury, Wild Privet, Spindle, Wayfaring Tree, Moschatel and Sanicle all indicate base-rich soils and all have been found in some of our southern woods. These woods also have Bluebells and Wood Anemones.

These two communities grade into each other and, without more detailed surveys to investigate relative abundance and frequencies of characteristic species of each community, it is difficult to assign a wood to a particular community. Indeed, given the variation in the geology and soils of the parish, it is likely that any given wood can contain both.

There is a third woodland community that occurs in one wood in the parish: W6 Alder and Common Nettle woodland, where the soil is wet and enriched with mineral deposits.

2.2 Ancient woodlands

Ancient woodland is defined as land that has had continuous woodland cover since at least 1600AD. Since then, it may have been cleared for underwood or timber production but it has never been ploughed, so its ground vegetation has persisted. It is identified by: its presence on historic maps; features such as historic boundary banks and ditches; its location, often on parish boundaries or steep slopes; the presence of coppice or pollarded trees; and the presence of a considerable number of plants that are characteristic of ancient woodland. Each region of England has its own list of 100 Ancient Woodland Indicators (AWIs), and ancient woods usually have at least 20 of these.

In the 1989 East Sussex Inventory of Ancient Woodland, six woods of more than 0.2 ha were listed as ancient: Plumpton Wood South, Grannies Wood (Wales Farm Wood), Riddens Wood, Letchmore Wood, Plumpton Wood North and Polecat Wood (Whitbread *et al*, 1989). It was updated in 2010 and several woodlands in the parish were added, including some that are smaller than 2 ha: Pig Wood; part of Beresford Manor Farm Wood (an extension of Plumpton Wood North); Sedgebrook Hostel (called Russet Wood in the revised inventory – a name given by the owners) and Grassy Wood (Hume *et al*, 2010). All of these were visited by both surveys, except for Russet Wood, which Lang was not able to visit. It is not clear why Inholmes Farm Wood South and Chiltoning Ferrings have not been included in the revised ancient woodland inventory, especially given the good numbers of AWIs they have (see Annex 3). It is also puzzling that

Grassy Wood was included in the revised inventory, given its small size and only seven AWIs.

An examination of the 1841 Tithe Map and accompanying apportionment table reveals that all the woods surveyed existed at that time, except for: Reed Pond (which was pond and waste), Highborough (for which no data were given), and the section of Chiltington Ferrings that lies within the parish boundary. This latter was an arable field at the time. Chiltington Ferrings was surveyed as a whole (ie. including the part that lies in East Chiltington) by both surveys but all the other woods or parts of larger woods were within Plumpton Parish.

Annex 3 shows the woodlands surveyed, their locations, type of woodland according to Lang, presence on the Tithe Map and number of AWIs recorded by each survey. In total, 61 AWIs were recorded in the Plumpton woods, nine only by Lang and nine only by P&ECWG. Only Bluebell was recorded in all of the 17 woods considered here, but Maple, Holly and Wood Anemone were recorded in most of the woods and some AWIs were recorded only once. Lang recorded Greater Butterfly-orchid and Bird's-nest Orchid, which we did not find, but our survey would have been too early. Some differences are harder to explain. We recorded more ferns than Lang, and these are long-lived perennials, as are other AWIs. While neither survey recorded the later summer and autumn flowering Broad-leaved and Violet Helleborine orchids, we included them in the AWI lists because we were aware of them from other surveys carried out by members of the P&ECWG.

Annex 4 shows the 100 AWIs for South-east England compiled by Hornby (1984) and Kirby (2004), together with the numbers of woods in which each of these species were recorded in each survey. It is obvious that there are some discrepancies between the numbers of AWIs recorded in each survey. Some of this may be due to differences in the survey season. Our survey found more of the early-flowering species, while Lang recorded later-flowering grasses and orchids, which we missed. Lang recorded more Crab Apple trees and Buckthorn than we did, while we recorded more Wild Service Trees. All three of these trees are infrequent, scattered and easy to miss. Other differences may be due to the differing amount of time spent in both surveys.

2.3 Soil types

The different geological strata of Plumpton give rise to varied soil types. In the southern part of the parish two woods are on well-drained basic soil over Chalk; two are on the Gault Clay/Upper Greensand boundary, on poorly drained soil derived from the clay; two are on the sandy and silty clay overlying Folkestone Beds; one is on the Sandgate and Folkestone

Beds, with free-draining brown forest soil, and one is on the sandy loam of the Upper Greensand. The nine woods in the northern part of the parish are all on Weald Clay with its poorly drained soils, but even here there are local intrusions of other geological strata: bands of sandstone and Paludina Limestone. While past management may have over-ridden the effects of soil type in determining the composition of the vegetation on different soils, it is striking that Hornbeam is confined to the woods on Weald Clay and is not found south of the wood at Chiltington Ferrings.

2.4 General differences

There is some evidence from comparing the two survey results that many of our woods have become slightly shadier. This is based on calculating the percentage of shade-loving species in each wood in each survey (using data from Hill *et al*, 2004). This would fit in with the national trend where woods that are no longer managed for coppice or timber are now often very shady, with fewer gaps for light-demanding species to occupy.

One of the more striking differences between the two surveys was the difference in bracken records. Lang recorded it in 14 of the 17 woods under consideration, whereas we found it in only eight. It is not an easy plant to miss, even in early spring, because of the persistent dead fronds, so its apparent disappearance from some woods may be linked to increased shade; it is quite a light-demanding plant.

2.5 Proportion of true woodland species

Of the 17 woods for which comparison was possible, 11 had a greater percentage of true woodland species in the more recent survey and 8 had a smaller percentage. One would not expect a great change because true woodland plants are generally long lived. But in some woods our survey failed to find some shorter-lived and light-demanding species, such as birch and cherry, which were recorded by Lang.

The percentage of species that are not characteristic of woodland varied from 16 to 48 per cent, with the average being 30 in both surveys. There was little difference between the two surveys for each wood, except for one wood where recent extensive clearance had been undertaken and non-woodland trees had been planted. Other non-woodland plants – grasses and plants, such as chickweed and plantains – had colonised the cleared ground there. Most of the non-woodland plants found in both surveys occur naturally in hedges, grassland, waste ground, arable fields or gardens. In the woods, they are largely confined to the woodland edges or on paths and tracks, or by streams, marshy ground and ponds. Others had been planted deliberately and these are listed in Table 2. They are present in only small patches or as single specimens.

Table 2: Species in Plumpton woods that had been planted rather than occurring naturally			
Species	Usual habitat	Species	Usual habitat
Horse-chestnut	Hedges, roadsides, gardens	Anceps Bamboo	Gardens
Sweet Chestnut	Woods on sandy soils	False Cypress	Gardens
Leyland Cypress	Gardens	Larch	Gardens, plantations
Wilson's Honeysuckle	Gardens	Oregon-grape	Gardens
Cultivated Daffodils	Gardens	Norway Spruce	Coniferous woods
Scots Pine	Coniferous woods	Cherry Laurel	Gardens
Arrow Bamboo	Gardens	Douglas Fir	Gardens
Turkey Oak	Gardens	Red Oak	Plantations
Rhododendron	Gardens	Broad-leaved Bamboo	Gardens
Snowberry	Gardens	Western Hemlock	Plantations
Western Red Cedar	Gardens	Fountain Bamboo	Gardens
Monkey Puzzle	Gardens		

Garden escapes were found in some places, probably established from seed brought in by birds or in flood water. They included Montbretia, Snowdrops, Fringecups and Lesser Periwinkle. The latter species is invasive and is smothering native plants in places. It is now frequent in one wood where Lang reported it as occasional, and abundant in another wood, where Lang said it was frequent.

2.6 Some interesting AWIs

Adoxa moschatellina, Moschatel or Town-hall Clock

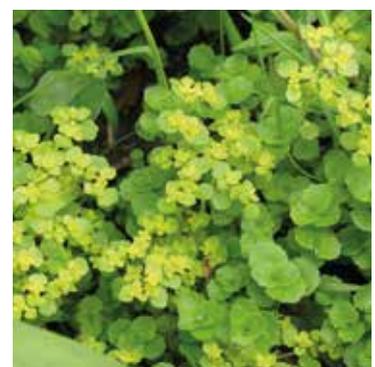
This is quite common in damp woodland, especially on base-rich soil, and we found it in nine woods. It is easily overlooked because it is so small and its leaves are very similar to those of wood anemones. It is one of the first spring flowers to come into bloom, nearly always by the beginning of April. The flowers are pale yellow-green, arranged round the top of the stem at right angles to each other, like the faces of a town-hall clock but with an additional one on top facing the sky. On warm, damp days, it is worth kneeling to delight in its orange-musky fragrance.

Chrysosplenium oppositifolium, Opposite-leaved Golden-saxifrage

This creeping plant on shady stream banks has tiny bright yellow flowers cupped in green leafy bracts that appear in March. We found it in three of our woods.



Moschatel © *Kate Gold*



Opposite-leaved Golden Saxifrage © *Kate Gold*

***Hyacinthoides non-scripta*, Bluebell**

Happily, we found no sign that our wild Bluebells are being lost by crossing with Spanish Bluebells, as is happening in other parts of the country. Bluebell bulbs were once used to make gum for bookbinding and for sticking feathers on to arrows. The bulbs also were a source of starch for laundry. Badgers like to eat bluebell bulbs, apparently. Bluebells are restricted to the fringes of western Europe and people visit Britain especially to delight in the sight and scent of our bluebell woods in spring.

***Conopodium majus*, Pignut**

The dark-brown tubers of Pignut used to be highly prized. Their white flesh is said to taste like young hazel nuts – but it is, of course, illegal to dig up wild plants, so I haven't had a chance to try them. They are less common now, perhaps because of past foraging but mainly because of loss of habitat – they grow in open woodland and 'unimproved' grassland, which are both scarce now. We found Pignut in only one wood, whereas Lang found it in the same wood and in one other.

***Daphne laureola*, Spurge-laurel**

The dark-green, glossy leaves of this shrub are crowded at the stop of the stem. The clusters of scented green flowers appear in February/March and are followed by black berries. We found this plant in two woods.

***Epipactis helleborine*, Broad-leaved Helleborine and *E. purpurata*, Violet Helleborine**

Both these orchids occur in a few woods in the parish. The Broad-leaved Helleborine flowers from early July to early September and likes good illumination, unlike the Violet Helleborine, which flowers in August/September and tolerates deep shade. The latter species is the rarer of the two and more elegant. We did not find them in our survey because of their late-flowering seasons, but know of their existence from other specific surveys in the parish.

***Narcissus pseudo-narcissus*, Wild Daffodil**

Some woods along the Longford Stream have delightful carpets of Wild Daffodils in March. They are shorter than most cultivated forms, have blue-green leaves, and the pale-yellow flowers have a trumpet of deeper yellow.

***Orchis mascula*, Early-purple Orchid**

Early-purple Orchids flower with the Bluebells and the blooms smell sweet when they first open. After pollination (by the Buff-tailed Bumble Bee), the scent changes and resembles that of a tomcat's urine. The

(Photos p21, clockwise from top left)
Bluebells; Pignut © *Kate Gold*;
Violet Helleborine © *Jacqui Hutson*;
Early-purple Orchid; Wild Daffodils; Spurge-laurel © *Kate Gold*





(Above left) Sanicle
 (Above right) Butcher's-broom
 Both photos © Kate Gold

plants can remain in a vegetative state for years, with just the rosette of spotted leaves visible, and will flower when woodland is cleared to let in more light.

***Ruscus aculeatus*, Butcher's-broom**

At first sight it is hard to believe that Butcher's-broom is a member of the lily family. Its stems are flattened and resemble spiny leaves, whereas its true leaves are reduced to tiny scales. The minute flowers, with six greenish-white petals and violet anthers, are in the axils of these scales and are followed by bright red berries. Their English name originated because bundles of the spiny stalks were once used to scour butchers' blocks and some butchers also made miniature hedges of the branches to place around meat to keep mice at bay. The parsley hedges around meat trays in some present-day butchers' shops may hark back to this tradition.

***Sanicula europaea*, Sanicle**

Sanicle is not immediately recognisable as a member of the carrot family, many of which have finely divided leaves and flowers arranged in flat, open flowerheads (umbels). Instead, its flowers are in tight, whitish or pinkish clusters and its leaves are broadly lobed. The name sanicle derives from the Latin *sanus*, meaning 'whole' or 'sound' and the plant was once popular as a herb to heal wounds. It likes chalky soil and we found it in only one wood.

2.7 The trees and shrubs

***Carpinus betulus*, Hornbeam**

Hornbeam (meaning hard tree) is a gregarious tree and often grows in pure stands. In Plumpton, it is confined to the Weald Clay. It is an AWI and is very slow to spread beyond a wood, unlike the pioneer species (Oak, Birch and Ash), which easily invade open ground. In the past, it was selected and coppiced for charcoal production and the hard wood was also used for chopping blocks, cog wheels and high-calorific firewood. Many of the stands in our woods show evidence of past coppicing, being multi-stemmed but now forming high forest.

Early-purple Orchid - its sweet scent changes after pollination to smell like tomcat's urine
©Kate Gold





(Above left) Field Maple
© Jeanie Muddle



(Above centre) Silver Birch
© Jacqui Hutson



(Above right) Hornbeam
© Jacqui Hutson

***Quercus robur*, Pedunculate oak, *Quercus petraea*, Sessile Oak and *Quercus rubra*, Red Oak**

Pedunculate Oak, with its more or less stalkless leaves and stalked acorns, is by far the more common of Britain's two native oaks in the parish, but Sessile Oak, with its stalked leaves and stalkless acorns, occurs in parts of the northern woods. Sessile Oak is an AWI and is less frequently planted than its relative because its timber is less valuable. It likes slightly wetter and slightly more acid soil than the Pedunculate Oak. Red Oak is not a native oak but has been planted in one wood on the Downs.

***Betula pendula*, Silver Birch and *B. pubescens*, Downy Birch**

Birches are light-demanding, short-lived, pioneer trees and Lang recorded them more often than we did. We did find dead birches and it may be that the lack of light in our woods is preventing them regenerating.

***Acer campestre*, Maple and *Acer pseudoplatanus*, Sycamore**

Another AWI, the Field Maple is well represented in our woods and there are some fine old trees with their characteristic, beautifully textured bark. The introduced sycamore is much less common but is now present in nine woods (compared with six woods recorded by Lang), so it may be spreading.

***Aesculus hippocastaneum*, Horse-chestnut and *Castanea sativa*, Sweet Chestnut**

The Horse-chestnut is not native to Britain and is not a tree of woodland but has been cultivated here since the 17th century. Lang found it in two woods and we found it in the same ones, plus another two, where it has been planted. It suffers attack from the horse-chestnut leaf-miner, which arrived in England in 2002. This does not kill the trees but it makes them vulnerable to other diseases. The Sweet Chestnut is not related to the Horse-chestnut. While it has long been planted on the sandy soils of the Weald for its timber, it is not a lover of clay or chalky soils and would not be considered a particularly appropriate tree for the parish. But it has been planted in three of our woods on the better drained soils.

***Alnus glutinosa*, Alder**

Alders like wet woodland and we recorded them in four woods by streams. In one wood they have been coppiced in the relatively recent past and now form a dense stand of tall stems. Long ago, rot-resistant alder wood was valued for the manufacture of clogs and gunpowder. In recent years, alders in some parts of Sussex have been killed by Phytophthora disease, and we did notice some apparently diseased and fallen alders along Plumpton Mill Stream but were not sure of the cause. As it does not rot under water, alder has sometimes been used to shore up canal and river banks. These days it is used chiefly for brush-backs and tool handles. It is also a traditional lure for woodworm: alder branches placed in cupboards will be preferred by the beetle over other wood.

***Corylus avellana*, Hazel**

Although not strictly a tree, because it is naturally multi-stemmed, Hazel can grow to a considerable height if not coppiced. There is little evidence that Hazel is being coppiced regularly in woods in the parish, although that may change with a return to traditional management fuelled by the demand for firewood. We found it in 14 woods.

***Crataegus laevigata*, Midland Hawthorn**

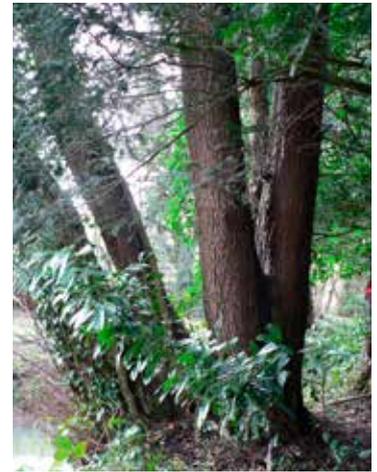
The Midland part of the English name is a little misleading. It is confined to woods on clay soil and differs from the common hawthorn of hedges and downland. It flowers a couple of weeks earlier than its more common relative and differs in that it has two stones in the fruit and its leaves are much more shallowly lobed. Clearance of woodland in the past has brought the two hawthorns, once each in distinct habitats, into close proximity and they have hybridized. The resulting offspring have characters intermediate between the two.

***Fagus sylvatica*, Beech**

Beech likes well-drained soils and is not common in the parish, being confined naturally mainly to downland sites, but it has been planted in many other woods where the soil is much less suitable.

***Fraxinus excelsior*, Ash**

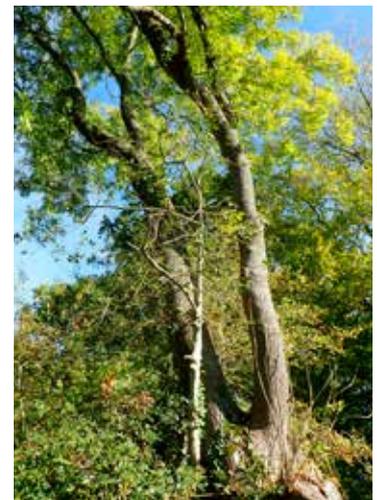
Ash was recorded in all of the woods under consideration. It is currently threatened by the spread of Ash Dieback Disease (Chalara), which was first identified in Sussex in November 2012. It is a coloniser and is not much valued for its timber, but the coppice poles are used for many items, such as oars, billiard cues, hockey sticks and walking sticks.



Alder © Jacqui Hutson



Beech © Jacqui Hutson



Ash © Jacqui Hutson



Aspen grove, with its characteristic flakey bark © Jacqui Hutson



Wild Service Tree leaves and fruit © Jacqui Hutson

***Populus tremula*, Aspen**

The most striking feature of the Aspen is the way its leaves tremble and rustle in the breeze. They are colonial trees, spreading by suckers to sometimes form extensive groves on wet soils. They are AWIs and we recorded clumps of them in four woods.

***Prunus avium*, Wild Cherry**

Another AWI, the Wild Cherry is usually found on the woodland edge because it needs light to regenerate. It is a short-lived tree – and we did find several dead ones – but it suckers vigorously, so replaces itself. It is easy to spot in a wood; its bark has horizontally papery strips, which peel off to reveal the shiny, smooth bark beneath. The timber is valuable, being reddish-brown and capable of being polished. Its flowers are valuable for early foraging insects. We found it in 10 woods.

***Salix caprea*, Goat Willow, *Salix cinerea*, Grey Willow, *Salix alba*, White Willow, *Salix fragilis*, Crack Willow and *Salix viminalis*, Osier**

The commonest willows are Goat Willow, on drier soils, and Grey Willow, on wetter soils. Both are also called Pussy Willows because they bear the silvery grey soft male catkin buds, which appear in late January and open in March, laden with brilliant yellow pollen. We found White Willow in three woods; it was known to have been planted in one of these. Lang recorded Crack Willow in three woods and Osier in one wood, but we failed to find these. Osier occurs naturally in damp places but has often been planted and coppiced to produce canes for basket-making – perhaps not in Plumpton, though.

***Sorbus aucuparia*, Rowan and *Sorbus torminalis*, Wild Service Tree**

Both surveys found Rowan in the same single wood. It grows naturally on sandy, nutrient-deficient, acid soils and it may have been planted. The Wild Service Tree, on the other hand, is characteristic of the Weald Clay and an AWI. We found it in four woods. It reproduces by suckers more than by seed, especially when growing on banks, because our summers are often too cool for the seeds to ripen. Several Sussex pubs are called The Chequers, so named after the local name for the fruit, which was once used to make an alcoholic drink. The flowers are showy, creamy clusters in late spring and the brown berries taste of dates (and some say spices) when over-ripe. The fruits were a Neolithic staple and in the more recent past they were gathered, hung up over the mantelpiece until soft and over-ripe, and eaten as sweets.

References

- Hill, M.O., Preston, C.D. & Roy, D.B. (2004) *PLANTATT: Attributes of British and Irish Plants: Status, Size, Life History, Geography and Habitats*. Abbots Ripton: Centre for Ecology & Hydrology.
- Hornby, R.J. (1984) *Ancient Vascular Plants: South-east region, NCC Species record card*. Unpublished.
- Hume, V., Grose, M., Sansum, P. (2010) *A Revision of the Ancient Woodland Inventory for Lewes District, East Sussex*. Project carried out by the Weald and Downs Ancient Woodland Survey. Henfield: Sussex Biodiversity Record Centre. www.lewes.gov.uk/planning/backgroundreps.asp
- Hutson, J. (2011) *Plumpton's wildlife habitats: a survey*. Plumpton Wildlife and Habitat Group.
- Lang, R. (1986) *Pilot Survey of Woods in Plumpton*. Lewes: East Sussex County Council.
- Rodwell, J.S. (1991) *British Plant Communities: Volume 1 Woodlands and Scrub*. Cambridge University Press.
- Rose, F. (2006) *The Wild Flower Key: How to identify wild flowers, trees and shrubs in Britain and Ireland*. Revised and updated by Clare O'Reilly. London: Frederick Warne (Penguin Books).
- Stace, C. (2010) *New Flora of the British Isles* (3rd ed). Cambridge University Press.
- Whitbread, A., Barton, J. & Hutton, D. (1989) *East Sussex Inventory of Ancient Woodlands (Provisional)*. Nature Conservancy Council. Unpublished.



Pig Wood
© Jeanie Muddle

A photograph of a dense forest with tall, slender trees and a lush green undergrowth. The trees are mostly deciduous with vibrant green leaves. The ground is covered in various green plants and small flowers. The lighting is bright, suggesting a sunny day. The word "ANNEXES" is overlaid in white, serif font in the lower right quadrant.

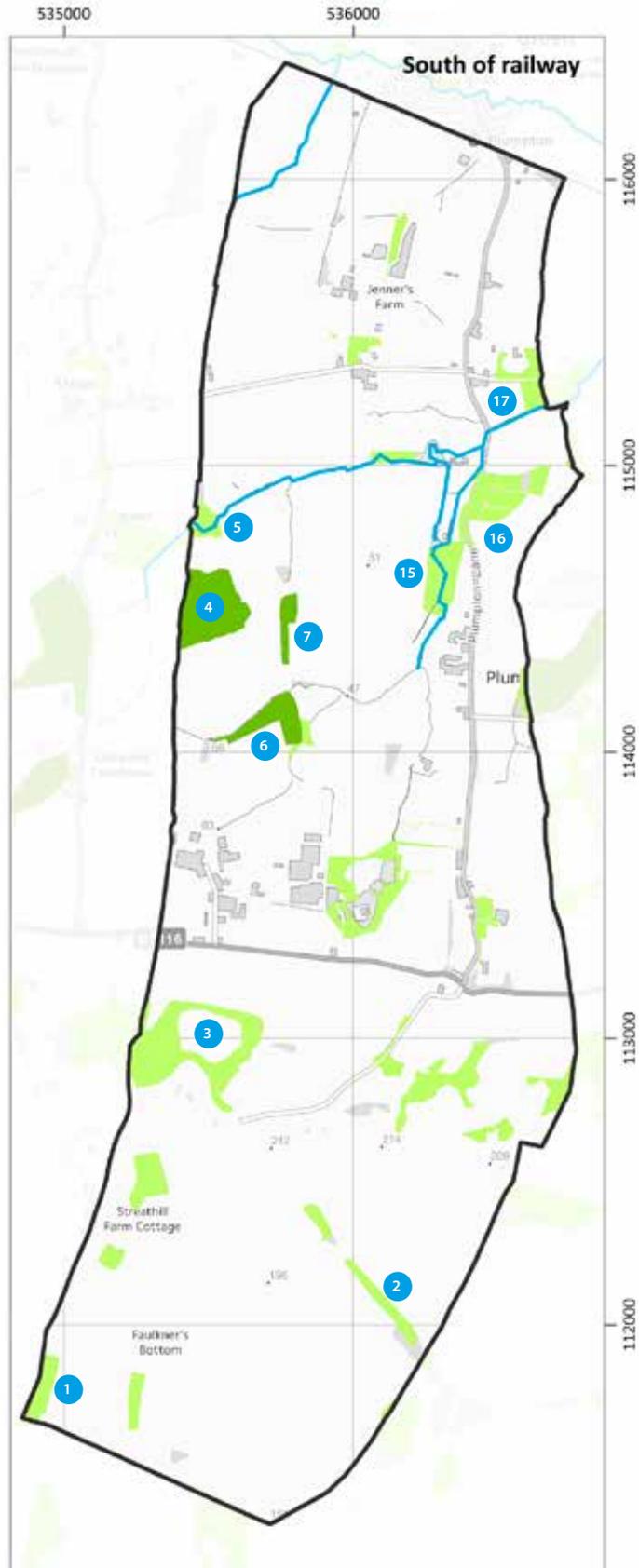
ANNEXES

Woodlands in Plumpton Parish

Key to woods

- 1. Horseshoe Plantation
- 2. Beeches
- 3. Streat Hill Shaw
- 4. Plumpton Wood South
- 5. The Pines
- 6. Grannie's Wood
- 7. Pig Wood
- 15. Reed Pond
- 16. Highborough
- 17. Chiltonton Ferrings

Key to map	
Rivers	
Ancient woodland	
Deciduous woodland	





Key to woods

- 8. Riddens Wood
- 9. Inholms Farm Wood, South
- 10. Grassy Wood and Shaws
- 11. Little Inholmes Wood
- 12. Cottage Wood North
- 13. Letchmore Wood
- 14. Sedgebrook Hostel (Russet Wood)
- 18. Plumpton Wood North
- 19. Beresford Manor Farm Wood
- 20. Polecat Wood



Rivers, ancient woodland and deciduous woodland data supplied by Natural England. Contains public sector information licensed under the Open Government Licence v3.0

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Annex 1: Plumpton woodland descriptions

1. Horseshoe Plantation

Grid reference: TQ 349118. Area: 1.7 ha (part within the parish boundary).

Age: Recent plantation (Lang) but on Tithe Map of 1841; not in Ancient Woodland Inventories

Conservation status: SSSI.

Public Access: Public footpath along eastern boundary only.

Situation: Near the top of the South Downs, chalk escarpment on dip slope at 160m a.s.l. on a 3–5° slope with a southerly aspect. Adjacent land is a mixture of arable and pasture. The nearest wood is 200m to the south and there is no hedgerow link.

Geology and soils: Upper chalk with flints. Soil is well-drained rendzina (basic) with a light crumbly texture.

Survey dates: Lang, 29 May 1986; P&ECWG, 24 April 2016.

Lang found young Beech to be the dominant tree, with a few Field Maples, Ash, Spruce and Turkey Oak. He said the Spruce looked unhealthy. The survey in 2016 noted that the wood, which is fenced, comprised mostly Beech, Ash and Sycamore, and Red Oak at the southern end. Holly and Elder were occasional and there was much Ivy on the trees in the southern part of the wood. Ash and Holly seedlings were frequent and the Early-purple Orchids recorded by Lang were also present.

While Lang recorded the whole wood, we surveyed only the part within the parish boundary. We recorded a total of 25 species (3 AWIs) compared with 42 (7 AWIs) found by Lang. We didn't find Crab Apple or Spruce, but the main difference was in the lower number of ground-layer herbaceous plants. Lang found 18 more species, most of which need a reasonable amount of light to thrive, which suggests that the wood has become shadier as the Beech has matured. Of these, only nine were woodland/hedgerow species; the other 18 were characteristic of more open habitats. Our survey also noted quite a depth of leaf litter, which would suppress some herbaceous plants. Our earlier survey season may also have meant that we didn't see some plants.

2. Beeches

Grid reference: TQ 361121. Area: 4 ha.

Age: Recent plantation (Lang).

Conservation status: SSSI.

Public access: No public footpath.

Situation: Head of a dry valley eroded in the dip slope of the South Downs escarpment. SE aspect and slope of about 10° from 140–195m a.s.l. The wood is mostly in the valley bottom and is surrounded by 3 ha

of scrubland. Beyond is mostly arable. The nearest wood is 0.5 km to the NE and scrub extends to the south.

Geology and soils: Upper chalk with flints. Coombe Rock (a fluvial deposit derived from chalk and tertiary deposits) is present in the valley bottom in the SE part of the wood. The soil is a well-drained rendzina, which is slightly heavier and damper on the Coombe Rock due to higher clay content. Clay-with-flints is present in the NW part of the scrub area.

Archaeology: Remains of two Bronze Age settlements in the scrub surround.

Survey dates: Lang, 3 June 1986; P&ECWG, early 2016 but not surveyed completely because of lack of time.

In 1986 the scrub was mostly Hawthorn and Elder, with some Pedunculate Oak, Willow and Birch. In more open parts, there was good cover of Bluebell, Bracken, Raspberry and Common Nettle. The wood was almost entirely even-aged, mature Beech with Elder, Hawthorn and Holly near the edges. The herb layer was sparse because of the deep shade. The woodland was rich in fungi and the scrub was important habitat for small birds.

In early 2016 the wood was found to be open to grazing in the northern part and there were a few fine old specimens of open-grown Beech among the more or less even-aged stand. The unfenced part contained scattered Holly, Hawthorn, Oak and Ash and some bramble with grassy patches. The fenced part to the north had scattered Holly and Elder, while the field layer was more typical of woodland than the unfenced area, with Red Campion, Bramble, Broad Buckler-fern and a good covering of moss species.

3. Streat Hill Shaw

Grid reference: TQ354131. Area: 2.8 ha.

Age: Ancient (Lang) and on Tithe Map of 1841 but not in Ancient Woodland Inventories.

Conservation status: SSSI.

Public access: Access land.

Situation: A old shelter belt, which runs along the 110m contour on the scarp face of the South Downs, facing north on an average 25° slope. The western end of the shaw grades into scrub and the eastern end borders the woodland in Streat. Chalk grassland borders the south edge and arable lies to the north.

Geology and soils: The underlying rock is Lower Chalk, a grey chalk with no flints and containing marl. The soil is a thin, well-drained rendzina with scattered chalk fragments on the surface. The soil has been terraced by a combination of sheep tracks and soil creep, which is still active.

Survey dates: Lang, 3 June 1986; P&ECWG, 24 April 2016.

In 1986 the wood was a mixture of Maple and Ash with an understorey of decayed Hazel coppice, Hawthorn and Elder. There were some dead standing trees, particularly Wild Cherry. The herb layer contained Enchanter's Nightshade, Lesser Celandine and Wood Speedwell in the taller, western part and Cow Parsley, Wood Millet and Common Nettle in the eastern half. The less common Early-purple Orchid and Goldilocks Buttercup were also recorded.

The survey in 2016 found that the decayed hazel coppice was still alive but would benefit from coppicing. There are some fine old Ash trees, arising from old coppice. There was a large mature Wild Cherry at the eastern end. The wood is open to grazing stock and much trampled, which may account for the decline in ground cover. It was also open to sheep in 1986 but perhaps the grazing intensity was less at that time. We didn't find Early-purple Orchids, Nettle-leaved Bellflower and Goldilocks Buttercup (all AWI species) but the bellflower would not have been in flower and its leaves are very similar in appearance to those of nettles. We did find the leaves of Common Twayblades, which were not found by Lang. Both surveys recorded a number of species of more open habitats (eight by Lang and nine by us). The biodiversity of this woodland could possibly be improved if grazing stock were excluded and a coppicing cycle resumed.

4. Plumpton Wood South

Grid reference: TQ355145. Area: 5.3 ha.

Age: Part Ancient (4 ha semi-natural/1 ha plantation). On Tithe Map of 1841 and in Ancient Woodland Inventories.

Conservation status: Area of Outstanding Natural Beauty; South Downs National Park.

Public access: No public footpath.

Situation: On fairly level topography, 1.5 km from the chalk escarpment. It lies at 58m a.s.l. with an average incline of 2°. Most of the surrounding land is of cattle pasture and scattered remnants of broadleaf woodland occasionally linked by narrow hedgerows.

Geology and soils: Gault clay/Upper Greensand boundary. The soil is poorly drained clay, derived from the Gault.

Survey dates: Lang, 4 June 1986; P&ECWG, 10 May 2015.

In 1986, the trees were mostly mature Pedunculate Oak with an understorey of decaying Hazel, Maple, Hawthorn, Elder, Blackthorn and Guelder Rose. The herb layer was dominated by Bluebell, with occasional patches of Bramble, Yellow Archangel and grasses. Common Spotted-orchid was found in the wood edge and 13 AWI species were recorded,

although most were infrequent and near the wood edge. There were two blocks of conifer plantation in the south. A total of 53 species were recorded, of which 16 are indicators of ancient woodland.

The survey in 2015 recorded a total of 70 species, 16 of which were indicators of ancient woodland, but not the same ones recorded in 1986. In August 2011, three flowering Broad-leaved Helleborine, an AWI, were found. The total of AWI species for this woodland could be higher than either survey recorded because both surveys may have failed to find some species. The Three-nerved Sandwort, for example, which was found only in 2015, is very small and easily overlooked, as is the Smooth Brome, which was found in 1986. The Wood Spurge found in 1986 would not have been easy to miss if it were present in 2015, but this plant appears in open spots after coppicing or felling and such places were not present in 2015.

The total recorded in 2015 included 30 species not recorded in the earlier survey but most were found along paths and were not typical woodland species. We failed to find the Common Spotted-orchid recorded in 1986 but this is not a woodland species. Also missing from this survey was Bracken, which may indicate that the soil is wetter now and the wood shadier.

5. The Pines

Grid reference: TQ355148. Area: 1.4 ha.

Age: Ancient with some plantations (Lang) and on Tithe Map of 1841. Not in Ancient Woodland Inventories.

Conservation status: Area of Outstanding Natural Beauty; South Downs National Park.

Public access: Public footpath on the western boundary.

Situation: In the bottom of a small valley running east–west at 48m a.s.l. A small stream runs across the south side, 0.5m wide and 0.2m deep, which in places is choked and dammed by fallen wood. The surrounding land is arable and pasture and the nearest wood is Plumpton Wood, linked by a 130m line of oaks.

Geology and soils: Folkestone Beds and silty clay. The soil is poorly drained.

Survey dates: Lang, 5 June 1986; P&ECWG, 18 May 2014.

This wood, on the western parish boundary, was planted with Pine trees at some time but is possibly an ancient remnant. The 1986 survey noted a mix of mature Pine, Ash, Pedunculate Oak and Beech but many fallen trees, particularly Pines. The western boundary had some very old over-mature oaks. The shrub layer contained Elder, Hazel, Hawthorn and Blackthorn. The herb layer was dominated by Bluebell, Bramble and Bracken in the

drier, higher parts and Ramsons, Yellow Archangel and Common Nettle in the damper areas by the stream. Seventeen White Willow had been planted recently by Plumpton College to replace felled trees. The total number of species was 48, with 12 being AWIs, suggesting that it is an ancient woodland remnant that has been altered by planting with Pine and Beech.

Access to the wood in 2014 was easy in the higher part on the slope to the north where Sweet Chestnut had been planted among the original plantation of Pines and Beech. Bracken dominated the ground layer here. The streamside woodland was less easy to survey because of fallen trees but 61 species were found, including 14 AWIs. Some of the plants found in April 2014 but not in June 1986 were spring flowering, so would have disappeared by the later month. The 2014 survey failed to find: the shrubs, Wild Privet and Buckthorn; the grasses, Smooth Brome, Cock's-foot and Wood Millet; the AWI, Pignut, and some species more typical of grassland such as Lesser Stitchwort and Germander Speedwell. Comparing 2014 records with 1986, the most obvious additions were Sycamore (which may have invaded in the intervening years), Sweet Chestnut (recently planted) and Alder (which must have been present judging by its age). Other additional records in 2014 included grasses, rushes, sedges and ferns, including the epiphytic Polypody fern growing on a tree that had fallen across the stream. We also found Common Marsh Bedstraw and Floating Sweet Grass in the marshy edges of the stream.

6. Grannie's Wood (Wales Farm Wood in the NCC Ancient Woodland Survey, 1984)

Grid reference: TQ357141. Area: 2.9 ha.

Age: Ancient (Lang), on Tithe Map of 1841 and in Ancient Woodland Inventories.

Conservation status: Area of Outstanding Natural Beauty; South Downs National Park.

Public access: Public footpath crosses a tiny part of its northern boundary.

Situation: On the Wealden plain 1 km from the South Downs scarp foot at 53m a.s.l. It has a number of old broadleaf hedgerows radiating from it and linking it with Pig Wood, 100m away. The surrounding land is arable and grassland ley. The wood is surrounded by drainage ditches including a natural stream on the north side and there are two internal ditches.

Geology and soils: Upper Greensand (sandy marl) with poorly drained, basic sandy loam.

Survey dates: Lang, 4 June 1986; P&ECWG, 10 May 2015.

In 1986, mature Pedunculate Oak and Ash were recorded as dominant

over Hazel coppice. The shrub layer contained Hawthorn and Blackthorn and there was Purging Buckthorn in the hedge on the southern boundary. The herb layer was dense and consisted of Bluebell, Bramble, Honeysuckle and Ivy. Two plants of Early-purple Orchid were found in the south-west. Nineteen AWIs were recorded of a total of 58 plant species.

In 2015, 59 species were recorded, of which only 15 are AWIs. AWIs found in 1986 but not in the recent survey were Remote Sedge, Wood Spurge, Woodruff, Early-purple Orchid, Red Currant and Bush Vetch, while those missing from the earlier survey but found in 2015 were Ramsons and Goldilocks Buttercup. There was no obvious explanation for the differences but it is possible that the latter two, spring-flowering species would have been over. Bracken was not seen in 2015, as was the case in Plumpton Wood South, and also may indicate wetter and shadier conditions.

7. Pig Wood

Grid reference: TQ357144; Area: 1.3 ha.

Age: Ancient (Lang), on Tithe Map of 1841 and in Revised Ancient Woodland Inventory.

Conservation status: Area of Outstanding Natural Beauty; South Downs National Park.

Public access: Public footpath running north-south through length of wood.

Situation: On the Wealden plain 1.5 km north of the South Downs scarp foot at 50m a.s.l. The surrounding land is arable. The wood is linked to Plumpton Wood by a 500m length of hedge.

Geology and soils: Gault clay with the soil being a limey, dark grey clay.

Survey dates: Lang, 4 June 1986; P&ECWG, 10 May 2015.

In 1986 it was noted that Pedunculate Oak and Ash were well spaced and there were young trees present. The wood was generally quite open and the shrub layer contained Hawthorn, Spindle, Blackthorn and Elder. The well-developed herb layer included Bramble, Bluebell and Yellow Archangel. A total of 43 species was recorded, with 11 being AWIs.

In 2015, 66 species were recorded and 15 of these were AWIs. We didn't find the following AWIs found in 1986: Creeping Soft-grass, Wood Millet and Early Dog-violet. However we did find the following AWIs in 2015 that had been unrecorded in 1986: Moschatel, Wood Anemone, Wood Spurge, Primrose, Field Rose, Wood Speedwell and Bush Vetch. These are all long-lived species so must have been present but it is easy to miss some when the flowering season is over; in 2015 we had to search hard for the Wood Anemone leaves dying back under other vegetation.

8. Riddens Wood

Grid reference: TQ358170. Area: 3.7 ha.

Age: Ancient but with some exotic planting (Lang), on Tithe Map of 1841 and in Ancient Woodland Inventories.

Conservation status: None.

Public access: No public footpath.

Situation: On the Wealden plain 4 km north of the South Downs scarp foot. The wood faces east on a gentle slope at 45m a.s.l. An ancient shaw joins the north end of the wood. The surrounding land is pasture.

Geology and soils: Weald clay, red, grey and yellow clay with shale. The soil is poorly drained.

Survey dates: Lang, 2 June 1986; P&ECWG, 5 April 2014.

This wood was a naturist colony until 1937 and there are remains of stone structures and exotic plantings. In 1986, the wood was recorded as mostly mature Hornbeam grown from coppice with occasional mature and over-mature Oak and Ash but few younger trees. Holly was particularly prominent in the understory in the northern part and there were also patches of Bamboo and Rhododendron in the vicinity of the remains of buildings.

The herb layer varied, with Bluebells in the shady and slightly drier centre, Bramble and Bracken in the north and Cow Parsley, Red Campion and other herbs in the damper south. Lesser Periwinkle has been planted at some time in the past and dominated large areas towards the south. Eleven AWI species were recorded out of a total of 45. But the 45 species also included four non-native species.

In 2014, exhaustive attempts to trace the owner were unsuccessful. There are still remains of stone pedestals that once supported wooden huts as well as structures that were probably part of a garden. There was a large amount of rubbish in the form of plastic sheets, bedding, bottles and cans.

In addition to the tree species recorded in 1986, Wild Cherry, Birch, Yew, Field Maple and Wild Service Tree were found. In the area with the remains of buildings, there were some large Cupressus, some of which had fallen. Some of the oaks might have been hybrids between Pedunculate and Sessile Oak, while others were non-native species. There were numerous fallen and standing dead trees.

We recorded a total of 56 species, of which 12 were AWIs. The total included eight non-native species. Notable among the AWIs, and missing from the 1986 survey, were Wild Service Tree, Midland Hawthorn, Goldilocks Buttercup and Violet Helleborine. The latter species was not recorded when we surveyed in the spring but was present at a subsequent visit in August.

9. Inholmes Farm Wood, South

Grid reference: TQ358175. Area: 2.2 ha.

Age: Ancient (Lang) and on Tithe Map of 1841 but not in Ancient Woodland Inventories.

Conservation status: None.

Public access: A public bridleway runs through the centre.

Situation: On the Wealden plain in gently undulating topography at 53m a.s.l. It links with Riddens Wood, 300m to the south and with Letchmore Wood 150m to the north. The surrounding land is arable and pasture.

Geology and soils: Weald Clay and poorly drained soil.

Survey dates: Lang, 6 June 1986; P&ECWG, 3 May 2016.

In 1986, it was recorded that the trees were mainly Hornbeam grown from old coppice, with some mature Oak. In the north-west part there was a small area of Aspen saplings. The shrub layer in the north-west consisted of Elder, Hawthorn, Blackthorn and Aspen, while the south-east part had mostly Hazel coppice and Hawthorn. There were many dead trees and the Hazel coppice had 'gone over'. The herb layer contained mostly Bramble, Bracken and Bluebell, with Wood Anemone in places. One plant of Butcher's Broom was found by the track. There were 22 AWIs in the total 55 recorded species.

In 2016, access was possible only from the bridleway and to the south-east part of the wood. We recorded only 44 species, including 17 AWIs, and this may be because we couldn't survey the wood in its entirety. Some of the species found by Lang were those of more open habitats and he did report that about 25 per cent of the area was either bare ground or covered in leaf litter. Of the AWIs recorded by Lang, we did not record the following: Hairy-brome, Wood Spurge, Wood Millet, Primrose, Red Currant, Wild Service Tree or Early Dog-violet, but we did record some AWIs that Lang didn't find: Pendulous Sedge, Three-nerved Sandwort and Wood Speedwell. Among the plants recorded on both surveys was Pignut, which was not seen in any of the other woods in 2016 but Lang recorded it in one other wood.

10. Grassy Wood and Shaws

Grid reference: Wood TQ358195; Shaws TQ361193. Area: Wood 1.4 ha; Shaws 2.7 ha.

Age: Ancient shaws and possible secondary wood (Lang). On 1841 Tithe Map and Grassy Wood is in Revised Ancient Woodland Inventory.

Conservation status: None.

Public access: Public bridleway along western boundary of Grassy Wood.

Situation: On gently undulating Wealden plain at 38m a.s.l. A small stream flows from west to east through Grassy Wood and the north

shaw. The stream is shaded, 0.6m wide and 0.2m deep. A pond 60m x 30m also drains into the stream at the western end of the north shaw. The surrounding land is now meadow but when Lang recorded he noted it was arable rotated with ley, usually cut for silage in June. The nearest wood is Sedgebrook Hostel, adjacent to the shaws.

Geology and soils: Weald Clay.

Survey dates: Lang, 13 June 1986; P&ECWG, 10 April 2016.

Grassy Wood was designated as ancient by Hume *et al* (2010). Although the woodland was cleared in 1810, it has never been ploughed. The shaws have been left intact since then, so they are ancient remnants.

In 1986, Grassy Wood was described as dominated by Hornbeam grown from coppice with mature, rather crowded Oak and Ash. Most of the Hornbeam and Ash was badly rotted at the base and there was much dead wood. There was a shrub layer of Hazel, Hawthorn and Elder on the north side and the herb cover was sparse. The owner had a plan to improve the wood by clearing decaying and crowded trees and replanting with Oak and other broadleaves.

The shaws are relatively old shelter belts in good condition with mature and over-mature Oak. The shrub layer comprised Hazel, Hawthorn and Blackthorn. The east and north Shaw had Bluebell, Dog's Mercury, Dog Rose and Bramble. The west Shaw was more open with grasses and some meadow species. The pond at the north end of this shaw had steep banks clothed in mature Oak, Maple, Hazel and Lime coppice.

In 2016, Lang's description of the woods and shaws mostly held true, although there was no Ash in the wood. Lang had reported that the Ash and Hornbeam were badly rotted at the base and needed to be felled or coppiced. Presumably, the Ash had been removed but Hornbeam was still abundant. The only Wild Cherry was fallen and dead. There was very little ground cover in the wood but the field layer of the shaws was more diverse.

In the shaws, Lang recorded 50 species, including 13 AWIs. Notable among the latter was Small-leaved Lime, which is now rare in Sussex. We must have overlooked this species (it may not have been in leaf) but recorded the AWI species Wild Daffodil and Early-purple Orchid, the former being very abundant along the Longford Stream and the latter present as one individual by the pond. Lang did not record these two species, but his visit would have been too late for the daffodils, which flower in March–April. Our species list was shorter than Lang's, at 36, including 10 AWIs.

In the wood, Lang had recorded 25 species, including three AWIs, compared with our list of 33 species, including seven AWIs. Lang did not find the Wood Anemone, Wood Sedge, Holly and Primrose that we recorded.

11. Little Inholmes Wood

Grid reference: TQ362166; Area: 2.5 ha.

Age: Recent (Lang).

Conservation status: None.

Public access: No public footpath in the wood. Riddens Lane runs along the southern edge.

Situation: On the Wealden Plain on the west side of Plumpton Green. The surrounding land is level, although much of the wood is in a disused brick pit below the water table. There are three pools, the north one being the most open when Lang visited. Water drains from this and flows east under the road. Land above the water table forms the periphery of the wood and there is a raised bank running east–west across the middle. The area floods in winter. Surrounding land is mostly pasture, with buildings on the eastern side.

Geology and soils: Weald Clay.

Survey date: Lang, 2 June 1986.

This site on Weald Clay has three distinct areas: dry woodland, willow swamp and an open marshy area. The dry woodland occupies the periphery and central bank of this disused brick pit. In 1986, the commonest trees and shrubs were Pedunculate Oak, Maple, Sycamore and Hawthorn, while the herb layer included Bramble, Cleavers and Common Nettle and a number of non-woodland species.

The trees of the willow swamp were mostly Goat Willow and the commonest plant in the pools was Yellow Iris. In the open marshy area, there were a few old willows and oaks in the centre and scattered shrubs and saplings of Birch, Purging Blackthorn and Hawthorn. The wetland plants included Meadowsweet and the rare Marsh Cinquefoil. Lang stated that the juxtaposition of wet and dry habitats in a small area yielded a large number of plant species (79) but only 66 were true woodland plants and were confined to the periphery and central bank, covering 40 per cent of the total area. Thirty per cent was made up of willow swamp, 20 per cent open marshy habitat and 10 per cent open still water. Twelve AWIs were present.

This wood was not surveyed during the recent survey because access was not possible. From the footpath along the southern side, the site appears to be very densely wooded now.

12. Cottage Wood North

Grid reference: TQ359191. Area: 0.8 ha.

Age: The whole of Cottage Wood is listed as Ancient and the part in Plumpton Parish is on the Tithe Map of 1841.

Conservation status: None.

Public access: None but can be seen from South Road.

Situation: On gently undulating Wealden plain in a slight valley with a south-facing slope of 2-3° and adjacent to a minor road on its eastern boundary. The wood within the parish boundary is a small appendage to Cottage Wood.

Geology and soils: Weald Clay.

Survey dates: Lang, 6 June 1986; P&ECWG, 10 April 2016.

Only the northern part of Cottage Wood lies within the Plumpton parish boundary and both surveys recorded species only in this part.

In 1986, most of the wood was composed of mature and young Pedunculate Oak with Hornbeam grown from coppice. There was a sparse shrub layer of Elder, Hazel, Hawthorn and Holly. Bluebells dominated the drier parts and there were also occasional patches of Wood Anemone, Bramble and Cleavers. The area near the stream on the south margin was grassier and contained Common Nettle, Cow Parsley and Wood Millet. There was an open area in the south with abundant Common Nettle and an area of Bracken and Foxglove to the west.

There were 10 AWIs recorded in 1986 out of a total of 33, and 14 in 2016 out of a total of 42, but not all of these were the same. The most striking difference was the population of wild daffodils recorded in 2016. The 1986 survey would have been too late in the season to see these. By 2016, there had been some clearance of the shrub and ground layer and a new pond dug and fed by the Longford Stream. Field Maple had been felled but a live stump remained. New planting included a Monkey Puzzle tree between two Wild Service Trees, several Horse-chestnuts, Beech and Rhododendron.

13. Letchmore Wood

Grid reference: TQ360177. Area: 2.8 ha.

Age: Ancient (Lang). On the Tithe Map of 1841 and in the original Ancient Woodland Inventory but removed from Revised Inventory.

Conservation status: None.

Public access: No public footpath through the wood but a public bridleway runs along the western boundary.

Situation: On gently undulating land on a slight rise at 58m a.s.l. Most of the surrounding land is arable and ley. On the north side is a garden with allotments and a small orchard (when Lang visited) and a private house, whose owner also owns the wood.

Geology and soils: Weald Clay. Poorly drained soil.

Survey dates: Lang, 2 June 1986; P&ECWG, 2 May 2015.

The previous owner had pigs in the wood until 1974 and they gnawed the bark and accelerated the rot of many tree bases. Since 1978 1 ha of the

wood had been felled and a house built. The imposition of a TPO on about 0.8 ha in 1984 has restricted management, to the benefit of the wood.

In 1986, most of the wood, including the TPO area, was Hornbeam and Oak grown from coppice, with a few Ash and Wild Cherry along the bridlepath. The trees were crowded, slender and with high crowns. Many were rotting at the base and trees of all ages were decaying and fallen. There were a few good quality, mature Oaks scattered through the wood. The shrub layer was thin and comprised mostly Holly and Elder. There was a dense stand of Birch in the central part, with much decay and dead wood. The herb layer was poor, with Bramble, Bluebell, Bracken and Yorkshire Fog in parts. Foxgloves grew in a small glade, with Bracken in the north-west, and Wild Service Tree was recorded adjacent to this glade. There were only eight AWIs of a total of 22 species.

In 2015, some clearing had taken place to provide a ride and views to the south. We recorded 42 species, considerably more than the previous survey, and they included six AWIs. We failed to find the Crab Apple, Wood Sorrel, Wild Service Tree and Hairy-brome (all AWIs) recorded by Lang but did find other AWIs not recorded previously: Pendulous Sedge, Wood Sedge and Primrose. Some of the oaks had characteristics that led us to believe they were Pedunculate/Sessile Oak hybrids. Of the additional species we recorded, many were common herbs, such as Wavy Bitter-cress, Lady's-smock, Herb-Robert and Creeping Buttercup. The only woody species we recorded that Lang did not were Horse Chestnut (one tree), Hazel and Goat Willow.

14. Sedgebrook Hostel (Russet Wood – name used by the owner in 2014)

Grid reference: TQ362194. Area: 1.3 ha.

Age: Ancient (Lang). On the Tithe Map of 1841 and listed in Revised Ancient Woodland Inventory.

Conservation status: None.

Public access: No public footpath through the wood but one just touches the south-west corner.

Situation: On gently undulating Wealden plain with a stream on its southwestern boundary and a pond in the middle. The surrounding land is mostly pasture.

Geology and soils: Head: clay, silt, sand and gravel.

Survey date: P&ECWG, 26 April 2014.

Lang did not survey this woodland in 1986 due to difficulties associated with change in ownership.

This ancient woodland is old Hazel coppice with Oak standards but coppicing is not currently practised. As a result, the woodland is rather

dark and the ground vegetation rather uniform. A new pond has Water Starwort and a solitary Water Plantain present. Bluebells dominate the ground vegetation and earlier in the year there is a good display of Wild Daffodils, although they appear to be restricted to the lighter edges and the adjoining shaw, along a tributary of the Longford Stream. Other species include Dog's Mercury, Greater Stitchwort, Male-fern, Scaly Male-fern, Broad Buckler-fern, Wild Strawberry, Wood Anemone and Moschatel. We recorded a total of 44 species, including 12 AWIs. Two species were water plants. There was one Wild Service Tree (an AWI) and some of the Hawthorns were Common/Midland hybrids.

15. Reed Pond

Grid reference: TQ363146. Area: 3 ha.

Age: Recent (Lang).

Conservation status: Area of Outstanding Natural Beauty; South Downs National Park.

Public access: None.

Situation: On the Wealden plain, 1.5 km north of the South Downs scarp foot. Reed Pond is a silted up catchment area above Upper Mill (once a Fulling mill) and situated in a slight valley. A small stream flows north through the centre and a drainage ditch runs along most of the western boundary. The surrounding land is arable and pasture. The nearest wood is Highborough, on the other side of Plumpton Lane and adjoining the north-east corner.

Geology and soils: Recent alluvium over Folkestone Beds (sandstone).

Survey dates: Lang, 9 June 1986; P&ECWG, 12 April 2014.

In 1986 this wood was waterlogged but there was a poorly drained path on a bank on the east side. The main tree cover was Alder grown from coppice, with some mature, uncoppiced trees in the south and north margins. The Alder had been clear-coppiced every 12–13 years and the wood used for fencing and firewood. The tree canopy was not full and allowed reasonable light penetration. Due to the instability of the silt substrate, there were frequent fallen, rotting stems and trunks, which occasionally blocked the stream. There were two very wet areas in the north and south, where willow species were concentrated with the Alder. The shrub layer was sparse and composed mostly of Spindle, Hawthorn and Elder. The drier periphery had some Oak and Ash, with a Blackthorn hedge along the western boundary.

Dominant species in the waterlogged herb layer were Cow Parsley, Hemlock Water-dropwort and Common Nettle, with a lower herb layer beneath. There was a dense bed of Yellow Iris in the northern willow stand. In the drier edges, there was a more typical woodland herb layer

of Moschatel, Bluebell and Dog's Mercury. The banks of the stream held patches of Ramsons. The total species count was 26 (including four AWIs) in the wet areas and 36 (including six AWIs) in the dry areas.

In 2014, the strip of higher and drier ground surrounded the wetter, marshy main area of the wood, through which ran two small streams. The most abundant canopy tree in the drier section was Alder, with occasional Pedunculate Oak and Ash and infrequent Sycamore. In the main wet part of the wood, Alder dominated with some White Willow. Some of the Alders appeared to be quite old but most showed signs of former coppicing.

The understorey in the drier section contained frequent Hazel and Elder, with some Holly, young Sycamore and suckering Elm. Hawthorn and Black Currant also occurred. In the main wetter part of the wood, Hazel was rare but Black Currant and Goat Willow were frequent.

The ground layer in both parts of the wood was quite rich in species and light penetration was good, as evidenced by the abundance and vigour of Rough Meadow Grass throughout. Bluebells were occasional in the drier parts, while Moschatel and Common Nettle were abundant. Other common species included Lesser Celandine, Red Campion and Ladies-smock. In the wetter area, Common Nettle, Opposite-leaved Golden-saxifrage and Hemlock Water-dropwort were the most abundant species. Species totals of 36 (including nine AWIs) and 39 (including 12 AWIs) were recorded in the wet and dry areas, respectively.

We recorded more species in both the dry and wet areas in 2014 but that may have been because of the differences in timing of the surveys. Certainly, the abundant Opposite-leaved Golden-saxifrage that we found in April may have died back by June. We recorded more wet woodland and aquatic species, which may indicate the site has become wetter over the intervening years, and we also recorded Sycamore, which Lang did not find. We failed to find Wood Millet (which would not have been flowering in April), Bracken and Rosebay Willowherb. The absence of the latter two may indicate less open conditions in 2014 compared with 1986.

16. Highborough

Grid reference: TQ364148. Area: 3.7 ha.

Age: Recent, planted 1920s (Lang).

Conservation status: Area of Outstanding Natural Beauty; South Downs National Park.

Public access: None but can be seen from Plumpton Lane.

Situation: On a slight ridge reaching 57m a.s.l. The slope is 10-15° on the west side and 5-10° on the east side. The surrounding land is arable and ley; the nearest wood is Reed Pond adjoining the south-west corner but on the other side of Plumpton Lane.

Geology and soils: Sandgate and Folkestone Beds (sandstone); freely drained brown forest soil.

Survey dates: Lang, 6 June 1986; P&ECWG, 26 April 2015.

In 1986 the main (western) part of Highborough was a Sweet Chestnut plantation about 60–70 years old. Mature and decaying Pines were frequent in the west half and there were scatterings of other deciduous species. The wood was edged with a wider variety of tree species. Many Sweet Chestnut, Birch and Pines were decayed and fallen and there was much Ivy on these. The shrub layer was quite sparse and mainly Elder, Holly and Hawthorn.

In the east, separated from the western part by a cleared belt, was a mixture of broad-leaved species, including Sycamore, Horse Chestnut, Oak and Beech, with a scattered shrub layer of Holly and Hazel. There was a small plantation of Larch. The herb layer was mostly Bramble, Bluebell and Dog's Mercury. Of the 60 species recorded, 13 were AWIs and, although this is not an ancient wood, it is possible that the eastern part is an ancient remnant.

The 2015 survey found a much denser wood with the cleared area having been invaded by shrubs and trees. Of the 59 species recorded, 12 were AWIs. We did not find any Scots Pine, which was frequent in 1986, and the numbers of Larch appeared to have decreased. We did not find the Raspberry recorded in 1986 but did find Gooseberry, which Lang did not. The 1986 species list contained more light-demanding plants such as Foxgloves, Wild Strawberry, Silverweed and Chickweed, which were not present in 2015.

17. Chilton Ferrings

Grid reference: TQ366152. Area: 3 ha.

Age: Ancient (part on the 1841 Tithe Map) but not on the Ancient Woodland Inventory.

Conservation status: Area of Outstanding Natural Beauty; South Downs National Park.

Public access: Public bridleway through the centre.

Situation: Wealden plain in a small stream valley. The wood is situated on the north-west side of the stream on ground sloping 3–5° in a south-east direction. The surrounding land is a mixture of arable and pasture and there is a garden and houses adjacent to the north-west corner.

Geology and soils: Weald Clay. Clay and alluvium deposits from the stream.

Survey dates: Lang, 10 June 1986; P&ECWG, 16 April 2016.

The remains of a Roman Road can be seen in the north of the wood as a sunken track. It runs parallel to the South Downs, approximately following the well-drained Greensand ridge.

The wood was surveyed in its entirety by both surveys, even though part is in East Chilton. There is a clear difference in vegetation on either side of the parish boundary, which is probably due to the fact that the part of the wood in Plumpton was arable at the time of the Tithe Map.

In 1986, the wood was shady, with an almost full canopy. The main trees were Oak and Ash, with a mixture of broadleaved trees and some exotic, decaying conifers. There was more Hornbeam in the north part, grown from coppice, and more Sycamore towards the west end. Alder and willows were concentrated along the stream banks. Most trees were mature and some decayed and fallen but there was quite a lot of regeneration of Sycamore, Maple and Ash in the south part.

The understorey in the north was very dense, with mostly Hawthorn, Blackthorn and Elder. The shrubs in the south were less dense and were mostly Hazel (decayed coppice), Holly and exotic shrubs such as Bamboo, Rhododendron, Viburnum species and Snowberry.

The herb layer in the dry parts of the wood consisted of Bramble, Ivy, Bluebell and Dog's Mercury. The stream banks, wet flushes and boggy parts had Ramsons, Common Nettle and local concentrations of Yellow Iris, Hemlock Water-dropwort, Pendulous Sedge and Great Willowherb.

The total of 15 AWIs (in a total species list of 61) indicated that Chilton Ferrings may be ancient, although it has been altered by planting with many exotics.

In 2016, the western edge was mainly old Hazel coppice and standard oaks, with some sycamore and a understorey of Honeysuckle, Wild Privet, Spindle and a ground covering of Ivy, with occasional Bluebells. There were many fallen trees of Ash and Larch. The northern part had carpets of Bluebells and Wood Anemones as well as dense stands of Cherry Laurel and Bamboo. In places, dense carpets of Lesser Periwinkle dominated the ground (whereas in 1986 Lang recorded it as only Occasional). We have recorded Violet Helleborines and Common Twayblade orchids at other times. We recorded 96 species in total, including 26 AWIs, giving more credence to the belief that this is an ancient woodland remnant. Of the total species count, there are 18 species that are non-native, either planted or occurring as garden escapes, such as Snowdrops and Fringecups, both of which occur on the banks of the stream and have presumably arrived in flood water. As in other woods, bracken was not recorded in 2016 compared with 1986.

18. Plumpton Wood North (Tanglewood – Oakwood in NCC Inventory)

Grid reference: TQ365185. Area: 8.5 ha.

Age: Ancient (Lang), on Tithe Map of 1841 and in Ancient Woodland Inventory.

Conservation status: None.

Public access: No public access.

Situation: On the Wealden plain, on a slight hill from 45 to 60m a.s.l. Most of the surrounding land is pasture and minor roads run along the SE and SW boundaries. There are several private houses in peripheral clearance and on the wood edge. One drainage course runs north and drains from a small pond. It crosses another at right angles in the centre of the wood. The nearest wood is 600m away.

Geology and soils: Weald Clay. Poorly drained clayey soil.

Survey dates: Lang, 10 June 1986; P&ECWG, 7–14 May 2016.

In 1986, the south part consisted of Hornbeam coppice with some Ash and Oak. A small block of Spruce was planted about five years previously but was soon to be cleared. The central part was recently cleared of dead wood and partly coppiced. In the north, a young conifer plantation had been used for timber and possibly firewood but not extensively felled. The rest of the wood, north of the conifers, was also Hornbeam coppice with some Oak and Ash.

Decayed Hazel coppice was the most frequent shrub but Holly, Hawthorn and Elder also occurred. There was a wide range of species in the herb layer but many were local or rare. The dominant species were Ivy, Bramble and Bluebell with Wood Anemone and Common Nettle in the more open parts. There were some species of particular interest: Green Hellebore, Common Twayblade, Bird's-nest Orchid, Early-purple Orchid and Greater Butterfly-orchid. The healthy pool on the south-west margin had a range of aquatic species and there was a Wild Service Tree among the surrounding trees. There were 32 AWI species in a total count of 101 and this wood had the largest vascular plant list of the parish, probably due to its large size and its past and present management.

By contrast with the 1986 survey, in 2016 we found only 91 species but 27 of these were AWIs. There are differences in the AWIs for each survey: Lang's survey had 15 species that were not recorded in 2016 and the 2016 survey recorded 11 species that Lang did not. In June 1986, it would have been too late to identify the Wild Daffodils and Goldilocks Buttercups, while the May 2016 survey would have been too early for some of the orchids, which are unpredictable in their flowering in any case. One orchid that both surveys did not record was Violet Helleborine, which flowers in August. This was recorded on a separate occasion in 2012, when there were 46 plants supporting 61 flower spikes, so it is included in the list because it occurs regularly, according to the owner.

Many of those 'missing' from the recent survey are species indicative of more open conditions: Common Spotted-orchid, Foxglove and Ragged-robin, for example. The species recorded from the pond in the southern

section in 1986 – Water-plantain, Marsh-marigold, Yellow Iris, Common Duckweed and Broad-leaved Pondweed – have disappeared; these are all light-demanding plants. There is evidence of past coppicing of Hazel but this does not seem to have been practised for some time, so the wood is likely to have become shadier.

Other species may have been missed in the 2016 survey because they were simply overlooked, especially if they were small plants or rare in the wood. Some trees were still not in leaf in early May 2016 and this may have resulted in their being missed.

It was good to see the lovely carpets of bluebells and wood anemones flourishing and to find that some of the more interesting and unusual plants were still present – Butcher's-broom, Spurge Laurel, Wild Service Tree and Green Hellebore. In the 1986 survey, the status of the latter species was uncertain; it is native but very rare in Sussex and could have been planted but was still there 30 years later.

19. Beresford Manor Farm Wood

Grid reference: TQ363185; Area: 0.6 ha,

Age: Recent according to Lang, but on Tithe Map of 1841 and added to the Revised Ancient Woodland Inventory.

Conservation status: None.

Public access: None.

Situation: On the Wealden plain on the north-west side of a slight hill, slope 2°, 48m a.s.l. Adjacent land is pasture and garden. A minor road runs along the western boundary. The nearest wood is 160m away.

Geology and soils: Weald Clay. Quite well-drained clayey soil.

Survey dates: Lang, 8 June 1986; P&ECWG, 12 May 2016.

The wood is divided into southern and northern parts by the private drive to the house. In 1986, it consisted of mature Oak and Hornbeam grown from coppice. In the uncleared northern part, the trees were very crowded and there was much dead wood, standing and fallen. The south part had recently been cleared of dead wood but the trees were still rather crowded. Understorey species were Hawthorn and Elder, with some young Holly and broadleaf saplings in the north part. The field layer consisted mainly of Bramble and Bluebell.

In 2016, the trees were still quite crowded in the northern portion, despite some having been lost to wind, and the ground flora was sparse. The southern portion was still more open than the northern part but not as open as in 1986. It had a more interesting understorey because of the increased light. In particular, there were several individuals of the Spurge Laurel and Wood Spurge – both AWIs. It is puzzling that the former species was not recorded in 1986 because the shrubs were quite large in

2016 and could have been present at the time of the earlier survey, even as small plants. Without information on the length of time it takes from germination to full size bushes, it is hard to say. In addition, there was a good cover of Wood Anemones, Bluebells and Common Dog-violets.

Of the 38 species recorded in 1986, 12 were AWIs; in 2016, 48 species were recorded, including 15 AWIs. There were differences in the species recorded between the years; some may have been missed in either survey, some may have disappeared and some may have appeared, although generally the plant community had remained fairly stable, as is to be expected in mature woodland. Silver Birch appeared to have been lost but that is a short-lived tree, seldom living longer than 60 years, so it could easily have been lost since 1986. Both Birch and Oak are pioneer species, needing light to germinate and there were no seedlings of either species recorded. By contrast, a number of seedling Ash and Hornbeam were seen in 2016, and these species are capable of germinating in shade. The Wild Cherries were quite old and this species is quite short-lived but sucker and replace themselves frequently.

Some recent planting had been done of a row of young False Cypress and Daffodils and there were garden escapes such as Yellow Loosestrife. The Snowberry shrubs may have been planted long ago as food for pheasants.

20. Polecat Wood

Grid reference: TQ368184. Area: 4.1 ha.

Age: Ancient (Lang), on Tithe Map of 1841 and in both Ancient Woodland Inventories.

Conservation status: None.

Public access: No public access but a public bridleway runs along the eastern boundary.

Situation: The wood lies across a small stream valley with north and south-facing slopes of 2–4°. The average altitude is 40m a.s.l. The stream runs in a north-east direction and opens out into a lake 110 x 15m. The adjacent land is mostly arable and pasture with 20 ha of broadleaf woodland adjacent to the SE corner.

Geology and soils: Weald Clay. Poorly drained clayey soil.

Survey dates: Lang, 9 June 1986; P&ECWG, 14 May 2016.

In the 1986 survey, its area was given as 2.5 ha but is actually 4.3 ha (this may have been a mistake). Hornbeam coppice was dominant and quite well spaced and there were mature Oaks and some areas of Birch. A small plantation of Beech, Larch and Spruce occupied the northern area. The understorey was sparse and mostly composed of Hawthorn, Holly, Elder and Birch saplings. The field layer was dominated by Bluebell with Wood

Anemone and Bramble. There was much Bramble and Common Nettle around the lake. A total of 35 species were recorded, only five of which were AWIs.

In 2016, we recorded 63 vascular plant species in total and of these 19 were AWIs (but the Wild Service Tree should not be counted as such because a previous owner reported that she had planted it). Of the 63 species, a few were not true woodland plants, being associated with the lake and stream edges. The fact that more species were found may be because of the shorter time spent surveying in 1986 (45 minutes), compared with an hour and a half in 2016, and species could have been missed. Other changes in records between the years may be due to changes in management, although there is no evidence of this, or trees falling and creating space and light for seeds in the soil seedbank to germinate and allowing other species that are suppressed by shade to increase. Birch was not recorded in 2016 and it is possible that the trees recorded in 1986 had died in the intervening period; they are short-lived trees and the seeds need light to germinate. The Spruce recorded by Lang was not found but we did find several mature trees of Western Hemlock.

Annex 2: Plumpton woodlands: locations and ages

Wood name	Grid reference	Type of woodland, after Lang 1986	In Ancient Woodland Inventory (1989)	In Revised Ancient Woodland Inventory (2010)	No. of Ancient Woodland Indicators (Lang, 1986)	No. of Ancient Woodland Indicators (P&ECWG, 2014-16)	On Tithe Map of 1841
1 Horseshoe Plantation	TQ349118	Recent plantation	no	no	7	3	yes
2 Beeches	TQ361121	Recent plantation	no	no	4	Not surveyed	no
3 Streat Hill Shaw	TQ354131	Ancient	no	no	15	7	yes
4 Plumpton Wood South	TQ355145	Part ancient, part plantation	yes	yes	16	17	yes
5 The Pines	TQ355148	Some ancient and some planted	no	no	12	14	yes
6 Grannie's Wood	TQ357141	Ancient	yes	yes	19	16	yes
7 Pig Wood	TQ357144	Ancient	no	yes	11	16	yes
8 Riddens Wood	TQ358170	Ancient	yes	yes	11	13	yes
9 Inholmes Farm Wood (South)	TQ358175	Ancient and part secondary	no	no	22	18	yes
10a Grassy Wood	TQ358195	Possibly secondary	no	yes	3	7	yes
10b Grassy Shaws	TQ361193	Ancient	no	no	13	10	yes

Wood name	Grid reference	Type of woodland, after Lang 1986	In Ancient Woodland Inventory (1989)	In Revised Ancient Woodland Inventory (2010)	No. of Ancient Woodland Indicators (Lang, 1986)	No. of Ancient Woodland Indicators (P&ECWG, 2014–16)	On Tithe Map of 1841
11 Little Inholmes Wood	TQ362166	Recent	no	no	12	Not surveyed	no
12 Cottage Wood North	TQ359191	Possibly secondary	no	no	10	14	yes
13 Letchmore Wood	TQ360177	Ancient but part secondary	yes	no	8	7	yes
14 Sedgebrook Hostel (Russet Wood)	TQ362194	Not surveyed by Lang	no	yes	Not surveyed	13	yes
15 Reed Pond	TQ363146	Recent	no	no	10	15	no
16 Highborough (High Burrows)	TQ364148	Recent, planted 1920s	no	no	3	12	no
17 Chiltington Ferrings	TQ366152	Ancient but some exotics	no	no	15	26	East part
18 Plumpton Wood North	TQ365185	Ancient	yes	yes	31	27	yes
19 Beresford Manor Farm Wood	TQ363185	Recent, secondary?	no	no	13	15	yes
20 Polecat Wood	TQ362194	Ancient	yes	yes	5	19	yes

Annex 3: Plant species recorded in woodlands in Plumpton Parish

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Acer campestre</i>	Field Maple	Woods, hedges	Yes	Native	12	13
<i>Acer pseudoplatanus</i>	Sycamore	Woods, hedges, built-up areas and gardens		Neophyte	6	9
<i>Adoxa moschatellina</i>	Moschatel	Woods	Yes	Native	6	9
<i>Aegopodium podagraria</i>	Ground Elder	Hedges, roadsides, gardens		Archaeophyte	0	1
<i>Aesculus hippocastanum</i>	Horse-chestnut	Hedges, roadsides, gardens		Neophyte	2	4
<i>Agrostis gigantea</i>	Black Bent	Hedges, roadsides, arable		Archaeophyte	3	2
<i>Agrostis stolonifera</i>	Creeping Bent	Arable, neutral grassland		Native	0	6
<i>Ajuga reptans</i>	Bugle	Woods		Native	12	12
<i>Alisma plantago-aquatica</i>	Water-plantain	Marsh, standing water		Native	2	0
<i>Alliaria petiolata</i>	Garlic Mustard	Hedges, roadsides		Native	4	9
<i>Allium ursinum</i>	Ramsons	Woods	Yes	Native	6	8
<i>Alnus glutinosa</i>	Alder	Woods, streams		Native	3	4
<i>Anemone nemorosa</i>	Wood Anemone	Woods	Yes	Native	12	14
<i>Angelica sylvestris</i>	Wild Angelica	Marsh		Native	0	2
<i>Anthriscus sylvestris</i>	Cow Parsley	Hedges, roadsides		Native	12	10
<i>Araucaria araucaria</i>	Monkey Puzzle	Gardens		Alien	0	1
<i>Arctium lappa</i>	Greater Burdock	Hedges, roadsides		Archaeophyte	0	1
<i>Arctium minor</i>	Lesser Burdock	Hedges, roadsides		Native	0	1
<i>Arrhenatherum elatius</i>	False Oat-grass	Hedges, roadsides, neutral grassland		Native	0	1

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Arum maculatum</i>	Lords-and-ladies	Woods		Native	12	16
<i>Arundinaria anceps</i>	Anceps Bamboo	Gardens		Alien	3	1
<i>Asplenium scolopendrium</i>	Hart's-tongue	Woods	Yes	Native	2	4
<i>Berberis vulgaris</i>	Barberry	Woods, hedges		Neophyte	0	1
<i>Berula erecta</i>	Lesser Water-parsnip	Marsh		Native	1	0
<i>Betula pendula</i>	Silver Birch	Woods		Native	11	6
<i>Betula pubescens</i>	Downy Birch	Woods		Native	2	4
<i>Brachypodium sylvaticum</i>	False Brome	Woods		Native	0	8
<i>Bromus racemosus</i>	Smooth Brome	Hedges, roadsides, neutral grassland		Native	3	0
<i>Bromus ramosa</i>	Hairy Brome	Woodland	Yes	Native	2	0
<i>Buxus sempervirens</i> (cultivar)	Box (cultivar)	Gardens		Neophyte	1	1
<i>Callitriche stagnalis</i>	Water Starwort	Standing water		Native	0	1
<i>Caltha palustris</i>	Marsh-marigold	Marsh		Native	3	3
<i>Calystegia sepium</i>	Hedge Bindweed	Marsh, streams		Native	1	0
<i>Campanula trachelium</i>	Nettle-leaved Bellflower	Woods	Yes	Native	1	0
<i>Cardamine flexuosa</i>	Wavy Bitter-cress	Woods		Native	8	6
<i>Cardamine hirsuta</i>	Hairy Bitter-cress	Gardens		Native	0	1
<i>Cardamine pratensis</i>	Lady's-smock	Neutral grassland, marsh		Native	3	12
<i>Carduus crispus</i>	Wetted Thistle	Roadsides		Native	1	0
<i>Carex acutiformis</i>	Lesser Pond-sedge	Marsh		Native	0	1

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Carex flacca</i>	Glaucous Sedge	Calcareous grassland, marsh		Native	1	0
<i>Carex pendula</i>	Pendulous Sedge	Woods, streams	Yes	Native	1	6
<i>Carex remota</i>	Remote Sedge	Woods, streams	Yes	Native	4	4
<i>Carex sylvatica</i>	Wood Sedge	Woods	Yes	Native	8	13
<i>Carpinus betulus</i>	Hornbeam	Woods	Yes	Native	9	9
<i>Castanea sativa</i>	Sweet Chestnut	Woods		Archaeophyte	2	3
<i>Cerastium arvense</i>	Field Mouse-ear	Acid grassland		Native	1	0
<i>Chamaecyparis</i> sp.	False Cypress			Alien	0	1
<i>Chamerion angustifolium</i>	Rosebay Willowherb	Roadsides, gardens		Native	5	0
<i>Chrysosplenium oppositifolium</i>	Opposite-leaved Golden Saxifrage	Woods, streams	Yes	Native	2	3
<i>Circaea lutetiana</i>	Enchanter's Nightshade	Woods		Native	12	11
<i>Cirsium palustre</i>	Marsh Thistle	Marsh, streams		Native	1	2
<i>Cirsium vulgare</i>	Spear Thistle	Roadsides, neutral and calcareous grassland		Native	1	1
<i>Clematis vitalba</i>	Traveller's-joy	Hedges		Native	2	3
<i>Conopodium majus</i>	Pignut	Woods, neutral grassland	Yes	Native	2	1
<i>Cornus sanguinea</i>	Dogwood	Woods, hedges		Native	2	3
<i>Cornus</i> sp.	A cultivated Dogwood	Gardens		Alien	1	0
<i>Corylus avellana</i>	Hazel	Woods, hedges		Native	13	14
<i>Cotoneaster</i> sp.	Cotoneaster	Gardens		Neophyte	0	1

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Crataegus laevigata</i>	Midland Hawthorn	Woods	Yes	Native	1	7
<i>Crataegus monogyna</i>	Hawthorn	Woods, hedges		Native	15	16
<i>Crataegus x media</i>	Hybrid Hawthorn	Woods		Native hybrid	0	8
<i>Crocsmia x crocosmiiflora</i>	Montbretia	Woods, roadsides, gardens		Neophyte	0	1
<i>Cupressocyparis leylandii</i>	Leyland Cypress	Gardens		Alien	0	2
<i>Cytisus scoparius</i>	Broom	Hedges, roadsides		Native	2	0
<i>Dactylis glomerata</i>	Cock's-foot	Neutral grassland		Native	7	6
<i>Dactylorhiza fuchsii</i>	Common Spotted-orchid	Marsh		Native	3	0
<i>Daphne laureola</i>	Spurge-laurel	Woods	Yes	Native	1	2
<i>Daphne sp.</i>	Cultivated Daphne	Gardens		Alien	0	1
<i>Dechampsia cespitosa</i>	Tufted Hair-grass	Woods, neutral grassland		Native	3	4
<i>Digitalis purpurea</i>	Foxglove	Acid grassland, bracken		Native	9	2
<i>Dipsacus fullonum</i>	Wild Teasel	Hedges, roadsides, neutral grassland, gardens		Neophyte	0	1
<i>Dryopteris affinis</i>	Scaly Male-fern	Woods	Yes	Native	0	5
<i>Dryopteris dilatata</i>	Broad Buckler-fern	Woods, hedges		Native	0	10
<i>Dryopteris filix-mas</i>	Male-fern	Woods, hedges		Native	0	9
<i>Epilobium hirsutum</i>	Great Willowherb	Marsh, streams		Native	1	0

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Epilobium montanum</i>	Broad-leaved Willowherb	Hedges, roadsides, gardens		Native	1	0
<i>Epipactis helleborine</i>	Broad-leaved Helleborine	Woods, calcareous grasslands	Yes	Native	0	1
<i>Epipactis purpurata</i>	Violet Helleborine	Woods	Yes	Native	0	3
<i>Equisetum telmateia</i>	Great Horsetail	Marsh		Native	0	1
<i>Euonymus europaeus</i>	Spindle		Woods, hedges	Native	7	8
<i>Euphorbia amygdaloides</i>	Wood Spurge	Woods	Yes	Native	4	4
<i>Fagus sylvatica</i>	Beech	Woods		Native	5	5
<i>Ficaria verna</i>	Lesser Celandine	Woods, hedges, roadsides		Native	11	13
<i>Filipendula ulmaria</i>	Meadowsweet	Marsh		Native	1	2
<i>Fragaria vesca</i>	Wild Strawberry	Woods, calcareous grasslands		Native	2	1
<i>Fraxinus excelsior</i>	Ash	Woods		Native	17	17
<i>Galanthus nivalis</i>	Snowdrops	Woods, hedges, gardens		Neophyte	0	1
<i>Galium aparine</i>	Cleavers	Hedges, roadsides, arable, gardens		Native	14	16
<i>Galium odoratum</i>	Woodruff	Woods	Yes	Native	1	0
<i>Galium palustre</i>	Common Marsh-bedstraw	Marsh		Native	0	3
<i>Geranium robertianum</i>	Herb-Robert	Woods		Native	11	14
<i>Geum urbanum</i>	Wood Avens	Woods		Native	11	15
<i>Glechoma hederacea</i>	Ground-ivy	Woods, hedges, roadsides		Native	12	14

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Glyceria fluitans</i>	Floating Sweet-grass	Marsh, streams		Native	0	1
<i>Hedera helix</i>	Ivy	Woods, Hedges		Native	15	14
<i>Helleborus viridis</i>	Green Hellebore	Woods, hedges	Yes	Native/Alien	1	1
<i>Heracleum sphondylium</i>	Hogweed	Hedges, roadsides, neutral grassland		Native	8	8
<i>Holcus lanatus</i>	Yorkshire-fog	Hedges, roadsides, neutral grassland		Native	3	4
<i>Holcus mollis</i>	Creeping Soft-grass	Woods, hedges, roadsides, bracken	Yes	Native	4	0
<i>Humulus lupulus</i>	Hop	Hedges		Native	0	1
<i>Hyacinthoides non-scripta</i>	Bluebell	Woods, bracken	Yes	Native	17	17
<i>Hypericum androsaemum</i>	Tutsan	Woods, hedges, roadsides	Yes	Native	0	1
<i>Hypericum perforatum</i>	Perforate St John's-wort	Calcareous grassland		Native	2	0
<i>Ilex aquifolium</i>	Holly	Woods	Yes	Native	15	17
<i>Iris foetidissima</i>	Gladdon	Woods	Yes	Native	0	1
<i>Iris pseudacorus</i>	Yellow Iris	Marsh		Native	3	3
<i>Juncus conglomeratus</i>	Compact Rush	Marsh		Native	0	1
<i>Juncus effusus</i>	Soft Rush	Acid grassland, marsh		Native	4	9
<i>Juncus inflexus</i>	Hard Rush	Neutral grassland, marsh		Native	0	1
<i>Lamium galeobdolon</i> ssp. <i>argenteum</i>	Yellow Archangel	Gardens		Neophyte	0	1

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Lamiastrum galeobdolon</i> ssp. <i>montanum</i>	Yellow Archangel	Woods	Yes	Native	6	7
<i>Lapsana communis</i>	Nipplewort	Hedges, roadsides, built-up areas, gardens		Native/Alien	4	4
<i>Larix decidua</i>	Larch	Woods, built-up areas, gardens		Neophyte	4	3
<i>Lemna minor</i>	Common Duckweed	Marsh, standing water		Native	1	0
<i>Ligustrum vulgare</i>	Wild Privet	Woods, hedges		Native	4	6
<i>Lolium perenne</i>	Perennial Rye Grass	Hedges, roadsides, neutral grassland		Native	0	1
<i>Lonicera nitida</i>	Wilson's Honeysuckle	Gardens		Alien	0	1
<i>Lonicera periclymenum</i>	Honeysuckle	Woods		Native	15	15
<i>Luzula forsteri</i>	Southern Wood-rush	Woods	Yes	Native	1	0
<i>Luzula multiflora</i>	Heath Wood-rush	Acid grassland		Native	1	0
<i>Lysimachia nemorum</i>	Yellow Pimpernel	Woods	Yes	Native	1	0
<i>Lysimachia nummularia</i>	Creeping Jenny	Neutral grassland, marsh, streams		Native	0	2
<i>Lysimachia vulgaris</i>	Yellow Loosestrife	Marsh		Native	0	1
<i>Mahonia aquifolium</i>	Oregon-grape	Woods, hedges		Neophyte	0	1
<i>Malus pumila</i>	Apple	Hedges		Archaeophyte	0	4
<i>Malus sylvestris</i>	Crab Apple	Woods, hedges	Yes	Native	10	6
<i>Melica uniflora</i>	Wood Melick	Woods	Yes	Native	3	2
<i>Mentha aquatica</i>	Water Mint	Marsh		Native	1	3
<i>Mentha arvensis</i>	Corn Mint	Arable, marsh		Native	2	0

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Mercurialis perennis</i>	Dog's Mercury	Woods		Native	12	12
<i>Millium effusum</i>	Wood Millet	Woods	Yes	Native	14	2
<i>Moehringia trinervia</i>	Thee-nerved Sandwort	Woods	Yes	Native	0	5
<i>Mycelis muralis</i>	Wall Lettuce	Woods, inland rock		Native	2	0
<i>Myosotis arvensis</i>	Field Forget-me-not	Hedges, roadsides, arable		Archaeophyte	5	0
<i>Myosotis scorpioides</i>	Water Forget-me-not	Marsh, streams		Native	1	1
<i>Myosotis sylvatica</i>	Wood Forget-me-not	Woods		Native	1	1
<i>Narcissus pseudonarcissus</i>	Wild Daffodil	Woods, hedges	Yes	Native	0	3
<i>Narcissus sp.</i>	Cultivated Daffodils			Alien	0	5
<i>Neottia nidus-avis</i>	Bird's-nest Orchid	Woods	Yes	Native	1	0
<i>Neottia ovata</i>	Common Twayblade	Woods, marsh		Native	1	2
<i>Oenanthe crocata</i>	Hemlock Water-dropwort	Marsh, streams		Native	2	2
<i>Orchis mascula</i>	Early-purple Orchid	Woods, calcareous grasslands, inland rock	Yes	Native	4	3
<i>Oxalis acetosella</i>	Wood-sorrel	Woods, inland rock	Yes	Native	2	1
<i>Persicaria hydropiper</i>	Water Pepper	Marsh, standing water, streams		Native	0	1
<i>Phalaris arundinacea</i>	Reed Canary-grass	Marsh, streams		Native	0	1
<i>Photinia</i>		Gardens		Alien	0	1
<i>Phragmites australis</i>	Common Reed	Marsh		Native	0	1

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Picea abies</i>	Norway Spruce	Coniferous woods		Neophyte	0	1
<i>Picea</i> sp.	Spruce	Plantations			6	1
<i>Pinus sylvestris</i>	Scots Pine	Coniferous woods		Native	5	1
<i>Plantago major</i>	Greater Plantain	Hedges, roadsides, improved grassland		Native	0	3
<i>Platanthera chlorantha</i>	Greater Butterfly-orchid	Woods, neutral grassland	Yes	Native	1	0
<i>Poa annua</i>	Annual Meadow Grass	Roadsides, arable, improved and neutral grassland		Native	2	0
<i>Poa trivialis</i>	Rough Meadow Grass	Woods, roadsides, improved grassland		Native	0	14
<i>Polygonatum x hybridum</i>	Garden Solomon's-seal	Gardens		Alien	0	1
<i>Polypodium interjectum</i>	Intermediate Polypody	Woods, hedges, inland rock	Yes	Native	0	1
<i>Polypodium vulgare</i>	Polypody	Woods, hedges, inland rock	Yes	Native	1	1
<i>Polystichum aculeatum</i>	Hard Shield-fern	Woods, inland rock	Yes	Native	0	1
<i>Polystichum setiferum</i>	Soft Shield-fern	Woods	Yes	Native	0	2
<i>Populus tremula</i>	Aspen	Woods, inland rock	Yes	Native	3	4
<i>Potamogeton natans</i>	Broad-leaved Pondweed	Marsh, standing water, streams		Native	1	0
<i>Potentilla anserina</i>	Silverweed	Neutral grassland		Native	1	1

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Potentilla reptans</i>	Creeping Cinquefoil	Neutral grassland		Native	1	0
<i>Potentilla sterilis</i>	Barren Strawberry	Woods	Yes	Native	1	3
<i>Primula veris</i>	Cowslip	Neutral and calcareous grassland		Native	3	1
<i>Primula vulgaris</i>	Primrose	Woods and skeletal soils	Yes	Native	8	12
<i>Prunella vulgaris</i>	Selfheal	Neutral and calcareous grassland		Native	1	3
<i>Prunus avium</i>	Wild Cherry	Woods	Yes	Native	7	10
<i>Prunus cerasifera</i>	Cherry Plum	Woods, hedges, built-up areas, gardens		Neophyte	0	1
<i>Prunus laurocerasus</i>	Cherry Laurel	Woods, built-up areas, gardens		Neophyte	1	3
<i>Prunus spinosa</i>	Blackthorn	Hedges		Native	12	12
<i>Pseudosasa japonica</i>	Arrow Bamboo	Gardens		Alien	0	2
<i>Pseudotsuga menziesii</i>	Douglas Fir	Woods, built-up areas, gardens		Neophyte	0	1
<i>Pteridium aquilinum</i>	Bracken	Woods, bracken		Native	14	8
<i>Pulmonaria officinalis</i>	Lungwort	Woods, hedges, built-up areas, gardens		Neophyte	1	0
<i>Pyrus communis</i>	Cultivated Pear	Woods, hedges, built-up areas and gardens		Archaeophyte	0	1
<i>Quercus cerris</i>	Turkey Oak	Woods, hedges, built-up areas, gardens		Neophyte	1	0
<i>Quercus petraea</i>	Sessile Oak	Woods	Yes	Native	0	1
<i>Quercus petraea</i> x <i>robur</i>	Oak hybrid	Woods		Native hybrid	0	2

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Quercus robur</i>	Pedunculate Oak	Woods, hedges		Native	15	15
<i>Quercus rubra</i>	Red Oak	Plantations		Alien	0	1
<i>Ranunculus auricomus</i>	Goldilocks Buttercup	Woods	Yes	Native	1	4
<i>Ranunculus repens</i>	Creeping Buttercup	Roadsides, neutral grassland		Native	11	7
<i>Rhamnus cathartica</i>	Buckthorn	Woods, hedges		Native	6	0
<i>Rhododendron ponticum</i>	Rhododendron	Woods, dwarf shrub heath, skeletal soils		Neophyte	1	3
<i>Ribes nigrum</i>	Black Currant	Woods, hedges, streams	Yes	Neophyte	3	1
<i>Ribes rubrum</i>	Red Currant	Woods	Yes	Native/Alien	3	3
<i>Ribes uva-crispa</i>	Gooseberry	Woods, hedges		Neophyte	0	2
<i>Rosa arvensis</i>	Field Rose	Hedges	Yes	Native	5	5
<i>Rosa canina</i>	Dog-rose	Woods, hedges		Native	11	10
<i>Rosa micrantha</i>	Small-flowered Sweet-briar	Woods, hedges, calcareous grassland		Native	1	1
<i>Rosa obtusifolia</i>	Round-leaved Dog-rose	Woods, hedges		Native	1	0
<i>Rubus fruticosus</i>	Bramble	Woods, hedges		Native	17	16
<i>Rubus idaeus</i>	Raspberry	Woods		Native	1	0
<i>Rumex acetosa</i>	Common Sorrel	Neutral grassland		Native	1	0
<i>Rumex obtusifolius</i>	Broad-leaved Dock	Roadsides, improved grassland, built-up areas, gardens		Native	11	14
<i>Rumex sanguineus</i>	Wood Dock	Woods		Native	0	4
<i>Ruscus aculeatus</i>	Butcher's-broom	Woods, hedges	Yes	Native	3	4
<i>Salix alba</i>	White Willow	Streams		Archaeophyte	1	3

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Salix caprea</i>	Goat Willow	Woods		Native	7	8
<i>Salix cinerea</i>	Grey Willow	Woods, marsh		Native	6	4
<i>Salix fragilis</i>	Crack-willow	Woods, streams		Archaeophyte	3	0
<i>Salix viminalis</i>	Osier	Marsh, bogs, streams		Archaeophyte	1	0
<i>Sambucus nigra</i>	Elder	Hedges, built-up areas, gardens		Native	17	17
<i>Sanicula europaea</i>	Sanicle	Woods	Yes	Native	3	1
<i>Sasa palmata</i>	Broad-leaved Bamboo	Gardens		Alien	0	1
<i>Scrophularia auriculata</i>	Water Figwort	Marsh, streams		Native	0	1
<i>Scrophularia nodosa</i>	Common Figwort	Woods, hedges		Native	3	3
<i>Senecio jacobaea</i>	Common Ragwort	Roadsides, neutral, calcareous and acid grassland		Native	0	3
<i>Senecio vulgaris</i>	Groundsel	Roadsides, arable, built-up areas, gardens		Native	0	1
<i>Silene dioica</i>	Red Campion	Woods		Native	14	11
<i>Silene flos-cuculi</i>	Ragged-robin	Marsh		Native	1	0
<i>Solanum dulcamara</i>	Bittersweet	Roadsides, marsh, streams		Native	2	2
<i>Sorbus aucuparia</i>	Rowan	Woods, skeletal soils		Native	1	1
<i>Sorbus torminalis</i>	Wild Service Tree	Woods	Yes	Native	3	4
<i>Sparganium erectum</i>	Branched Burr-reed	Marsh, standing water		Native	0	1
<i>Stachys sylvatica</i>	Hedge Woundwort	Hedges		Native	1	3
<i>Stellaria graminea</i>	Lesser Stitchwort	Neutral grassland		Native	5	0

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Stellaria holostea</i>	Greater Stitchwort	Woods		Native	12	12
<i>Stellaria media</i>	Chickweed	Roadsides, arable		Native	16	5
<i>Symphoricarpos albus</i>	Snowberry	Woods, hedges, built-up areas, gardens		Neophyte	1	2
<i>Tamus communis</i>	Black Bryony	Woods, hedges	Yes	Native	8	7
<i>Taraxacum officinale</i>	Dandelion	Roadsides, improved grassland, built-up areas, gardens		Native	5	8
<i>Taxus baccata</i>	Yew	Woods		Native	6	8
<i>Tellima grandiflora</i>	Fringecups	Woods, roadsides, built-up areas, gardens		Neophyte	0	1
<i>Teucrium scorodonia</i>	Wood Sage	Woods, bracken, skeletal soils		Native	2	0
<i>Tilia cordata</i>	Small-leaved lime	Woods	Yes	Native	1	0
<i>Tilia x europaea</i>	Lime	Woods		Native hybrid	1	0
<i>Tsuga heterophylla</i>	Western Hemlock	Woods, coniferous woods, built-up areas, gardens		Neophyte	0	1
<i>Typha latifolia</i>	Bulrush	Marsh		Native	1	0
<i>Ulmus procera</i>	English Elm	Hedges		Native/Alien	0	1
<i>Urtica dioica</i>	Common Nettle	Roadsides, arable, built-up areas, gardens		Native	13	15
<i>Veronica arvensis</i>	Wall Speedwell	Roadsides, arable, skeletal soils		Native	0	1
<i>Veronica beccabunga</i>	Brooklime	Marsh, streams		Native	0	2

Scientific name	English name	Usual habitat	Ancient Woodland Indicator*	Status†	No. of woods in which recorded by Lang**	No. of woods in which recorded by P&ECWG**
<i>Veronica chamaedrys</i>	Germander Speedwell	Woods, roadsides, neutral grassland		Native	9	4
<i>Veronica hederifolia</i>	Ivy-leaved Speedwell	Woods, roadsides, arable, built-up areas, gardens		Archaeophyte	0	4
<i>Veronica montana</i>	Wood Speedwell	Woods	Yes	Native	9	12
<i>Veronica officinalis</i>	Heath Speedwell	Calcareous and acid grassland		Native	1	0
<i>Veronica serpyllifolia</i>	Thyme-leaved Speedwell	Hedges, roadsides, improved grassland, gardens			0	2
<i>Viburnum lantana</i>	Wayfaring-tree	Woods, hedges		Native	1	1
<i>Viburnum opulus</i>	Guelder Rose	Woods	Yes	Native	3	2
<i>Vicia sepium</i>	Bush Vetch	Roadsides, neutral grassland	Yes	Native	7	2
<i>Vinca minor</i>	Lesser Periwinkle	Woods, roadsides, built-up areas, gardens		Archaeophyte	3	2
<i>Viola odorata</i>	Sweet Violet	Calcareous grassland		Native	0	1
<i>Viola reichenbachiana</i>	Early Dog-violet	Woods	Yes	Native	8	5
<i>Viola riviniana</i>	Common Dog-violet	Woods, calcareous grassland, skeletal soils		Native	3	9
<i>Yushania anceps</i>	Fountain-bamboo	Gardens		Alien	1	0

*Ancient Woodland Indicators for South-east England collated by K. Kirby, English Nature (2004), in Rose, F. (2006) The Wild Flower Key, Frederick Warne.

** In the 17 woods that were recorded by both surveys.

†Status: Native; Archaeophyte (established before AD1500); Neophyte (introduced after AD1500); Alien.

Annex 4: Ancient Woodland Indicator species for South East England with occurrence in Plumpton woods

Scientific name	English name	Hornby (1984)	Kirby (2004), in Rose (2006)	No. of woods in which recorded (Lang)	No. of woods in which recorded (P&ECWG)
<i>Acer campestre</i>	Field Maple	yes	yes	12	13
<i>Adoxa moschatellina</i>	Moschatel	yes	yes	6	9
<i>Agrimonia procera</i>	Fragrant Agrimony	yes	no		
<i>Allium ursinum</i>	Ramsons	yes	yes	6	8
<i>Anemone nemorosa</i>	Wood Anemone	yes	yes	12	14
<i>Aquilegia vulgaris</i>	Columbine	yes	yes		
<i>Asplenium scolopendrium</i>	Hart's-tongue	yes	yes	2	4
<i>Blechnum spicant</i>	Hard-fern	yes	yes		
<i>Bromus ramosa</i>	Hairy-brome	yes	yes	5	0
<i>Calamagrostis epigejos</i>	Wood Small-reed	yes	yes		
<i>Campanula trachelium</i>	Nettle-leaved Bellflower	yes	yes	1	0
<i>Cardamine amara</i>	Large Bitter-cress	no	yes		
<i>Cardamine bulbifera</i>	Coral-root	yes	no		
<i>Carex laevigata</i>	Smooth-stalked Sedge	yes	yes		
<i>Carex pallescens</i>	Pale Sedge	yes	yes		
<i>Carex pendula</i>	Pendulous Sedge	yes	yes	1	6
<i>Carex remota</i>	Remote Sedge	yes	yes	4	4
<i>Carex strigosa</i>	Thin-spiked Wood Sedge	yes	yes		
<i>Carex sylvatica</i>	Wood Sedge	yes	yes	8	13
<i>Carpinus betulus</i>	Hornbeam	yes	yes	9	9
<i>Centaureum pulchellum</i>	Lesser Centaury	yes	no		
<i>Centunculus minimus</i>	Chaffweed	yes	yes		
<i>Chrysosplenium alternifolium</i>	Alternate-leaved Golden Saxifrage	yes	no		
<i>Chrysosplenium oppositifolium</i>	Opposite-leaved Golden Saxifrage	yes	yes	2	3
<i>Conopodium majus</i>	Pignut	yes	yes	2	1

Scientific name	English name	Hornby (1984)	Kirby (2004), in Rose (2006)	No. of woods in which recorded (Lang)	No. of woods in which recorded (P&ECWG)
<i>Convallaria majalis</i>	Lily-of-the-valley	yes	yes		
<i>Crataegus laevigata</i>	Midland Hawthorn	yes	yes	1	7
<i>Daphne laureola</i>	Spurge-laurel	yes	yes	1	2
<i>Dipsacus pilosus</i>	Small Teasel	yes	yes		
<i>Dryopteris aemula</i>	Hay-scented Buckler-fern	yes	yes		
<i>Dryopteris carthusiana</i>	Narrow Buckler-fern	no	yes		
<i>Dryopteris affinis</i>	Scaly Male-fern	yes	yes	0	5
<i>Elymus caninus</i>	Bearded Couch	yes	yes		
<i>Epipactis helleborine</i>	Broad-leaved Helleborine	yes	yes	0	1
<i>Epipactis purpurata</i>	Viola Helleborine	yes	yes	0	3
<i>Equisetum sylvaticum</i>	Wood Horsetail	yes	yes		
<i>Euphorbia amygdaloides</i>	Wood Spurge	yes	yes	4	4
<i>Festuca gigantea</i>	Giant Fescue	yes	yes		
<i>Frangula alnus</i>	Alder Buckthorn	yes	yes		
<i>Galium odoratum</i>	Woodruff	yes	yes	1	0
<i>Gnaphalium sylvaticum</i>	Heath Cudweed	yes	no		
<i>Helleborus viridis</i>	Green Hellebore	yes	yes	1	1
<i>Holcus mollis</i>	Creeping Soft-grass	yes	yes	4	0
<i>Hyacinthoides non-scripta</i>	Bluebell	no	yes	17	17
<i>Hypericum androsaemum</i>	Tutsan	yes	yes	0	1
<i>Hypericum pulchrum</i>	Slender St John's-wort	yes	yes		
<i>Ilex aquifolium</i>	Holly	no	yes	15	17
<i>Iris foetidissima</i>	Gladdon	yes	yes	0	1

Scientific name	English name	Hornby (1984)	Kirby (2004), in Rose (2006)	No. of woods in which recorded (Lang)	No. of woods in which recorded (P&ECWG)
<i>Lamiastrum galeobdolon</i> ssp. <i>montanum</i>	Yellow Archangel	yes	yes	6	7
<i>Lathraea squamaria</i>	Toothwort	yes	yes		
<i>Lathyrus linifolius</i>	Bitter-vetch	yes	yes		
<i>Lathyrus sylvestris</i>	Narrow-leaved Everlasting-pea	yes	yes		
<i>Lithospermum officinale</i>	Common Gromwell	yes	no		
<i>Luzula forsteri</i>	Southern Wood-rush	yes	yes	1	0
<i>Luzula pilosa</i>	Hairy Wood-rush	yes	yes		
<i>Luzula sylvatica</i>	Great Wood-rush	yes	yes		
<i>Lysimachia nemorum</i>	Yellow Pimpernel	yes	yes	1	0
<i>Malus sylvestris</i>	Crab Apple	yes	yes	10	6
<i>Melampyrum pratense</i>	Common Cow-wheat	yes	yes		
<i>Melica uniflora</i>	Wood Melick	yes	yes	3	2
<i>Millium effusum</i>	Wood Millet	yes	yes	14	2
<i>Moehringia trinervia</i>	Three-nerved Sandwort	no	yes	0	5
<i>Myosotis sylvatica</i>	Wood Forget-me-not	yes	no	2	1
<i>Narcissus pseudonarcissus</i>	Wild Daffodil	yes	yes	0	3
<i>Neottia nidus-avis</i>	Bird's-nest Orchid	yes	yes	1	0
<i>Orchis mascula</i>	Early-purple Orchid	yes	yes	4	3
<i>Orchis purpurea</i>	Lady Orchid	yes	yes		
<i>Oreopteris limbosperma</i>	Lemon-scented Fern	yes	yes		
<i>Oxalis acetosella</i>	Wood-sorrel	yes	yes	2	1
<i>Paris quadrifolia</i>	Herb Paris	yes	yes		

Scientific name	English name	Hornby (1984)	Kirby (2004), in Rose (2006)	No. of woods in which recorded (Lang)	No. of woods in which recorded (P&ECWG)
<i>Pimpinella major</i>	Greater Burnet-saxifrage	yes	yes		
<i>Platanthera bifolia</i>	Lesser Butterfly-orchid	yes	yes		
<i>Platanthera chlorantha</i>	Greater Butterfly-orchid	yes	yes	1	0
<i>Poa nemoralis</i>	Wood Meadow Grass	yes	yes		
<i>Polygonatum multiflorum</i>	Solomon's-seal	yes	yes		
<i>Polypodium vulgare</i> and <i>P. interjectum</i>	Polypody	yes	yes	1	1
<i>Polystichum aculeatum</i>	Hard Shield-fern	yes	yes	0	1
<i>Polystichum setiferum</i>	Soft Shield-fern	yes	yes	0	2
<i>Populus tremula</i>	Aspen	yes	yes	3	4
<i>Potentilla sterilis</i>	Barren Strawberry	no	yes	1	3
<i>Primula vulgaris</i>	Primrose	yes	yes	8	12
<i>Prunus avium</i>	Wild Cherry	yes	yes	7	10
<i>Quercus petraea</i>	Sessile Oak	yes	yes	0	1
<i>Radiola linoides</i>	Allseed	yes	yes		
<i>Ranunculus auricomus</i>	Goldilocks Buttercup	yes	yes	1	4
<i>Ribes nigrum</i>	Black Currant	yes	yes	3	1
<i>Ribes rubrum</i>	Red Currant	yes	yes	3	3
<i>Rosa arvensis</i>	Field Rose	yes	yes	3	5
<i>Ruscus aculeatus</i>	Butcher's-broom	yes	yes	3	4
<i>Sanicula europaea</i>	Sanicle	yes	yes	3	1
<i>Scirpus sylvaticus</i>	Wood Club-rush	yes	yes		
<i>Scutellaria minor</i>	Lesser Skullcap	yes	yes		
<i>Sedum telephium</i>	Orpine	yes	yes		
<i>Serratula tinctoria</i>	Saw-wort	yes	yes		

Scientific name	English name	Hornby (1984)	Kirby (2004), in Rose (2006)	No. of woods in which recorded (Lang)	No. of woods in which recorded (P&ECWG)
<i>Solidago virgaurea</i>	Goldenrod	yes	yes		
<i>Sorbus torminalis</i>	Wild Service Tree	yes	yes	3	4
<i>Stachys officinalis</i>	Betony	no	yes		
<i>Stellaria neglecta</i>	Greater Chickweed	yes	no		
<i>Tamus communis</i>	Black Bryony	no	yes	8	7
<i>Tilia cordata</i>	Small-leaved Lime	yes	yes	1	0
<i>Ulmus glabra</i>	Wych Elm	yes	no		
<i>Vaccinium myrtillus</i>	Bilberry	yes	yes		
<i>Veronica montana</i>	Wood Speedwell	yes	yes	9	12
<i>Viburnum opulus</i>	Guelder Rose	yes	yes	3	2
<i>Vicia sepium</i>	Bush Vetch	no	yes	7	2
<i>Vicia sylvatica</i>	Wood Vetch	yes	yes		
<i>Viola odorata</i>	Sweet Violet	yes	no	0	1
<i>Viola palustris</i>	Marsh Violet	no	yes		
<i>Viola reichnebachiana</i>	Early Dog-violet	no	yes	8	5
<i>Wahlenbergia hederacea</i>	Ivy-leaved Bellflower	yes	yes		

(Right) Riddens Wood
 © Jeanie Muddle



This report compares the findings of two surveys of the woodlands in Plumpton Parish, in 1986 and 2014/2016. A total of 247 species were recorded, of which 112 were true woodland species, including 61 Ancient Woodland Indicators. Some species present in 1986 were not found in 2014/16; others missed in 1986 were present in the later survey, which found important changes in the habitats, due mainly to changes in woodland management practices.

The surveys reveal the wealth of species and great antiquity of Plumpton's woods, all but three of which are recorded on the 1841 Tithe Map.

‘This report is what I should love to see developed in every community. It demonstrates how people, passionate about the area they live in, can work together through professional biological recording and citizen science techniques to produce a high quality publication.’

Carole Nicholson, Chairman, Sussex Wildlife Trust