

Management Plan 2011

Funded by the Princes Trust in partnership with Moulsecoomb Forest Garden and Brighton Aldridge Community Academy to support disadvantaged young people and benefit the community. For more information on Prince's Trust awards programmes in Sussex, please contact Wilf Nicholls at: wilf.nicholls@princes-trust.org.uk

# Contents

For	eword	5
-	Natasha Silsby, Community Manager, Aldridge Foundation, Brighton ridge Community Academy	
Intr	oduction	7
by F	Patrick Beach, Environmental Project Worker, Sussex YMCA	
Par	t A – Description and Evaluation	9
1.	Location and Context	9
2.	History	13
3.	Archaeology	18
4.	Present Use and Management	21
5.	Biological and Physical Resource	22
6.	Factors Affecting Development and Management	32
Par	t B – Development and Management Proposals	35
7.	Objectives	35
8.	Landscape and Wildlife Resources	35
9.	Education and Informal Recreation	41
10	A Gateway to the Wider Downs	43



The neighbourhood around the Academy has been referred to as deprived for a number of generations now and this is correct in relation to the National Indices of Deprivation. However, for all we hear about being a deprived community it is also a richly resourced community in many ways. Local resources include, the two higher education institutes and their intake of students from around the world, the AMEX Community Stadium housing Brighton and Hove Albion football team, The Bridge Community Education Centre, the new £28 million academy building and the soon to be completed Keep – which will house the archives and historical resources for the whole of East Sussex and Brighton & Hove. These institutions combine to make a new landscape which is flanked by the real local resource; the woodlands and the surrounding South Downs. The woodland has the potential to connect these large institutions not just by proximity but by creating shared pathways and joint community projects which reach out and engage the community in using and celebrating this rich resource.

The Academy and its students have a huge amount to gain by working to improve access to the woodlands. There have been a number of reports written to show the benefit not only to health and wellbeing, but behaviour and reengagement to learning by working outside of the classroom. There are numerous curriculum links to be made at each Key Stage in Science, Geography, Art and Design, History, PSHE, Design Technology and English Literature, these in addition to essential life skills; team work, responsibility, problem solving and risk taking to name but a few.

However the vision of the Aldridge Foundation is not just about narrowing the gap of academic attainment for young people from disadvantaged areas but empowering them to impact positively on their community and bring about lasting social change. What better way to achieve this than by working to regenerate the physical area and increase access to a shared resource; the surrounding woodlands.

#### **Natasha Silsby**

Community Manager, Aldridge Foundation, Brighton Aldridge Community Academy



**Outdoor learning** is becoming more and more recognised and embraced in today's schools, complementing and providing an alternative alongside mainstream education. As we become more dependant on push button technology the time spent in the natural world decreases, so does our understanding of it. Current research into Nature Deficit Disorder amongst young people and its consequent effect underpins and shows the need for nature based learning and the importance of balancing this with modern technology.

The challenges of engaging with the natural world can provide many life skills and experiences that transfer into other areas of life. By combining therapeutic and educational processes, environmental based activity can give a broad, almost limitless resource; an ideal medium to work through, particularly with Special Educational Needs students and others who are seen to be difficult to engage.

Raising self esteem, motivation and building confidence along with experiential learning also allows the delivery of non invasive nature based accreditation such OCN (Open College Network) which can be designed around student needs.

The natural environment or out door classroom gives a unique medium to deliver this work.

By engaging students practically, they learn by experience and more importantly by osmosis. For example recently at Moulsecoomb Forest Garden we had to deliver sessions around tree botany to a group of students from a Pupil Referral Unit. Interest in this subject was very low and the students difficult to motivate. We then approached the subject through bow making which sparked their interest. The search for a suitable tree touched on woodland ecology, biodiversity and eco systems; the felling and splitting of the tree used woodland craft, the required responsibility around associated tools, plus team work. The problems encountered through the conversion of the wood related to how the tree grew, from cell division to photosynthesis. Then there was the actual creation of the bow, a journey into primitive technology including fire lighting, flint knapping and use of natural glues all of which require the

learning of new skills, this in turn led to conversations on the geology and history of the local area.

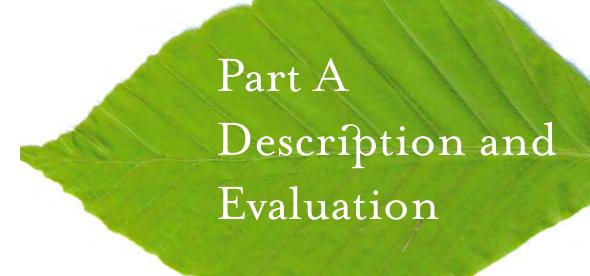
The point is this is just a small fragment the potential out door learning can offer, the obvious resource needed for the delivery is a natural space. In many cases when the value of this work is recognised, it takes place on a piece of school ground nobody really wants or periodic trips away from the school.

With the Westlain Belt woods Brighton Aldridge Community Academy (BACA) has a wonderful educational resource literally on its door step. The horticultural space within the school backs on to the woodland creating a natural corridor between cultivation and the wild wood, integrating the two contrasting areas within the Academy

The survey carried out by Dave Bangs shows the extent of the value of the woodland as a resource, not only to the Academy but also the local community. As a majority of BACA students are local, this not only provides BACA with a unique learning space but also forms a vital link with this local community.

#### **Patrick Beach**

Environmental Project Worker, Sussex YMCA



#### I. Location and Context

Westlain Belt is a woodland site which forms a conspicuous part of the boundary of the built-up area of Moulsecoomb, a north eastern suburb of the Brighton conurbation.

This woodland feature has been chosen to mark part of the boundary of the new South Downs National Park. Perhaps two thirds – the western part – of the Belt lie within the National Park.

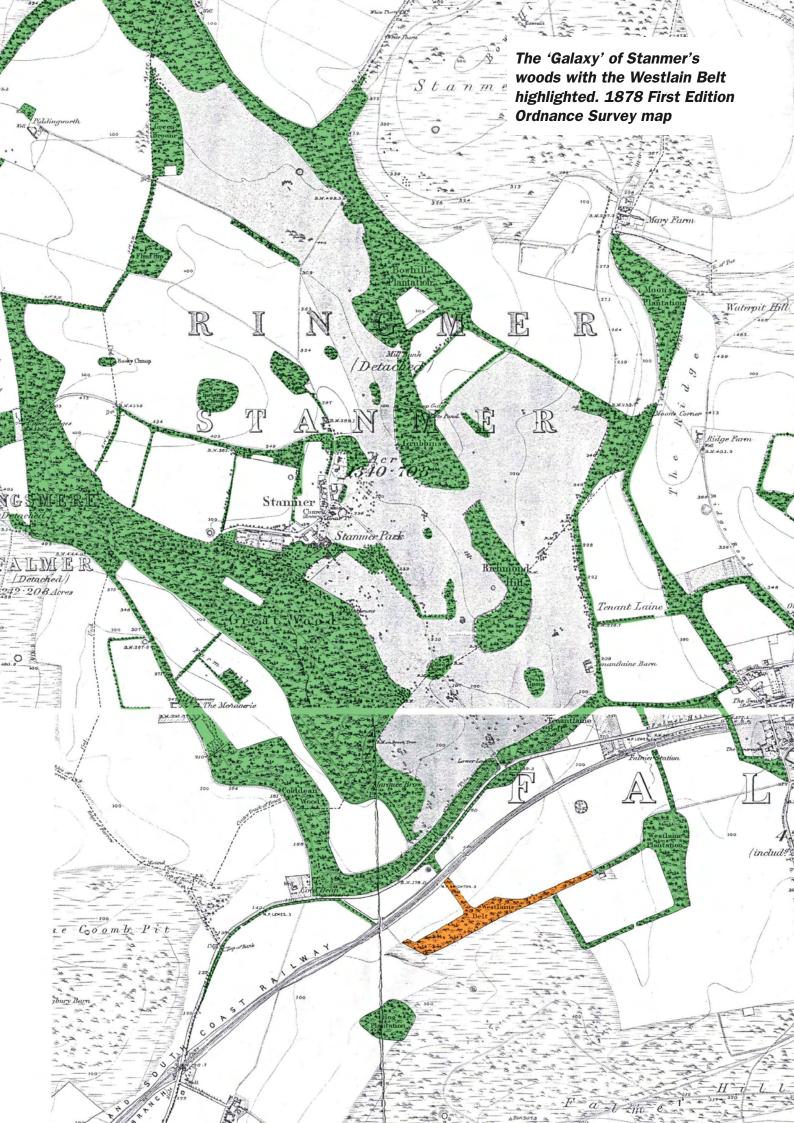
The Belt is located on the lower part of the south slopes of the 8.25 mile long dry valley that stretches between Brighton and Lewes. This mile wide dry valley forms a defining part of the topography of the 54 square mile block of the Brighton Downs.

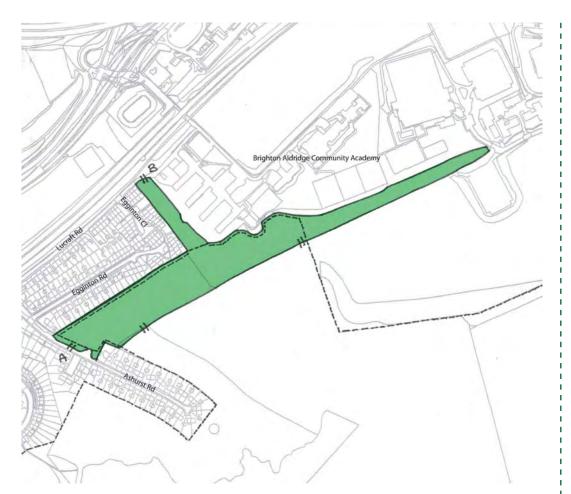
The Brighton Downs are generally treeless in character, but this is not so to the north east of the city, where the eighteenth century ornamental plantations of Stanmer Park give the area a character more akin to that of the western, wooded South Downs, beyond Arundel.

Westlain Belt is an outlier of Stanmer Park's plantations, with parts of which it is inter-visible. It lies nearly a mile from the estate mansion at Stanmer village. It is not, however, the most distant of these whimsical plantings. Newmarket Plantation sits more than two miles south east of the mansion, Horsehoe Plantation, Streathill, sits around two miles to its north east, and both Hodshrove Wood (now enclosed within Moulsecoomb suburb) and Highpark Wood (between Stanmer village and Ditchling Beacon) are almost 1.5 miles distant.

Westlain Belt is thus part of a galaxy of planned plantations, with a roughly three mile dimension in both north-south and east-west axes. The mansion house sits to the west-of-centre of this 'galaxy', which is at its densest at its centre, with the dark mass of Great Wood, and at its thinnest towards its edge, where Westlain Belt is located.

Westlain Belt consists of two intersecting linear strips of mature, mixed deciduous woodland. These strips form an upside down 'T' shape, with



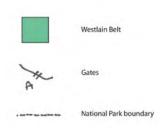


#### The Westlain Belt now

the trunk of the T much shorter than its cap. The main strip is just under a kilometre / half a mile in length, with a varying width. It is much wider at its western end (circa 75m) than at its eastern. It narrows sharply just over half way eastwards to circa 25m wide. From this main strip the subsidiary 'trunk' of the 'T' subtends. It is about 260 metres / 275 yards long by roughly 25m wide.

To the south of Westlain Belt the northern slope of Falmer Hill rises, blocking long views. At the far western end of this southern side the Belt abuts the aboriginal sheep pastures of a small combe, known as Hog Plantation Combe after the Stanmer woods outlier of that name that sits on top of its southern slope. Most of the western half of this southern





side abuts new sheep pasture, reverted from arable land. All the wood edge facing these sheep pastures has stock-proof post and wire fencing, topped with two strands of barbed wire. A kissing gate gives public access from the Belt to Hog Plantation combe, which is statutory access land (under the CROW Act, 2000). The eastern end of this southern side bounds Brighton University's sports grounds, which is blocked from view from the Belt by a turfed, steep, made bank. All the old farm post and wire fencing of this eastern end is broken down, but has not been consistently removed along its length, and still constitutes a minor hazard.

The western butt of the Belt faces Ashurst Road, a cul-de-sac of council, ex-council, and self-built semi-detached homes. An old concrete post and wire perimeter fence has been removed, though the concrete posts remain. A new, spike-top 2m tall metal fence has been installed, perhaps 20 metres back into the Belt from its edge. Two stanchions of this fence have been removed, probably by walkers, to enable public access to the wood from Ashurst Road.

The northern edges of the Belt are entirely bounded by built development. At the western end this consists of the semi-detached housing of Egginton Road and Close. The Belt is enclosed from the houses by the same type of spiked metal fencing that faces Ashurst Road. The eastern side of the short trunk of the Westlain Belt 'T' is irregular because of incursions from the adjacent redundant buildings of Falmer School. This side is open and unfenced. The eastern half of the northern edge of the Belt is bounded by three sets of buildings. This part of the boundary is steeply sloped. The remaining western buildings are those of the redundant Falmer High School. The middle buildings are those of the new Brighton Aldridge Community Academy (BACA), which replaces Falmer High. The BACA buildings and their grounds are fenced with tall, chain-link metal fencing. The eastern buildings are the Brighton Health and Raquet Club. They are also similarly securely fenced.

The narrow eastern butt of the Belt is open, and an informal vehicle track enters the Belt there.





## 2. History

A millennia and a half of history – and perhaps much longer than that – is encapsulated in the place name **Westlain Belt.** If we deconstruct that name and other neighbouring old place names we can gain a clear picture of the local landscape from medieval through to modern times.

A *Laine* was the name given in Sussex to a medieval 'open field', that is, to the large fields cultivated on a cooperative basis by the bonded (servile) peasants and their lord of the manor. These fields were characteristic of farming all across the South Downs and the coastal plain from Saxon times, and survived right up until the first half of the 19<sup>th</sup> century. Farming at both Falmer and Stanmer and all the surrounding parishes was organised around clusters of large open fields on the lower, fertile ground, and huge open sheep pastures on the higher, poorer ground. The fields were divided up into long, narrow strips and the valuable ploughs and plough teams of oxen were shared amongst the farming families. The fields were mostly without hedges or trees.

**West** Laine was the western open field of Falmer manor. That field was located on and around the site of the Amex Community Stadium, somewhat to the east of Westlain Belt. The Belt was the westward extension of Westlain Plantation, which sat right next to West Laine, so the Belt took its name from the Plantation.

**Belt** is a modern word for a thin strip of woodland. In the middle ages the local word for such strips would have been 'rew', or perhaps 'shaw', though both these names are more familiar in the wooded landscape of the Weald. It is possible to guess the age of a wood simply by reference to such place names. Thus, woods called 'holt', 'grove', 'hurst', or 'hangar' are likely to be ancient in origin. Such woodland place names as 'spinney', 'copse', 'coppice', or 'wood' itself are far less indicative of antiquity, and place names like 'plantation', 'clump', and 'belt' are strong indicators of a recent origin.

We can thus say that the name 'Westlain Belt' indicates that the wood is of modern origin and was planted next to medieval open, largely treeless, cultivated fields.

If we look at the older neighbouring place names we find further evidence of the historic landscape. Half a mile south west of Westlain Belt we find **Hodshrove** Road and Wood, which sit on the erstwhile fields of the medieval Hodshrove Farm. **Hod** is the same word as 'hoath', which means 'heath', that is, 'heathery vegetation', and the place name is common in heathy areas of mid and east Sussex and Kent, as in West and East Hoathly. 'Schorve', now **shrove**, means steep slope, giving a meaning for Hodshrove of 'steep heathy slope'. In early modern times this name was updated, so that Falmer Hill, on whose slopes Westlain Belt sits, was called **Heath Hill** on the 1799-1800 Stanmer estate map.

The two cultivated fields just downslope from Westlain Belt (on the site of the present Falmer High buildings, BACA, and the Raquet Club) were called **Short Heath Field** and **Piece** on that map, which also notes that "157 acres by the Lower Lodges (of Stanmer Park were) formerly part of **Short Heath**". We can thus deduce that the long-gone Short Heath straddled the dry valley bottom below Westlain Belt, across the Lewes Road, to embrace the southern part of Stanmer Park, west of the Park road to Stanmer village, as far as Old Lodge Clump. The soil chemistry of this long-gone Heath could perhaps be quite acidic in places because of downwash from the acidic Woolwich and Reading Beds¹ around Falmer village.

It seems, then, that these multiple local Heath / Hoth names indicate that the landscape both above and below the Belt had a vegetation of grazed 'chalk heath',<sup>2</sup> and was probably just as open as the large cultivated laines to the east and to the west.

Plainly the landscape went through a dramatic episode of afforestation in early modern times...but when ?...and how ?...and were there *any* woods in the local landscape before the time of the planting of Westlain Belt ?

Certainly there seems to be no place name evidence for woodland surviving in the local medieval landscape.

The entry for Falmer manor in the Domesday Book of 1086 – the new Norman overlords' first national tax register - lists "woodland (taxed) at 20 pigs" (for medieval woods were valued for the number of foraging pigs they could carry). Falmer manor, however, had large lands far across the wooded Weald north of the Downs in Worth Forest, East Grinstead, Plumpton, and Balneath, just east of modern South Chailey. It is thus uncertain that any of this woodland was located on the downland centre of the manor.

The Victoria County History<sup>3</sup> states that "when (Falmer) manor was surveyed in 1617 it was said that there had been a great many trees growing upon a waste called Nowendean. Most of these had then been felled and those remaining were young trees 'fit to be preserved'. The woodland had completely disappeared by 1827". The text bears the implication that Nowendean was on the downland centre of the manor. The 'dean' name also implies a downland locality. 'Deans' are long, usually downland, valleys.

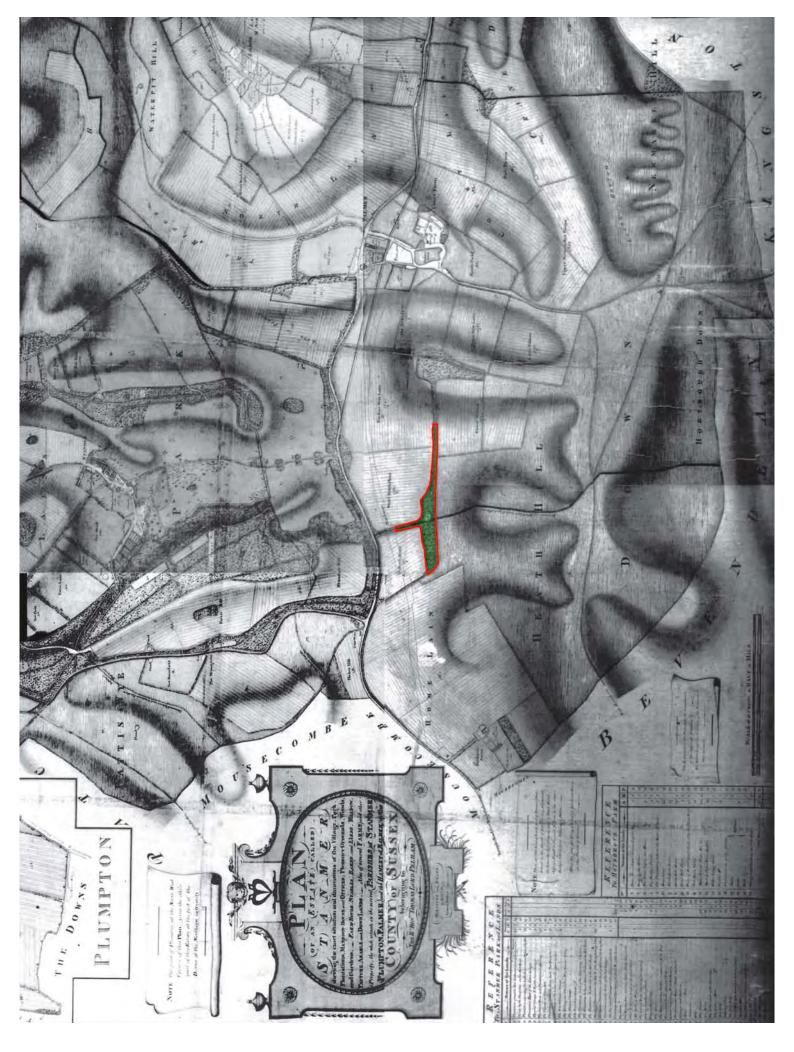
The process of systematic afforestation of the local down landscape started in Stanmer parish after Stanmer manor was bought by the aggrandizing Pelham family in 1713. The family had been based on estates on the east side of Lewes at Laughton and Halland, where they had a huge deer park. They built Stanmer House from 1722-27 and also set the architect the task of planting timber in a new park around it.<sup>4</sup> Stanmer Park was thus planted up by the Pelhams between about 1720 and 1799, for by the latter date almost all of its present woodlands are recorded on a Stanmer Estate map.

Falmer manor, however, was not bought by Thomas, Lord Pelham of Stanmer until 1776, and so it is unclear how much of the outer woodland

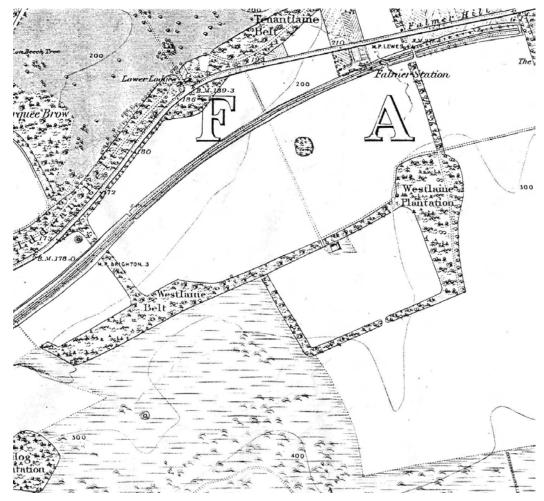
- 1. The Woolwich and Reading Beds are strata of sands, gravels and clays that sit on top of the chalk. They date from the early Tertiary period, that is, from the early Age of Mammals, circa 30 million years ago. They survive at Falmer because of the presence there of the Caburn Syncline, a geological feature which protects them somewhat from erosion.
- 2. 'Chalk heath' is a vegetation community characterised by an intimate mixture of chalk loving (calcicole) and acid loving (calcifuge) plants. It is characteristic of chalk substrates with superficial surface deposits of an acidic chemistry, such as clay-with-flints, or the Woolwich and Reading Beds.

3. "A History of the County of Sussex: Volume Seven: The Rape of Lewes". Falmer Parish, pages 223-227. Author L.F. Salzman (editor). (1940). The Victoria County History of England, accessed via 'British History Online'.

4. It is noteworthy that the new park of Stanmer (excluding peripheral woods like Westlain Belt) was roughly the same size (circa 5sq km) and even shape (oval) as the huge deer park of Halland where the Pelham family had their earlier Elizabethan mansion.



Lord Pelham's Stanmer Estate map, 1799. The route of the Victorian railway line has been pencilled in on top (circa 1842). Westlain Belt highlighted.



First Edition Ordnance Survey map (detail), 1878

planting in Falmer parish, of which Westlain Belt is a part, was done before that purchase. Certainly most of these Falmer parish woodlands had been planted by 1799-1800 - Marquee Brow, Colddean Belt, Westlain Belt and Plantation, and the Tenantlaine Belts (where the bulk of Sussex University was built). Only little Hog Plantation, upslope from Moulsecoomb Way, on the brow of the hill overlooking the combe in which Ashurst Road sits, was not planted at that time, though by the time of the 1838 Falmer Tithe Redemption Survey map it had been.

We can thus locate the date of the planting out of Westlain Belt to the period between circa 1720 and 1799, with a greater possibility that it was planted between 1776 and 1799.

That gives Westlain Belt an age range of between 213 and 298 years old, with an enhanced possibility of an age range between 213 and 237 years old.

For convenience, therefore, let us assume that Westlain Belt is about 2.25 centuries old, or up to a few decades older.

Westlain Belt was linked to the main Stanmer Park woods by three thin subsidiary Belts, one at its west end, one in the middle and one at its east end. At the west end a thin belt of trees ran north west, roughly along the alignment of Ashurst Road to meet the Coldean Belt north of the Lewes Road. The middle belt continued the line of the thin trunk of Westlain Belt's 'T' to join the Colddean Belt. At the east end another thin

Belt subtended northwards from Westlain Plantation to meet Tenantlaine Plantation on the far side of the Lewes Road.

Between 1837 and 1846 all three of these woodland corridors were severed from the main Stanmer Park woods by the construction of the Brighton-Lewes railway. The Ashurst Road tunnel under the railway line marks the alignment of the southern woodland corridor, which has now completely gone. A bit of the middle belt of trees still survives at the northern end of Woollard's Field (where The Keep, the new East Sussex Record Office is currently being built). The northern corridor of trees has entirely disappeared, with the construction of Brighton University and the Amex Stadium.

From 1846 through to the 1920s the basic structure of Westlain Belt's landscape remained static, with cultivated fields below the Belt and sheep pastures (probably still heathy in character) on the slopes above.

After 1920, and particularly after the passing of the Wheatley Housing Act by the first Labour government in 1924, the Moulsecoomb Valley began to fill up with a large and spacious council estate. From 1925-9 North Moulsecoomb was built (Barcombe, Chailey, Newick and Ringmer Roads). From 1935-9 the old Hodshrove Farm was developed and the ancient farmstead eventually demolished. Hodshrove and Birdham Roads took their place.

The building of Ashurst Road (with Bolney, Halland and Stonecross Roads) after the Second World War, from 1946 to 1950, brought housing development right up to touch the north western edges of Westlain Belt. From 1956-9 Egginton Road was built, touching Westlain Belt along the north side of its western end, to be followed by Egginton Close in 1975-8.

In 1952 Stanmer Secondary School was opened at the end of Lucraft Road, north east of Westlain Belt, and sheltered by it on two sides. In 1957 Westlain Grammar School was opened alongside the first school, to its east. They both later became Falmer High School, and closed in 2010. The western buildings are now redundant and their replacement is controversial, but BACA, built on the site of the eastern buildings, was opened to coincide with Falmer High's closure.

Into the late 1940s, at least, most of the south side of Westlain Belt remained connected with the surviving aboriginal down pastures of Falmer Hill. The 1946 RAF aerial photo survey shows this clearly. At some subsequent point in the next decade or so the majority of Falmer Hill's remaining unimproved chalk grassland and scrub was bulldozed and ploughed out. Now, only the extreme west of the Belt, at Hog Plantation Combe, still touches this ancient vegetation type.

By circa 1960 Westlain Belt thus assumed its current geography, with built development touching it along its northern side, but still facing open ground, though largely without its erstwhile aboriginal down pasture cover, on its southern side.



# 3. Archæology

The archaeological evidence suggests that Westlain Belt's landscape context was heavily farmed from at least the Bronze Age, that is, from circa 3000 BP (Before the Present) or earlier. Honeyman<sup>5</sup> showed both the north and south slopes of Falmer Hill as being under cultivation in the Roman-British period, from the evidence of field lynchets. Additionally, he noted evidence for Roman-British period peasant settlements on both the north and south slopes of Falmer Hill. The 1946 RAF aerial photo survey plainly shows a pattern of field lynchets (banks) around small square prehistoric fields, across the unimproved north slope of Falmer Hill. These were organised along, and at right angles to, the contours of the hillside. Westlain Belt plainly sits upon these fields, and a modern aerial survey using remote sensing LIDAR (Light Detection And Ranging) would probably pick up the pattern of field lynchets on the woodland floor. Indeed, it is likely that the woodland will have ensured a preservation of these archaeological features superior to that on the recently ploughed and re-ploughed open Down.

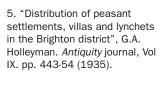
Grinsell<sup>6</sup> noted a likely Bronze Age burial barrow on the crown of Falmer Hill, just west of the Falmer Road, and Hadrian Allcroft<sup>7</sup> noted a further barrow just on the east side of the Falmer Road. Bronze Age barrows tended to be located on open, high ground where they were inter-visible with the surrounding landscape.

A Saxon barrow cemetery<sup>8</sup> stood on the crown of Falmer Hill, overlooking West Laine, just west of the Falmer Road, till post war farming activity destroyed it. It consisted of 10 small tumps. Saxon barrows are mostly

much smaller than Bronze Age barrows.

If you walk the ploughed land on top of Falmer Hill you can still see the white smears across the earth that are all that remains of the ploughed out barrows. If you are lucky you can still find prehistoric flint flakes from tool manufacture, and scrapers, and perhaps other tools.

The north slope of Falmer Hill upwards from the edge of Westlain Belt, together with the Hill crown and some of its south slope



- 6. Grinsell was a prolific recorder of prehistoric burial mounds in the first half of the twentieth century. His notebooks are deposited in the Library of the Sussex Archaeological Society, at the Barbican, Lewes High Street.
- 7. Hadrian Allcroft was a Sussex landscape historian of the early twentieth century.
- 8. Most local Saxon barrow cemeteries date from the fifth to early eighth centuries AD.



Detail taken from main aerial photo.
Some Bronze Age field lynchets highlighted. We have sugested that they pass into the wood.



overlooking Bevendean, are designated as anArchaeological Notification Area (ANA) under the City's planning policies.

It is likely that the woodland cover of Westlain Belt hides more of these archaeological features, and it is difficult to understand why Westlain Belt was excluded from the ANA.

On the western boundary of Westlain Belt, on the slope leading down to Ashurst Road, there is **a small chalk pit**, now covered with earth and vegetation. We can hypothesise that this pit was used for material for lime making, or perhaps for flints for building purposes, by a local farm, perhaps Hodshrove Farm.

A small bostal track climbs diagonally up the north slope of Hog Plantation Combe, above Ashurst Road. At the slope top it curves towards the east and enters Westlain Belt. Its two banks and the path between can then be detected travelling eastwards along, and just inside, the southern boundary of the Belt, for some distance. The northern, inward, bank of the track is marked by a line of trees and shrubs. The clarity of this feature inside the Belt is disturbed by many windblown trees and their upturned root plates. We can hypothesise that this track lay outside the Belt, and indeed may have been used to mark the boundary of the Belt at

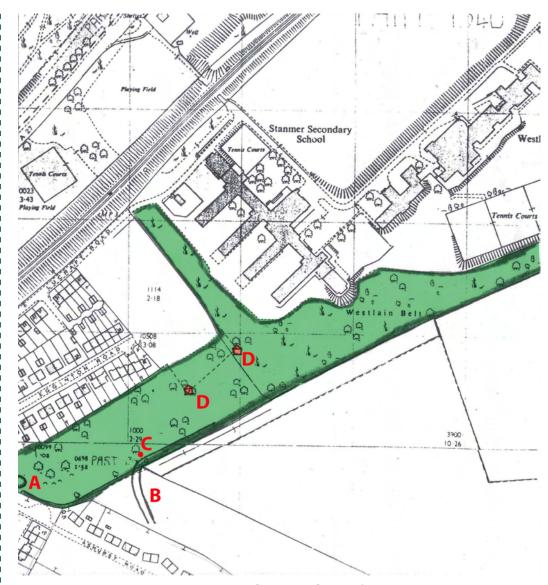


its inception. Alternatively, the track took its course from the edge of the plantation. Over the past half century the woodland has grown over the track and established a new boundary, which has now been formalised by the positioning of the new stock-proof fencing.

The Hog Plantation Combe end of the path is prominent and well covered with species-rich semi-natural turf. However, such old down pasture vegetation can colonise new sites very rapidly from adjacent habitat, so this is not necessarily evidence of the path's antiquity. The 1946 RAF aerial survey shows the track passing westwards across the floor of Hog Plantation Combe and out of it westwards along the rear of Birdham Road.

Hog Plantation Combe and the western part of Westlain Belt lay within Hodshrove Farm, and the eastern part of the Belt lay within Court Farm,

- A Chalk Pit
- B Bostal Track
- C Sarsen Stone
- D x2 Water Company bollards



Archaeology Map (shows Westlain Belt circa 1957)

Falmer, on the evidence of the 1799 and 1838 maps. The path would therefore have tracked out of Hodshrove Farm's down pastures and onto Court Farm's pastures, which is not easy to explain.

The track may be a modern feature, or it could be of considerable antiquity. It could even predate the creation of medieval Hodshrove Farm, being made under an earlier farm economy, centred to the east?

### Two cast iron boundary bollards,

about knee high, can be seen in the main part of the Belt, where its short 'trunk' meets the big 'cap'. The words 'CORPORATION WATERWORKS' are cast on their sides. The bollards are square in vertical cross section, hollow, and have low pyramidal caps. The western bollard has had its cap smashed off.

In this part of the woodland the map of circa 1967 shows a small squared area, indicated by a



dotted line. The two woodland corners of this area mark the two points where these bollards are located. They plainly mark some old Corporation Waterworks land boundary, but it is not clear what that denoted. Southern Water, which has inherited the old Waterworks functions, still has their headquarters buildings on the far side of the railway line north north east of Westlain Belt.



# 4. Present use and Management

The woodland is currently used by local members of the public, but only lightly. For much of the day no-one is there. Users enter it at both ends. They used also to enter it from Lucraft Road and the Falmer School grounds, but the present spiked metal fencing along the Lucraft Road boundary prevents most of that.

Young boys enter from the Ashurst Road end and use it for informal war games and den making. This appears to have little impact. Low numbers of dog walkers exercise in the Belt over the course of a day. One dog walker reported that the woodland used to be used much more, and had denser and more interesting undergrowth. He said that there were several more entrances before the spiked metal perimeter fencing was installed, and that there was a much larger network of informal paths.

There are two main informal paths through the wood at the west end and centre, together with some fainter paths. The eastern end has just one path, and the Lucraft Road Belt has one main path and short paths from the grounds of Falmer High School.

Brighton University ground staff use a glade at the eastern end to dump and mound brashings and mowings, and the rich composted material is



then taken for use – at least by some members of the public. The ground staff enter from the east end and drive their small vehicles along an informal track. They also dump grass mowings all along the south side wood edge of the Belt where it abuts the University playing fields.

Boys from Falmer School used a cross country route that passed through a bit of the Belt, but that report was from a long time past.

People from a few of the Egginton Road houses that back on to the Belt tip rubbish, such as unwanted large plastic play equipment, over the spiked fence into the woodland. Rubbish has been dumped along the Ashurst Road frontage in the open woodland strip between the spiked perimeter fencing and the edge of the wood. Builders and garden rubble are found in the woodland. The Lucraft Road Belt is quite heavily tipped in some places, particularly near to Lucraft Road.

For all that, the overall level of tipped material is quite low.

The Lucraft Road Belt has been quite heavily cut over in recent years in places, reportedly by chainsaw, and some of the cut wood stacked. It is not known who has done that, or how much, if any, of the cut wood was removed.

Council staff have worked over the years to keep the main paths open. One council worker complained that an unknown member of the public had cut down several young Yew trees behind Falmer High and left the attractive cut wood at the path side.

Trees in the Lucraft Road belt have had sturdy bat boxes erected high in their canopies. Most, if not all of these have now been brought down and broken. It is not known who installed them. There are also one or two wooden bird nest boxes in the wood that are now in poor condition and appear unmonitored.

No tree planting appears to have been done, and the amount of clearance after the 1987 and 1992 gales appears to have been small. At any rate, little sign of it survives today.



# 5. Biological and Physical Resource

#### 5.1.Planted...blown down...much loved

Westlain Belt has been planted and nurtured by people. It is not a naturally occurring wood<sup>9</sup>. It has, however, already acquired some antiquity, with an age of perhaps 2.25 centuries.

This management plan is written at a crucial point in the history of the woodland, when its original character as Beech woodland has just been hugely challenged by two climatic events – the great gales of 1987 and

9. Many of the modern secondary woods on the Brighton Downs (as opposed to the few ancient, possibly primary woods) have grown up naturally and without human intervention. Queensdown Wood, a mile to the south on the opposite side of the Moulsecoomb Valley, is one of these. Most of the Moulsecoomb Wild Park, Ashcombe Bottom, and Newtimber Hill woods were naturally generated after the cessation of intensive sheep grazing a century and more ago.

1992. Westlain Belt is, in a sense, a monument to Beech. Its woodland floor is covered in the uniformly laid out bones of the toppled high forest giants. They are being replaced with woodland of a more mixed character, in which new Sycamore and Ash are co-dominant, and naturally regenerating Beech so far has a minor part.

Westlain Belt is thus on the cusp between two woodland types.

Given the treelessness of the open Downscape, all of Brighton's urban and urban fringe woodlands are of special value. Up until this point, however, the Belt has had no formal public access, though its informal accessibility has been recently re-asserted by the clandestine removal of a part of its harsh perimeter exclusion fencing. That exclusion fencing symbolised the old tension between the wood's potential as a public amenity, and its function as a boundary feature of a large secondary school.

Westlain Belt additionally offers an important visual shelter to the soft National Park landscape against the visual harshness of the built-up area. It is a key boundary feature of the Park.

#### These aspects of its character...

- 1. the lack of the inhibiting 'specialness' of ancient, natural woodland
- 2. the 'monument' to the old woodland type
- 3. the point-of-change between two woodland types
- 4. the tension between its functions as a boundary to a large school, a valued local amenity, and a boundary to the National Park

...all point in the same direction...to Westlain Belt's natural potential as an informal educational amenity...close to schools and universities, close to a large residential community, and close to the open protected South Downs landscape.



#### 5.2. Geology

Westlain Belt sits upon the **Upper Chalk**, which used - accurately - to be called the **White Chalk**. If you walk along the upper side of the Belt, where a line of upturned tree root plates exposes the raw chalk rock, its glaring whiteness is plain to see. (This whiteness is in contrast to the Lower, or Grey Chalk, the oldest chalk, which is not normally exposed on the open Downland chalk plateau).

The Upper Chalk strata are divided into a number of formations, named after the particular outcrop locations whose description defined them.



"Root plates which are exposed in this area are characteristically fawn coloured from the staining of these [Combe Rock] deposits."

Westlain Belt sits upon the **Seaford Chalk formation**, near to its transition into the higher and younger Newhaven Chalk formation. The Seaford Chalk is soft to firm, pure white, and with regular seams of flint.

The Seaford Chalk was formed at the bottom of warm tropical oceans from around 86 to 83 million years ago. Chalk was formed in the Cretaceous (which means 'chalky') system, which was the last of three stages of the Age of Dinosaurs, the Mesozoic Age, which ended around 65 million years ago with the Dinosaurs' extinction.

The climate was one of drastic global warming, with no polar ice caps and sea surface temperatures substantially warmer than at present – in the range of 20-30 degrees centigrade. Sea level rose dramatically, transgressing over huge land areas. Thus, at its maximum extent the Chalk Sea probably covered nearly all of the British Isles and extended as far afield as central Asia. Texas and Western Australia.

The Seaford Chalk, like all chalks, was formed on the sea floor "from accumulation of calcareous plankton rain, the calcite skeletons of myriad single-celled organisms<sup>10</sup>...The sea floor was below the limit of light penetration, and there is a striking absence of those organisms that dominate in shallow-water limestones that formed in the photic zone". Indeed, the Seaford Chalk does not strike you as obviously fossiliferous, in contrast to the plainly fossiliferous Lower, Grey Chalk.

Some kinds of fossils are clearly visible in the Seaford chalk exposures of Westlain Belt, however. 'Trace fossils', that is, the traces left of the activity of life forms, largely burrows, are abundant. It is the largest of these burrow systems which give characteristic 'organic', tubular, and rounded shape to the layers of flint nodules. The burrowing animals responsible were probably lobsters, prawns and crabs of the *Decapoda*, and other crustaceans. These large burrows are classed as *Thalassinoides*.

On many of the layers and nodules of flint small surface burrowings can be seen, rarely more than a millimetre or so in diameter, and of constant

10. 'Fossils of the Chalk', page 1. Edited by Smith, and Batten. The Palaeontological Association, London. (2002).

diameter. The species that produced these systems are unknown, but are presumably vermiform (that is, worm-like). They are classed as **Chrondrites**.

Fossil sponges are very common, particularly the King Sponge, Siphonia koenigi, which is at its most abundant in the Brighton area. It occurs as large rounded or pear shaped pebbles, often broken to reveal a pattern of radial canals around a central tube and fossilised spicules. Spectacularly well-preserved specimens can be found. The slender cyclindrical stem which gave these sponges a tulip-like life form are almost always broken off, though small stumps often survive.

Very large, thin-shelled plate-like bivalves, such as *Platyceramus*, from the extinct *Inoceramidae* family can be found in the Seaford Chalk.

We can expect to find occasional fossil sea urchins *Echinoderms*, such as *Micraster* spp., as well as Lamp Shells, *Brachiopoda*, with proper searching, too, as well as other bivalve and gastropod molluscs.

The chalk of the lower contours of the Belt, particularly within and at the top of the Lucraft Road Belt, is topped with a **superficial layer of fawn coloured Chalk Head, or Combe Rock**. Root plates which are exposed in this area are characteristically fawn coloured from the staining of these deposits. They are an agglomeration of sands and clayey silts, with gravels and small flint and chalk pieces, which have slurried into the valley bottom, mostly during Periglacial times, but also in historical times as a result of forest clearance and cultivation of the downland hills.



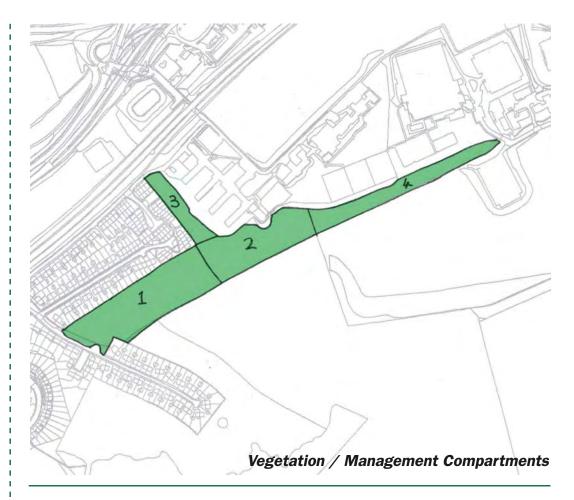
#### 5.3. Vegetation types

Westlain Belt is an Ash, *Fraxinus excelsior*, and Sycamore, *Acer pseudoplatanus*, wood in an advanced process of transition from a Beech, *Fagus sylvatica*, wood, caused by the gales of 1987 and '92. After a period of extreme openness following the gales' felling of most of its timber, it now has a closed canopy again, with some small glades. The shrub layer is thin and mostly open. There is a moderate list of woody species, with a much more limited number of dominants. The herbaceous flora is also limited and lvy, *Hedera helix*, is overwhelmingly dominant. Most of the windblown Beech, Sycamore and Ash boles still lie in situ and are in an advanced state of decay. Survey would undoubtedly reveal them bearing an extensive saprophytic fungal flora.

The Belt can be divided into three compartments.

**Compartment One.** The Ashurst Road end. Tall Sycamore, and Ash are dominant, with some Beech saplings, and rare surviving Beech from before the gales.

Hawthorn, *Crataegus monogyna*, is occasional to frequent, and there are frequent Holly, *Ilex aquifolium*, groves (hollins), particularly upslope and



on the Ashurst Road slope. Other woody species include small amounts of Hazel, *Corylus avellana*, Elder, *Sambucus nigra*, Privet, *Ligustrum vulgare*, Dogwood, *Cornus sanguinea*, and rare saplings of Horse Chestnut, *Aesculus hippocastanum*, English Elm, *Ulmus procera*, and Yew, *Taxus baccata*. Ivy and Clematis, *Clematis vitalaba*, form festoons around the glades and up slope edge.

The field layer is dominated by Ivy, with frequent low Bramble, Rubus fruticosus agg. Cow Parsley, Anthriscus sylvestris, is frequent, with scatters of Black Horehound, Ballota nigra, Greater Bindweed, Calystegia sylvatica, Nettle, Urtica dioica, Dandelion, Taraxacum officinale agg., Hemp Agrimony, Eupatorium cannabinum, Wood Avens, Geum urbanum, Wood Falsebrome, Brachypodium sylvaticum, and the variegated Yellow Archangel, Galeobdolon luteum, cultivar.

Compartment Two. The middle belt. The rotting boles of the four largest of the Belt's Beech lie here, and there are some swarms of young Beech seedlings. The vegetation is similar to Compartment One, with a closed canopy and extensive



hollins, together with occasional surviving Beech and dominant Sycamore and Ash. There are small Gean (Wild Cherry) *Prunus avium*, swarms, with Privet and Hawthorn. The down slope is partly cut over, with swarms of young Ash and Sycamore saplings and one or two cut Yew. Guelder Rose, *Viburnum opulus*, is present, and there is a small swarm of Dog's Mercury, *Mercurialis perennis*. There is a single Turkey Oak, *Quercus cerris*, and a single English Oak, *Q. Robur*, on the upper edge.

**Compartment Three.** The Lucraft Road belt. This arm of the Belt is dominated by a mix of Ash and Sycamore regrowth from tumbled trees, over a depauperate field layer dominated by Ivy. There has been much felling and stacking of wood from the post-gale regrowth, and so the compartment is more open than the other three.

**Compartment Four.** The Brighton University end. This area is the thinnest part of the Belt, but has a larger proportion of trees surviving from before the gales, perhaps because of the protection afforded by the earth bund along its southern side (which raises and levels the University playing fields). Ash and Sycamore are dominant. The only significant grove of standing Beech poles is in this compartment. There is a young Aspen, *Populus tremula*, swarm on the up slope edge, with English Oak and Red Oak, *Q. Rubra*, or Scarlet Oak, *Q. Coccinea*. Gooseberry, *Ribes rubacrispa*, is present, with occasional Gean. There is a small swarm of Dog's Mercury. Male Fern, *Dryopteris filix-mas*, is present and Broad Buckler Fern, *D. Dilatata*, grows on at least one rotting fallen Beech hulk.

The vegetation type of all four compartments conforms to the National Vegetation Classification's **W8 Ash-Maple-Dog's Mercury woodland, of the W8d Ivy sub-community.** This community is characteristic of calcareous (chalky) soils in south east England. The range of variation within the W8 community is wide, and seven sub-communities have been identified. Though Maple is not present, Ash is typically co-dominant, and Sycamore is characteristic of secondary stands (like Westlain Belt).

The abundance of Ivy in the field layer is typical of the W8d sub-community. Our survey work has been in the autumn and winter only. Nonetheless, it is clear that the field layer is typically impoverished. Dog's Mercury is often much commoner in the W8 community, but this is not so in the Ivy sub-community and at Westlain only two small swarms are present. Bramble, Wood Avens, Wood False-brome and Gooseberry are all characteristic field layer components of this community.

An assessment of the vegetation community *before* the '87 and 92 gales would have identified a different community: **W12b Beech-Dog's Mercury woodland, of the Sanicle, Sanicula europaea, sub-community.** Many of the characteristics of the present woodland – the presence of Ash and Sycamore, the sparse shrub layer, the patches of Hazel, Hawthorn and Holly, the sparse field layer, with carpetting lvy and abundant Bramble - are characteristics of that earlier Beech woodland type, too.

Sanicle is very rare at Westlain, but the Ivy ground carpet, the Clematis festoons, and the Wood False-brome are typical of this sub-community, which is found on just such slopes with shallow well-drained soils.



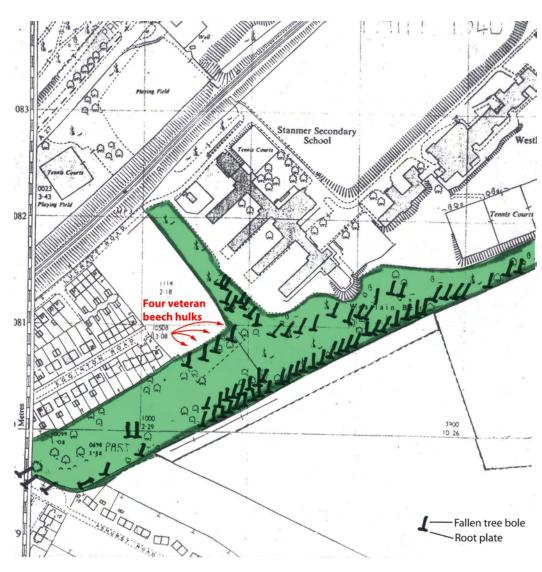
Sanicle

We can speculate that one reason why the field layer has remained so impoverished after two hundred years is that the earlier closed beech canopy prevented any widespread colonisation by herbaceous species.

#### 5.4. Fallen ancient and veteran trees and other fallen trees

Measurements from a number of the larger fallen and standing trees were taken in Compartment One. A dead standing broken Beech bole had a diameter at breast height (dbh) of 33 inches and a girth of 101 inches (8 ft 5 inches). A standing living Beech had a 27 inch dbh and 98 inch (8 ft 2 inch) girth, and a further standing living Beech had a 20 inch dbh. A fallen Beech bole had a dbh of 26 inches. Some measured dead Beech hulks were estimated to have dbh of 30 to 36 inches. By comparison, standing coppice poles of Sycamore at the Ashurst Road end had dbh of 6 to 12 inches.

One of the group of four very large and similar aged fallen Beech on the down slope side near the Lucraft Road belt had a dbh of 46 inches and a girth of 142 inches (11 foot 10 inches). This group are the largest of the Beeches (dead and alive) present in the Belt. Their circa 12 foot girths place them in the category of 'ancient veteran' trees, 11 which have an especial cultural and wildlife value.



Disposition of windblown beech hulks toppled in the '87 and '92 gales (Positions, density and numbers are indicative only).

11. Tree species age at different speeds, but Beech is credited with the status of 'ancient' when it reaches a girth of about 12 feet (circa 4 m) or two full arm stretches of a 6 ft tall person. Veteran trees are trees which show characteristic signs of ageing, such as wounds, decay, fungal fruiting bodies, or dead wood. All ancient trees are veterans. Not all veteran trees are ancient. From 'Ancient Tree Guide no 4: What are ancient, veteran and other trees of special interest?' Published by the Ancient Tree Forum and the Woodland Trust.

If we assume that this group of Beeches grew in open conditions, we can estimate that they have a minimum age of about 142 years. This would give them a planting date of circa 1845 (assuming they were toppled in the 1987 gale). This is based on a rule of thumb that estimates an annual growth of girth of 1 inch for every year of age in free standing conditions. This group of trees are on the northern edge of the Belt and would thus have benefitted at least from partial openness.

It seems much safer, however, to assume that the Beech group were planted together in partially or wholly open conditions (perhaps at the Belt's initial planting) but had spent much of their life in shadier woodland conditions. Such a middle position would give them an age of about 213 years and a planting date of circa 1774. We know that trees grow faster when young (and were likely to have been in more open conditions) and this factor would compensate for their slower growth during their mature life in woodland conditions. These four ancient veterans all have long boles characteristic of woodland grown trees.

We can thus hypothesise that the group were amongst the earliest trees planted at Westlain Belt and date back to a time soon after the purchase of Falmer manor in 1776 by Lord Pelham.

Such a method of aging would give the other two Beech from which girths have been taken planting dates of circa 1836 (for the hulk of 101 inch girth/33 inches dbh) and 1840 (for the living tree of 98 inch girth/27 inches dbh), which indicates that active planting continued in the generations after the Belt was initially planted up. The living Beech of 20 inch dbh would perhaps have been planted some years after the specimen of circa 1840.

Unlike most of the main woods of Stanmer Park, Westlain Belt does not seem to have been planted up with any new trees after the gales, and work seems to have been confined to making fallen hulks safe and clearing blocked informal paths.

#### 5.5. Fungi and other lower plants

We have not surveyed the Belt in any consistent way, and weather conditions have not been good for fruiting fungi this year. We can only say therefore that better conditions would undoubtedly reveal a rich fungal



12. I take these rules from 'Trees and Woodland in the British Landscape', page 27, by Oliver Rackham, published by Dent. (1981). Rackham is quoting from 'A Field Guide to the Trees of Britain and Northern Europe', by A F Mitchell. Collins (1974).

flora, given the amount of dead wood, and the age and structural diversity of this woodland.

We noticed Artist's Fungus, *Ganoderma sp.*, on at least one fallen Beech bole. Deer Shield, *Pluteus cervinus*, was present on a couple of other hulks. Honey Fungus, *Armillaria sp.*, was present on large numbers of fallen hulks. Spectacular Rustgill, *Gymnopilus junonius*, was present on one fallen Beech at the Ashurst Road end. Cramp Balls / King Alfred's Cakes, *Daldinia concentrica*, or an allied *Daldinia* species, was present on a Beech hulk, as were a number of Bonnet, *Mycena*, species. Two attractive Slime Moulds, *Myxomycetes*, have been spotted on fallen hulks: the Scrambled Egg Slime Mould / Flowers of Tan, *Fuligo septica*, and a pink *Lycogala* species.

Many of the fallen hulks are draped in soft mats of Feather Moss, mostly Rough Stalked Feather Moss, *Brachythecium rutabulum*.

The shady conditions of the Belt mean that the epiphytic lichen flora is very depauperate.

#### **5.6. Fauna**

Again, our late season survey work has been only cursory. We have noticed large numbers of Black-lipped Banded Snails, *Cepaea nemoralis*, in all their main colour varieties, Garden Snails, *Helix aspersa*, and handsome Great Grey Slugs, *Limax maximus*. The blue-tinted sheet webs of *Amaurobid* spider species are common on the pitted rotten bark of the Beech hulks. Red Admiral butterflies competed for territory in the small sunlit glades.

We noticed parties of Long-tailed Tits in the canopy.

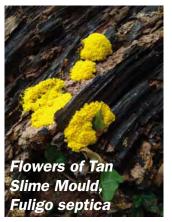
#### 5.7. Other striking features of the wood

**Dead wood.** The dead wood resource is outstanding, with many large Beech hulks. Most of the fallen timber is now between 19 and 24 years old, so the earlier successional stages of decay are over. Much potential interest remains, however, for lower plants and dead wood invertebrates.

**Hollins.** The holly thickets are extensive and provide significant dense undergrowth for nesting songbirds and small mammals.

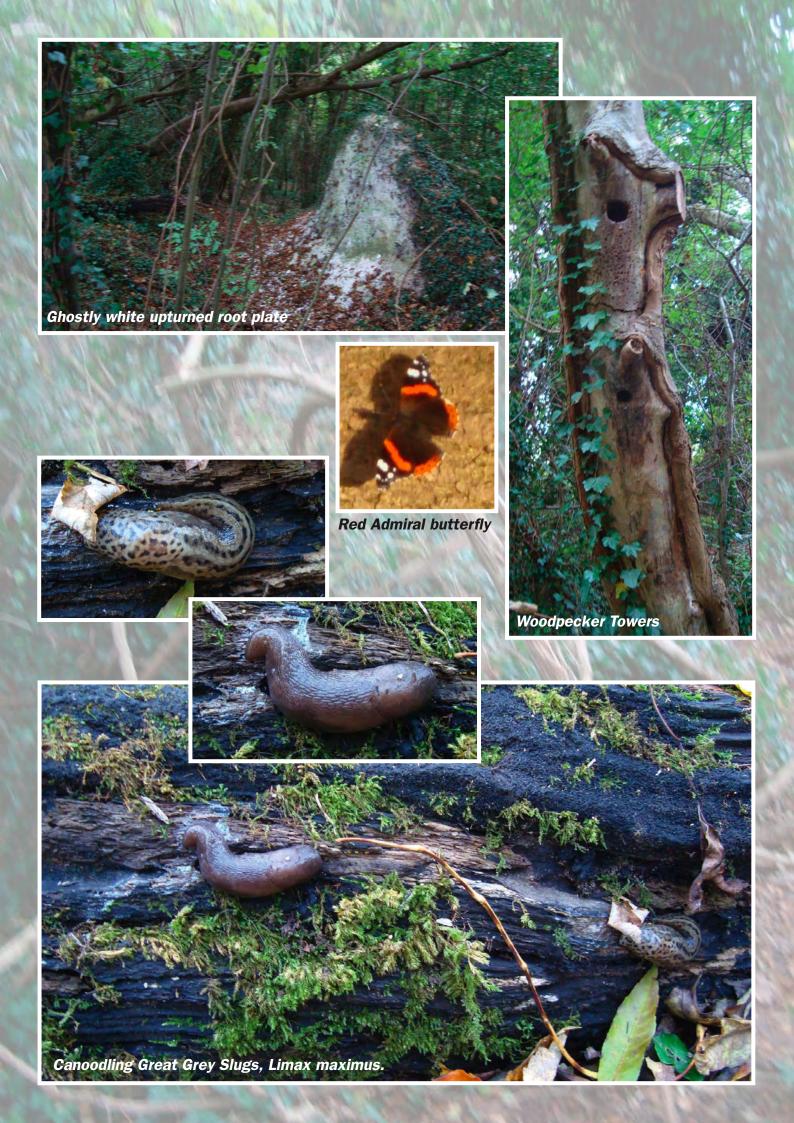
**Festoons.** The festoons of Ivy and Clematis provide important structural and visual variety, and a touch of the jungle!!







Bonnet fungi, Mycena sp.



**Root plates.** The upturned root plates found throughout the Belt are the only geological exposures present there. They provide important - and rather ghostly – visual features, and a kind of 'architecture' to the woodland floor.

**Long wood edge.** The long wood edge facing open ground on the Belt's southern side provides an important transitional habitat. It has a density of undergrowth that is lacking in most of the Belt, and is vital for nesting songbirds, small mammals and invertebrates.



# 6. Factors Affecting Development and Management

**Tree Preservation Order.** The Belt has been covered in its entirety by a Tree Preservation Order (TPO ref. 1974/20) since the land was passed to the Education Department of the City Council. The TPO also includes the Brighton University land. There is thus a need for an application to the City Council for any tree works proposed under the Management Plan.

Archaeological Notification Area. The slope of Falmer Hill bounding Westlain Belt to the south, as well as the whole of Hog Plantation Combe, including the houses of Ashurst Road, are designated as an Archaeological Notification Area by the City Council. The Belt itself is not. However, it is very likely that the same archaeological features (of prehistoric field lynchets) that determined the designated area continue within Westlain Belt, though they are hidden by its tree cover and upturned tree root plates. There is thus a need to search for the presence of these features, and to conserve them if they are found to be present.

**Natural trends.** The woodland is changing naturally as a result of the process of succession. Glades and paths will disappear without use and management and the canopy will remain closed until further traumatic events, such as gales and drought, bring about tree loss. Decisions need to be made about what features of the wood are worth managing for retention, or, indeed, if natural processes should be allowed to dominate.

**Informal exploitation or management.** Large parts of Compartment Three have recently been coppiced and the wood stacked. We do not know who was responsible for this, but it was not done with the Council – as owners – knowledge or permission.

**Trampling and disturbance.** All the paths and most of the glades in the wood are made by usage, not by management intention. Most of them – but not all - are too small to significantly generate diversity, at present. Disturbance alters and diminishes bird and small mammal usage, particularly.



Litter and tipping. Tipping is most significant along the northern boundary, where the woodland abuts housing, the school and the Brighton University grounds. Some of the wood abutting Egginton Road and Close has had considerable material tipped over the boundary fence. Some of the woodland facing the old buildings of Falmer High School has suffered likewise. A glade and path at the east end of Compartment Four has been used for some time by the Brighton University ground staff as a dump for clippings and mowings. Likewise, the southern edge of Compartment Four, against the University sports ground, has long been used to dump grass mowings. The strip of woodland outside the boundary fence along the Ashurst Road frontage is still used for garden and other domestic rubbish tipping.

**Vandalism.** The sturdy bat boxes placed high in the canopy of Compartment Three have all been brought down and destroyed. There is little other visible vandalism – few fires set or wilful hazards created.

#### **External bodies.**

In the past **the School** have not generally used the woodland for purposive activities, though, in the latter days of Falmer High School, some limited woodland education with the Swan Centre was carried out by Warren Carter and Pat Beach.

**Brighton University**, too, has not used the woodland, except as cover for dumping gardening refuse.

**The National Park** has incorporated more than half the Belt as a boundary feature, but that has not been a positive management determinant as of yet.

**The City Council** have intervened in the woodland's management in recent years by erecting the metal spiked boundary fencing against the built-up area, and by putting in two new gates on the south edge to enable public usage of Hogtrough Bottom's statutory access land, and the permissive access arable reversion permanent pasture on the north slope of Falmer Hill. A council officer in the estates section has also taken a practical interest in the Belt by periodically keeping the paths open from

encroaching vegetation. That is, at present, the limit of the City Council's input.

**Health and safety.** The landowner has responsibility for the safety of Westlain Belt. The main safety issue is that some tree species, particularly Ash can be unstable and subject to rot at their base after coppicing. Such trees will be unsuitable to succeed to timber for safety reasons.

Some tippings, such as glass and sharp metal, will be hazardous for children and dogs.

# Part B Development and Management Proposals

# 7. Objectives

Our management objectives for the Wood are three fold.

- 1. Firstly, to conserve and enhance its landscape and wildlife resources.
- 2. Secondly, to use them for education and appropriate informal recreation, chiefly by communities local to the site.
- 3. Thirdly, we accept a responsibility as a gateway site to the new South Downs National Park.



# 8. Landscape and Wildlife Resources

#### 8.1. General principles

The proposals adhere to the general principle that any future development should aim for the survival of as many plants and animals as possible, whether they be common or rare, spectacular or insignificant, useful or apparently useless. Both for nature conservation and educational purposes, greater diversity is advantageous.

In order to ensure the continuance of the present habitats of the woodland, an assessment is required as to whether management is needed to sustain their interest or whether they are best left alone. Where no management is deemed necessary, none is recommended. However, there are areas where the relative merits of management and no management are difficult to assess. Whether an area is to be managed or not, future monitoring and reviewing will be necessary to determine any change of policy.



Humps and lumps: upturned root plates

The woodland supports both naturally arriving and humanly introduced species. The humanly introduced species will not be eradicated unless they are a health risk or unless they are invasive and spread at the expense of those with less competitive ability. It will often be more appropriate to control such an invasive species than to eradicate it.

The character of Westlain Belt as wooded, tranquil, separate, and antithetical to the busyness of the adjacent built-up area will remain central to any management work.

#### 8.2. Management proposals

- **8.2.1.** A monument to Beech. The historic character of Westlain Belt as an ornamental beech plantation was lost in the '87 and '92 gales. However, the hulks of the fallen Beech still survive en masse. We will leave all this dead timber resource intact and in situ as a 'monument to Beech', and an object of study in its decay, for its changing dependent wildlife assemblage.
- **8.2.2. The conservation of Beech.** A small number of Beech survive from before the gales. These trees should be identified, tagged, and their health managed for by the thinning of their competitors. Many of the young Beech saplings are relatively poor in shape and struggling with competition for light. These areas of sapling swarms and viable individuals should be identified, marked and conserved.
- **8.2.3. Thinning, pollarding and coppicing.** Westlain Belt seems to have been managed as ornamental high forest. We do not know of any commercial exploitation of the timber or small wood. We think that that character should be preserved.

The tree work proposed below will be subject to a successful application to the City Council for such work under the remit of the Tree Preservation Order (TPO) which covers the whole Belt (TPO ref. 1074/20).

**Thinning.** Many of the trees are young, crowded and thin. We will thin these young poles as appropriate to ensure the flourishing of a representative age mix and species mix of trees.

**Pollards.** The woodland will benefit from the creation of a new generation of old and veteran trees, and for that reason, as well as to vary the structure of the wood, we will create a generation of new pollards of timber species at intervals through the woodland. The lower canopy height of these trees means that they would be best placed on the woodland boundaries, or in larger glades, where they would not be at a disadvantage in access to light.

Pollarding will be done at about 2m height, although pollards at lesser heights down to 1m are also appropriate. Such pollards provide greater opportunities for epiphytic plants, as well as holes and cavities for nesting birds, bats, small mammals and invertebrates, and heartwood resources for fungi and invertebrates.

**Coppicing.** Small areas of coppice will be created to vary the structure of woodland so as to create a dense under storey for small birds, mammals and invertebrates. Such areas can be used for woodland craft and other educational activities. This management plan will not be directive about the locations of the coppice areas. We do not, however, think that any large areas should be converted to coppice, and suggest a maximum of 10 % of the footprint of the woodland be used as coppice. The areas of the Belt at its gateways onto Ashurst Road, Lucraft Road and the University east end, should not be coppiced because of their important screening function. Additionally, the Lucraft Road belt and the University end are too narrow to bear areas of coppice coup and should be encouraged to grow to their full height. No part of the Lucraft Road belt is appropriate for coppice management because of this gateway and screening function and its narrowness. It should be returned to its erstwhile high forest character.

- **8.2.4. Health and safety tree work.** There will be a need for some coppicing and pollarding for health and safety reasons, but such activity will be kept to a necessary minimum.
- **8.2.5. Glade creation.** A glade will be cleared in the Compartment Two woodland to the rear of the redundant Falmer School buildings. It will be of sufficient size to constitute a working area for outdoor educational and woodland craft work. The glade will be situated in the middle of the Belt, with a screen of trees and shrubs between it and the boundary with the school buildings.
- **8.2.6. New plantings.** At present Ash and Sycamore are co-dominant in the forest canopy and swarms and individual saplings of young Beech, Gean, Yew, Horse Chestnut, and English Elm are pushing though the shrub layer to canopy level. It is desirable that this new and greater diversity of timber species be encouraged and widened.

There are a range of tree species native to local old woodland and scrub, such as Maple, Large-leaved Lime, Whitebeam, Wych Elm, and English Oak, which may be appropriate to import. Existing Yew, Beech and Hazel

numbers could be supplemented as appropriate, too. Shrub species, such as Wayfaring Tree, Spindle, several Rose species, and Buckthorn would thrive on the woodland edges, and perhaps along paths and glade edges.

Given the ornamental nature of these planted woods it may also be appropriate to plant some new timber and shrub species. Turkey Oak and Red/Scarlet Oak are already present. There may be interesting exotic species already present in Stanmer Great Wood from which cuttings or seed can be grown on. These species should remain minority components of the shrub and tree flora, perhaps at a maximum of five percent.

Invasive species, such as Laurel, Rhodedendron, *Rhodedendron ponticum*, and Snowberry should be carefully avoided.

On-going discussion is desirable about the nature of 'naturalness', when considering whether to import new species to the Wood. There is an educational value in monitoring the *natural* ingress of new species, and many species of special attractiveness have made their own way to the planted Stanmer and Falmer woodlands over time, including orchids such as White and Sword-leaved Helleborines, Early Purple and Twayblade Orchids, native ferns, including Adder's Tongue Fern, *Ophioglossum vulgatum*, old forest tooth fungi such as Bearded Tooth fungus, *Hieracium erinaceum*, Morel fungi and other rare and special woodland fungi, rare and beautiful beetles and flies, Woodpeckers, and Badgers.

That being said, there is no reason in principle why species native to the Brighton Downs, and even exotic species, should not be imported to this secondary ornamental woodland.

There are a range of herbaceous species that may be appropriate, such as Town Hall Clock, *Adoxa moschatellina*, Wood Anemone, *Anemone nemorosa*, or even Ramsons, *Allium ursinum*, on the lower, damper ground.

Native Bluebell may not be an appropriate species to introduce, because its ready tendency to hybridise with the large swarms of Hybrid Bluebell locally present in gardens may generate further sources of contamination for nearby Downland native Bluebell populations (such as those in Stanmer Great Wood).

**8.2.7. Edge habitats.** The transitional habitats along the woodland edges, particularly along the southern side, with good light conditions, are richer in denser undergrowth, of value to small creatures and herbaceous species.

We will encourage this dense boundary undergrowth.

Along the southern boundary with open land, we will consider planting additional native under shrubs, such as Hawthorn and Hazel, and brashing or layering existing Holly to bush up.

We will negotiate the cessation of the practice of dumping grass cuttings along the edge of the Belt adjacent to the Brighton University playing fields.

We will collect and remove the old fallen barbed wire along this southern boundary, which forms a safety hazard.

**8.2.7. New boundary hedging.** A boundary hedge will be planted along the Ashurst Road and Lucraft Road frontages, at the edge of the metalled roadway, with gated entrances onto the public road.

A boundary hedge will also be planted along the east side of the Lucraft Road belt where it faces the old Falmer School buildings. This boundary hedge will have one gate entrance to the adjacent grounds.

**8.2.8. Fencing.** We will negotiate the removal of the spiked metal exclusion fencing along the Ashurst Road and Lucraft Road frontages. We will work to replace it with an appropriate circa 1 m fence line, with pedestrian gate, at the true frontage of the wood on the edge of the metalled roadway (in addition to the boundary hedge planting specified above).

We are content with the existing metal fence line to the rear of the housing on Egginton Road and Close.

**8.2.9. Paths.** Westlain Belt is not large enough to accommodate a system of open flowery rides without compromising the high forest character of the woodland. The path system will therefore be managed for its present character as narrow pedestrian 'indian file' paths.

We will maintain two paths, loosely parallel, lengthwise through the Belt from the Ashurst Road entrance as far as the eastern end of Compartment Two. These paths shall be clear and wide enough for single file use.

We will maintain the connecting path from the Ashurst Road entrance to the gated access point onto the Hogtrough Bottom access land, to the same width.





We will maintain a single path through the length of the Lucraft Road belt for single file use.

We will maintain a single path open along the length of Compartment Four from the boundary of Compartment Three as far as the composting site, to a width of 6 feet. (Thereafter the eastwards path becomes a rough vehicle track).

Other desire line paths within the woodland will be tolerated, but not formally maintained under this management plan.

- **8.2.10. Litter and tipping.** With the support of the BACA, local residents and the Universities we will organise a number of clean up days to remove all tipped material and dropped litter. Such detritus is both hazardous to wildlife and human users, and detracts from the naturalness of the site.
- **8.2.11.** Brighton University composting site. We will seek to consolidate the composting and clippings disposal site in Compartment Four onto as small a footprint as possible at the eastern end, and to eliminate tipping from the sides of the entrance track. If possible the composting site will be moved further east, so as to shorten the vehicle track into the wood and to minimise the tipped area.
- **8.2.12. Bird nest boxes and bat boxes.** Bird and bat boxes will be placed in numbers through the woodland to increase nesting and roosting opportunities for the many hole dwelling species which are currently restricted by the paucity of old and cavity bearing trees.
- **8.2.13. Badger sett.** We are not aware of any main sett within the Belt. However, there may be a subsidiary sett, occasionally used. We have a legal obligation not to disturb such a sett, and all our woodland activities will be cognisant of that.
- **8.2.14. Woodland archaeology.** As funds become available we will pursue the use of modern aerial survey using remote sensing LIDAR (Light Detection And Ranging) to detect any pattern of prehistoric field lynchets that may survive on the woodland floor, as well as any other erstwhile undetected archaeological features.



## 9. Education and Informal Recreation

#### 9.1. Woodland craft skills

Woodland craft skills work will be centred in the glade in Compartment Two. We will use the glade and the cut over coppice as bases for the teaching of a range of woodland (and bush) craft skills.

#### 9.2. Structures

In Compartment Two structures will be made as part of learning processes and free play. All structures will be demountable and made exclusively of materials generated from the Wood: timber, underwood, brash, leaves, chalk, and flint. All other structures - except play structures and dens made informally by children - will be demounted after their immediate usage.

#### 9.3. Signage and Interpretation

New signage is required for the Wood. It may be that such signage is best located off site, for instance outside the Ashurst Road, Lucraft Road and Brighton University east end entrances.

Other interpretive materials will be considered, such as booklets, leaflets and posters, and short films.

We will leaflet the nearest houses to inform them of our plans for the woods and encourage them to establish a 'Friends of' group and work with BACA and the Universities in occasional clean up and woodland work days. We will also encourage pupils and residents to keep records of what they see in the woods to help us monitor the health of the woods and plan future management.



#### 9.4. Nature Trail

We will design a fixed Nature Trail within the Wood, along the maintained path system. The stages and special interest points of the Trail will be unobtrusively signed. Interpretive materials for the Trail will be carried by Trail users, not provided by in situ interpretive panels. In this way we will preserve the naturalness of users' experience of the Wood, and the sense of discovery to be gained from searching out its features.

#### 9.5. Art works

Environmental art works can enhance the experience of natural woodland for users, but can also domesticate such naturalness and interfere with the integrity of the observers' direct relationship with nature.

In recognition of the tension between these two experiences, any environmental art works will only be made in Compartment Two and displayed in Compartments Two, Three and Four, and will be demounted after a period of display, except those that decay away naturally with the passing of a short passage of time.

Environmental art works will be made only of materials found within the Wood itself, and their construction is to be considered as a part of the woodland craft skills programme within the Wood.

#### 9.6. Learning from observation

The Wood as a whole provides many opportunities for learning about nature and natural systems from observation, survey, and monitoring.

We will recruit and train volunteers to survey the Wood for nesting birds, and will attempt to repeat such survey on a yearly basis.

We will use survey as an educational tool, with our volunteers and students, to systematically improve our knowledge of all the life forms within the Wood, particularly those groups about which public knowledge is poor, such as the invertebrate and lower plant groups.

We will monitor the ingress of new species on an on-going basis, as much as possible by systematic annual survey. We think particularly of such groups as flowering plants and macro-fungi.

#### 9.7. Informal recreation

We believe that the informal users, chiefly dog-walkers and young people, are the guardians of the Wood and its naturalness. We support the use of the Wood for a range of free play, including the creation of temporary dens.

#### 9.8. Access Land

We will vigorously seek the dedication by Brighton and Hove City Council of the whole of Westlain Belt as statutory access land under the terms of the Countryside and Rights of Way Act (2000). By such means the public character of this woodland will be protected in perpetuity.



# 10. A Gateway to the Wider Downs

The majority of urban people are isolated from a direct experience of the Down landscape and its wildlife. We will promote a wider usage of this Downscape in all our activities, and will encourage an understanding of the value of this landscape for people's happiness and welfare.

Most of the users of this gateway will be local people and school pupils, and it is to this local community that most of our interpretive and promotional activities will be addressed.

