Queensdown Wood, Moulsecoomb

– gateway to the South Downs National Park

Management Plan 2009

Introduction by Warren Carter, Moulsecoomb Forest Garden and Wildlife Project

SINCE 2002, the Moulsecoomb Forest Garden and Wildlife Project (MFG) has been working with local residents, schools and volunteers in Queensdown Wood. In that time we have met with both the Countryside Rangers Team and the Sussex Wildlife Trust who have encouraged us in our work.

We have organised spring cleans, carried out woodland clearance to maintain paths; and opened up an old sheep drove. We have run occasional history tours of the woods and surrounding area and we have also carried out some coppicing and have then used the wood to make a variety of products. A group from the Brighton *Argus* newspaper worked with us to put steps into the wood to make them more accessible. We have also blocked off an entrance to stop fly-tipping; and working with the Targeted Youth Support Service we have built a wooden fence at the end of one road to stop old motorbikes being dumped in the woods.

We have also successfully fought to include the Queensdown Wood in the proposed National Park boundaries. Queensdown wood has been neglected for many years and has been used for occasional fly tipping and for the abandonment of vehicles, especially motor bikes. With land at a premium in Brighton we feared that developers would build on the wood. To this end we made presentations at the South Downs National Park enquiry and were successful in persuading the inspector to include the wood in the proposed National Park boundaries. It is currently home to badgers and bats, and we have identified 60 different varieties of birds. Proper management will increase this diversity still further.

In a management plan drawn up seven years ago by one of Brighton Council's Countryside Rangers, Queensdown Wood was identified as an educational resource, and we have been using it as an educational tool that in particular benefits pupils who learn best by practical hands-on work rather than in the classroom. The work these students undertake also forms a substantial contribution to their citizenship education - in particular where service to the community is given prominence - as well as equipping them with skills they can use to apply for further courses to study or gain employment.

However, to date much of this work has been patchy and we aim to formally incorporate woodland management and wilderness skills as part of our charity's activities. Coppiced wood can then be used to teach pupils how make products that can be used at the Moulsecoomb Forest Garden - such as beanpoles, fence and bench posts, fencing materials, roofing as well as bird and bat boxes. We would also work with local primary schools introducing them to the South Downs, carrying out some coppicing, but also teaching them about the history and landscape that is on their doorstep.

We have teamed up with Hove YMCA and their Targeted Youth Support worker and received funding from organisations such as the South Downs Society

The woods perfectly complement the work we are doing at the Forest Garden Project and have become a gateway to the South Downs National Park.

Patrick Beach, Targeted Youth Support Service

The Queensdown Wood project is a link between Moulescoomb Forest Garden and Wildlife Project, Hove YMCA and the Targeted Youth Support Service. The MFG has been highly successful for fifteen years. The Youth Inclusion Programme (now Targeted Youth Support) having been running highly successful sessions with the MFG since 2007 with students from Falmer High School.

The woodland project gives another dimension to an already thriving community initiative. It gives young people the opportunity to engage in something which can positively affect the local community and provide a base for education and environmental awareness. It will also help to conserve a special site for future generations.

We began part of this project in 2008, as one to one work with young people - particularly those experiencing problems in school. The environment and the nature of the work allowed them to achieve beyond their expectations. One particular young man has used this as part of his Duke of Edinburgh Award, others have received Youth Awards and we are also looking into other forms of accreditation.

By undertaking valuable conservation work - coppicing, pollarding and planting - young people get the opportunity to experience the woodland; its inhabitants; its ecosystem and how the mood of the wood changes with seasonal and climatic changes.

Through an in-depth survey carried out on the woodland, there is a great opportunity to search out and identify the different plant and animal species, and to learn about the geography and history of the woodland.

Working with wood gives people the opportunity to identify each tree, connecting with the structure of the woodland and each tree's signature, almost seeing their personalities. The traditional tools used (axe, bow saw, froe etc,) gives an introduction to new skills on an old theme, a more harmonious way to work, and is less invasive to the woodland The woodland project lends itself to a multi sensory education through experience....What better way to learn about our native woodland?

ANNUAL ACTIVITIES

Autumn / Winter

***Coppicing** – system of harvesting tree poles, by cutting to ground level, allowing re growth, used to be carried out every 10 – 15 years.

***Pollarding** – same as coppicing, but cut approx. 2m above ground level carried out traditionally to prevent browsing animals such as deer eating young shoots

***Thinning** – removal of crowded / week trees – non native species such as sycamore to create space for new **plantings**

***Maintaining existing pathways** - Creating shrub layer by pollarding and coppicing (producing a tiered effect) for biodiversity, keeping pathways clear so public stay on them, rather than the rest of the woodland.

***Re- planting** - native trees and plant species (refer to survey)

***Eco habitats for wild life** – brush piles, log piles.

Spring / Summer

***Tree Climbing** – to look and learn, secure nesting boxes, using rope and harness.

***Using stored wood** – Building projects, fences from coppicing, pollarding etc,

***Bushcraft skills**

***Green woodworking** – pole lathe, shave horse

***Maintenance of plantings.**

PART A: DESCRIPTION AND EVALUATION

2. DESCRIPTION AND EVALUATION

2.1. Location and context

Queensdown Wood is located on the south eastern slopes of Hollingbury Hill, which is an inlier of open, high Downscape (rising to 584 ft/178m) surrounded on three sides by Brighton's northern suburbs. The wood neatly occupies a combe tucked into these slopes. The gentler flank of Hollingbury Hill is marked by a sharp break-of-slope with the steepness of the combe, and this break-of-slope forms the upper boundaries of the wood. The lower boundary is formed by the physical barrier of the Brighton-Lewes railway line, behind the Brighton University main campus and Moulsecoomb Place, just off the A270 road. This combination of the enveloping wider landform of the Hill and the barrier of the railway line give the Wood an extraordinary self-contained context. The main public approach to the wood through the tunnel under the barrier of the railway line, emphasizes the dramatic transition from the noise and movement of busy Moulsecoomb to the stillness and naturalness of the wooded combe. It lends it a delightful through-the-back-of-the-wardrobe quality.

At its south-east corner the wood touches the beginning of the wider scrublands and woodlands of Moulsecoomb Wild Park, which now embrace the whole of the southern shoulder of the Wild Park. These woodlands and scrub thickets are of a similar age and vegetation type to Queensdown Wood.

Only one other combe and combe wood on Brighton's urban and urban fringe Downland approaches Queensdown's magical self containment: - Roedale, with Down Hill Plantation, just over half a mile away on the south-western flank of Hollingbury Hill, though that combe's allotments and woodland made paths domesticate its wilderness quality. There are a series of other small woods within the City and on its urban fringe[1].

The head of the combe is occupied by the buildings and grounds of the Alternative Centre for Education. The way in which the wood embraces the school on all four sides gives this built space the quality of a woodland glade.

The upslope sides of the wood, to its north and east, are bounded by a large ex-arable field which is now managed in permanent fallow by a Downland cut, and is open for public access.

The lower west side of the combe is bounded by the end of Lynchet Close and Uplands Road, and public access is possible from those points.

The south side, downslope end of the wood abuts the top of Moulsecoomb Place Allotments, which is the home of the Moulsecoomb Forest Garden and Wildlife Project. This is a porous boundary for wildlife, and many species use the wood and the allotments to meet different parts of their life needs.

The north side, downslope end of the wood abuts the Home Farm Industrial Estate, and there is a walk way and steps from the Estate down to the railway tunnel gateway or on to Hollingdean.

The Wood faces south-east across the half mile wide Moulsecoomb Valley to Bevendean's slopes and beyond to the long ridge of Race Hill and the Jugg's Road.

It lies just inside both the proposed South Downs National Park boundary, and the boundary of the Hollingbury and Wild Park Local Nature Reserve, Brighton.

1 - Such as Portslade Manor House's two woods, Three Cornered Copse Tongdean, Coney Hill and Patcham Place Woods, the series of Withdean woods, Bersted Wood Hollingbury, Coldean woods, Hog Plantation and Hodshrove Wood Moulsecoomb, Bevendean Valleysides woods, Craven Vale wood, and Ovingdean Place shaws.

It is owned by the City of Brighton and Hove, as is the great majority of the rest of the Local Nature Reserve.

2.2. History

From medieval times until its sale to Brighton Corporation in 1925, the entrance to Queensdown Wood combe was the headquarters of the manor of Moulsecoomb[2], within the larger medieval parish of Patcham. Modern Moulsecoomb Place (built in 1790) on the other side of the railway tunnel from the wooded combe, probably sits on the site of the much earlier manor house. A medieval half-timbered cottage attached to the rear of Moulsecoomb Place was, perhaps, part of that older manor house. The Home Farm of the manor, in Queensdown combe, just through the railway tunnel from Moulsecoomb Place, was only demolished in the early 1960's. Its farmhouse was where the electricity sub-station now stands. From photographs it looks like a building of the 17th century or earlier. The Home Farm animal hovels and other outbuildings were on the slope opposite the electricity substation. Their eroded 'bungaroosh' and concrete footings can still be seen under the trees and shrubs. The main waggon barn and yard were right at the head of the combe where the school buildings are now.

The name 'Moulsecoomb' is first recorded in the reign of King William Rufus (1087-1100) and that was perhaps, about the time of the splitting of the manor of Moulsecoomb from the larger Patcham manor. A farming settlement may have been there much earlier, though, adjacent to the good arable land in the Moulsecoomb Valley, watered by its seasonal winterbourne.

The name 'Moulsecoomb' means 'Mul's Cumb' in Saxon English. 'Cumb' meant a short, steep-sided, dead-end valley, which, of course, the Queensdown combe is.

It seems very likely, then, that the name Moulsecoomb referred originally to Queensdown combe, rather than to the larger combe of Moulscoomb Pit, with which the name is more often associated.

Speculatively, that means that the original 'Moulsecoomb' was probably where the Alternative Centre for Education, the Wood and the Forest Garden are now.

Two droves ran from the farmstead and manor up the combe to the huge manorial sheep pastures sprawling over Hollingbury Hill and Castle, Moulsecoomb Pit and the Ditchling Road. One drove ran up the southern side of the combe and has been recently opened up by the **Moulsecoomb Forest Garden Project (MFG)** workers and volunteers. Another drove ran up the east slope of the combe, and, again, MFG folk have recently opened up that part of it which climbs the steep combe side.

The lower part of the combe adjacent to the farmstead would have been used as arable land and, perhaps, as house crofts by the farm from the earliest time.

The higher part of the combe may have been used as arable, too, but most of it was shown as Down pasture on the First Edition Ordnance Survey map of 1873, though the upper north-western side of the combe was already, by then, under a scrub thicket. Some of this thicket may have been of ornamental plantings, but this seems unlikely as no exotic trees or shrubs seem to have survived.

A photograph of the combe taken about 1930 shows that part of the upper north side of the combe may still have been bushy Down pasture at that time. It was then still continuous with the higher Down pastures of Hollingbury Hill.

By the time of the 1946 RAF aerial photo survey this division between scrub and relict chalk grassland in the combe still seems to have been intact, though the scrub thicket had expanded, and the link between the combe Down pasture and the Hollingbury Hill pastures had been finally broken by cultivation of the ground in between (which has recently been returned to grass).

The beginnings of Queensdown Wood can therefore be dated to circa 1850 in its north western corner; circa 1900 along its north eastern upslope boundary: and to the 1950's or even '60's along its eastern and southern lower slopes.

This division between an older and a younger wood can still be plainly seen in the vegetation types, for the eastern slope can be better described as a scrub community, whereas the western and northern parts of the Wood correspond to a woodland vegetation type. This division forms part of the basis for the management compartments of this Plan.

2.3. Present use and management

The Wood has had only very low levels of public use, and no legal business uses. Indeed, its birth over the past 150 years is due to this withdrawal of human management and exploitation after the decline and disappearance of its millennia-old farm.

The Wood has been lightly used informally by

2 - A manor was a medieval landed estate under the regime of feudalism. The lords of the manor had the rights of a proprietor, but also had judicial rights over their feudal tenants, and held them in servitude. These lords were, in turn, subject to higher feudal lords.

local residents, workers on the Industrial Estate, and personnel of the **Alternative Centre for Education** for quiet recreation, dog walking, and children's free play. Additionally, it has had minor use for fly tipping and vehicle dumping.

It is likely that the Wood has not received any formal management since its inception, with two exceptions.

Firstly, there was an episode of tree planting in the upper Wood subsequent to the Great Gales of 1987 and 1992. Some of the plastic tree collars are still extant. It is difficult to see the success of this re-planting, but sapling growth, in any case, seems to be prolific.

Secondly, MFG have worked over the past decade at path widening, litter collection and vehicle removal, and have coppiced stools for poles. They have also fenced part of the boundary to discourage fly-tipping. They also use the Wood for education.

2.4. Biological and physical resource

2.4.1. General considerations

The very existence of this Wood on the busy urban edge of the City is the main measure of its special nature. The dominant landscape character of the Brighton Downs is of a treeless, rolling, 'steppe', known historically as 'champion' or 'champaign' country[3]. This makes the counterpoint provided by the City's small suite of urban and urban edge woods of particular educational and recreational value.

In addition, the Wood has a very particular quality of self-containment and isolation, which is precious.

Like all such individual natural sites it has its special species, but it is this local scarcity value of the Wood itself in a mostly treeless landscape, and its magical self-containment and otherness which are its core value.

2.4.2. Geology, landform, and soil

2.4.2.1. Geology. Queensdown combe is located in the upper part of the **Lewes Nodular Chalk Formation.** This is a hard, off-white, nodular chalk with regular seams of nodular flint. The flintiness of the chalk is readily seen on the bare woodland floor, where the flints form part of a light scree, with chalk pieces.

This Lewes Chalk mostly outcrops along the high scarp of the Downs (roughly along the line of the South Downs Way). However, in the Moulsecoomb Valley south of Ashurst Road (which sits on a geological fault) it outcrops more or less exactly up to the break-of-slope at the top of Queensdown combe, and, on the Valley's south side, up to the edge of the built-up area, where it meets the open Down.

This southerly outcropping of the Lewes Chalk seems to be due to the influence of the **Hollingbury Dome**, an anticline, or upthrust, of the chalk, peaking just south of Denton Drive, Patcham. This anticline has thrust up the older Lewes Chalk, through the younger, softer, **Seaford Chalk** which surfaces across most of Hollingbury Hill and Falmer Hill.

The Lewes Nodular Chalk is part of the **White, or Upper Chalk,** which used to be called **'Chalk-with-flints'** (as opposed to the flintless Grey, or Lower Chalk outcropping at the base of the scarp on the edge of the Weald).

The Lewes Chalk is about 87 million years old and was laid down in a deep tropical sea of the Coniacian stage of the Cretaceous Epoch[4].

The mid Coniacian stage shows relatively few macro (big) fossils, perhaps because it was laid down so deep in the dark ocean. However, one fossil, the King Sponge, *Siphonia koenigi,* seems to be abundant in the Wood and can be readily picked up. This was a large, often tulip-flower-shaped sponge, complete with a long thin stalk (which is now almost always broken off). Brighton seems to be the place where this fossil is most common.

Other fossils may be present. A complete shell of the *Brachiopod Gibbithyris merensis*, from the same strata, was recently found on Moulsecoomb Pit butterfly bank, behind the Wild Park café. The Wood's users have some chance of finding Sea Urchin, *Echinoid spp*. fossils as well as fragments of very large, flat shells of Inoceramid bivalves.

2.4.2.2. Landform. The combe was made in the Ice Age, which is known as the Quaternary[5] Epoch, between 2 million and 10,000 years ago. That is very modern in terms of 'deep' geological time. It was made by periglacial[6] processes of frost and ice, such as 'freeze-thawing' and 'sheetwash', where saturated soil slides down or across the sub-surface permafrost. The Ice Age was the time when all the dry valleys of the Downs were formed. Only the big river valleys, like the Adur and Ouse are much older.

3 - Nothing to do with the fizzy alcoholic drink, but a word related to the Latin word for field.

4 - Cretaceous' means chalky. It is the same word that the island of Crete is named after (which is made up largely of limestone – a hard chalk). The Cretaceous was the last epoch of the age of dinosaurs. *Tyrannosaurus rex* came from that time. The different strata of chalk (like Lewes or Seaford) take their names from the places where they appear most typically.

5 - 'Quaternary' means 'fourth'.

6 - 'Periglacial' means 'at the edge of the glaciers'. Sussex would have been a tundra area, with permafrost, like northern Siberia today. The shape of the combe is quite similar to the glacial 'cwms' you get in Snowdonia and other mountain areas. In fact, the Welsh language word 'cwm' was probably part of the origin of the later Saxon word 'cumb', now combe.

The combe is split into two smaller combes in its higher part, although this gentle division is not obvious from a distance.

The break of slope between the combe and the wider Moulsecoomb Valley slopes is characteristically sharp. This sharpness may have been accentuated by long-term ploughing of the surrounding slopes, piling up earth on the lip of the combe

2.4.2.3. Soil. The soil of the Wood is what is known as a 'rendzina', which means a skeletally thin soil over chalk or limestone. Before humans started chopping the wildwood down about 7000 years ago, the soil may have been a thicker loam.

The bottom of the combe, where the road and the school sit, has a 'chalk head' soil, which is the kind of soil formed by the washing down of eroded rock and soil from higher ground. (The west end of Black Rock cliffs are made up of similar yellowy washed down chalk head, which you can see from the Asda Marina car park).

2.4.3. Vegetation Types[7]

2.4.3.1. Compartment One. The western and northern sides of the combe have tree cover consisting largely of a mixture of young Sycamore, *Acer pseudoplatanus*, and Ash, *Fraxinus excelsior*, with some English Elm, *Ulmus procera*, clones, often with dead trunks. Most of this cover takes the form of swarms of young single poles, though there are also multiple poles arising from coppiced stools. There are also some older trees, perhaps around 50 years old or more.

There are many wind-blown trees and rotting trunks from the time of the Great Gales. The damper fallen trunks are often partially covered in Feather Moss mats, largely *Brachythecium rutabulum* and *Eurhynchium praelongum*.

Ivy, *Hedera helix*, covers large areas of the woodland floor, as well as trunks and canopies. In one area it makes groves of the trees in winter look superficially like evergreen conifers. Bramble, *Rubus fruticosa agg.*, also covers many areas of untrampled ground, with scattered Dog Rose, *Rosa canina*, Gooseberry, *Ribes uva-crispa*, and, rarely, Cotoneaster, *Cotoneaster sp.*, bushes. There are also occasional Elder, *Sambucus nigra*, and Hawthorn, *Crataegus monogyna*.

The herbaceous ground cover is scanty, with some swarms of Cow Parsley, *Anthriscus sylvestris*, and a few clumps of Hybrid Bluebell, *Hyacinthoides non-scriptus x hispanicus*. There are some Dog's Mercury, *Mercurialis perennis*, swarms in the higher combe, though never forming a dominant over large areas. Other herbaceous species include much Arum, *Arum maculata*, some Lesser Celandine, *Ranunculus ficaria,* Ivy-leaved Speedwell, *Veronica hederifolia*, and one group of Twayblade Orchis, *Listera ovata*.

Male Fern, *Dryopteris filix-mas,* Hart's-tongue, *Phyllitis scolopendrium,* and Polypody, *Polypodium vulgare,* ferns, can be found in the more humid areas.

This woodland conforms to the type classified as **'Ash-Maple-Dog's Mercury woodland'** of the **'Ivy sub-community'.** This community has the code **W8d** in the National Vegetation Classification (NVC). This type of woodland is characteristic of chalky, southern soils, and is often associated with recent woodland. It is often simple in structure with a species-poor ground flora dominated by Ivy.

2.4.3.2. Compartment Two. Much of the **eastern side of the combe** is best described as a scrub community, rather than woodland, though it is on the cusp of transition to true woodland. It is dominated by large old Hawthorns There are also some good sized Ash and Sycamore, Elm clones, and some Holly, *Ilex aquifolium*. Some of the more substantial trees are wind-blown or have broken limbs. There is also at least one old Blackthorn (?), *Prunus spinosa*. In some areas there are old and woody festoons of Clematis, *Clematis vitalba*, and Privet, *Ligustrum vulgare*, giving the thickets a very 'jungley' and impenetrable feel.

Cover is somewhat more open in the northern, upslope area.

Male Fern, *Dryopteris filix-mas,* Hart's-tongue, *Phyllitis scolopendrium*, and Polypody, *Polypodium vulgare,* Ferns, can be found in the more humid areas.

It is in this compartment that the best epiphytic lower plant flora can be found, implying that it is both more humid, more open, and with less air pollution than most of Compartment One.

At its steep, southern end, east of the school, Ivy is dominant across the ground and drapes the bushes and trunks. Some areas also have much Nettle, *Urtica dioica*.

There has been some tree planting in the Wood immediately behind the School.

The herbaceous flora seems a bit richer than in Compartment One, with occasional Primrose, *Primula vulgaris* (presumably planted), some large swarms of Sweet Violet, *Viola odorata*, often in the white form, Common Dog Violet, *Viola riviniana*, Ground Ivy, *Glechoma hederacea*, Enchanter's

7 - Different types of vegetation can be classified by the assemblages of species which occur in them. Each type of vegetation is known as a 'vegetation community', and the people who classify them are known as 'plant sociologists', just as people who study human society are known as 'sociologists'.

Nightshade, *Circaea lutetiana*, Lesser Burdock, *Arctium minus*, and frequent Arum.

This part of the Wood can be classified as **'Hawthorn-Ivy scrub'** of the **'Ivy-Nettle sub-community'**, though it is in transition to the woodland type in Compartment One. Its NVC code is **W21a**. This type of scrub is very characteristic of the Downs.

2.4.3.3. Compartment Three. This area embraces **the footings of the farm buildings of the old Home Farm, on the eastern combe side.**

It has now succeeded to woodland of the type found in Compartment One. There are many Sycamore poles, often from young coppiced stools. Small Elm clones, Elder and Hawthorn are frequent. There is a line of Japanese Spindle-tree, *Euonymus japonica*, and Sycamore along the remains of a bungaroosh wall going upslope. The shrub layer has much Ivy, Clematis and Bramble forming good cover in places.

There is one big Sallow, *Salix caprea*, on the upper boundary with The Green, Compartment Four.

The field layer is dominated by Bramble and Ivy, with much Cow Parsley, Cleavers, *Galium aparine,* Wood Avens, *Geum urbanum*, and Lesser Celandine, Herb Robert, *Geranium robertianum*, Dandelion, *Taraxacum officinale sp*., Hybrid Bluebell, Wild Garlic, *Allium sp.*, Hogweed, *Heracleum sphondylium,* and Ivy-leaved Speedwell.

There has been some planting of Primrose and Daffodil, *Narcissus sp.*

The tumbled bungaroosh farm wall footings are clothed in mats of Feather Moss spp., *Eurhynchium praelongum, E. hians,* and *Brachythecium rutabulum.*

2.4.3.4. Compartment Four. This is a **small Green: - an open area of grassland, incipient scrub and chalk scree at the junction of the footpaths from the Home Farm Industrial Estate and from Hollingbury Hill,** at the top of the steps down to the railway tunnel and access road. It has been planted with chalk grassland herbs and has a bench. It is, nonetheless, succeeding to light scrub.

The bare scree on the industrial estate bank has young Dog Rose, Dogwood, *Cornus sanguinea*, Hawthorn, Salad Burnet, *Sanguisorba minor*, and other herbs.

The grassland has Cowslip, *Primula veris*, Purging Flax, *Linum catharticum*, Hairy Violet, *Viola hirta*, Eggs and Bacon, *Lotus corniculata*, and Hardheads, *Centaurea nigra*, as well as tall herbs like Canadian Goldenrod, *Solidago Canadensis*, and Mugwort, *Artemisia vulgaris*.

Bramble is forming a large thicket.

2.4.3.5. Lower plants, particularly epiphytes. Some parts of the Wood, particularly Compartment Two and the northern end of Compartment One, have an epiphytic flora of lichen, mosses, liverworts and algae which together make quite a long species list. The Appendix lists 34 of these species. That is not to say that the lower plant flora of the Wood is in any way rich or unusual. Indeed, nutrient-rich tree boles on The Avenue, Bevendean, near the shops across the Valley from the combe, have a more colourful lichen flora.

This lower plant flora does, however, have considerable educational interest both in its own right - for many of the plants are bizarre and colourful under magnification - and as a way of measuring atmospheric pollution levels. Many lower plants are very sensitive to air pollution, for they absorb air across their whole plant surface. Heavily polluted areas have a very poor flora and clean areas have a rich flora. These gradations can be measured very precisely, and can be recognized easily by amateurs, after some practice. Similarly, the flora can be used to measure ecological continuity, for old ecosytems, like old forest, can have a very distinctive community of epiphytes quite different from recent woodland even with the cleanest air.

On one fallen Hawthorn in Compartment 2 there were abundant *Parmelia perlata, P. caperata, P. sulcata, P. glabratula,* and *Ramallina farinacea*. On the bole of the tree was abundant *Cladonia fimbriata* and Cypress-leaved Plait-moss, *Hypnum cupressiforme*. The moderately-pollution-sensitive *Graphis scripta* was present on the bark of older Sycamore poles at the junction of Compartments One and Two, together with less sensitive *Arthonia radiata, Buellia punctata, Opegrapha spp*., and *Lecanora conizaeoides*, 'The Pollution Lichen'. The older tree boles in Compartment Two had good cover of the Liverworts Forked Veilwort, *Metzgeria furcata,* and Dilated Scalewort, *Frullania dilatata,* and one branch crook had the less common Even Scalewort, *Radula complanata*. Nutrient enriched higher branches had hoary little gardens of *Physcia tenella, Phaeophyscia orbicularis, Evernia prunastri, R. farinacea,* and *Xanthoria parietina*, with several Parmelia spp.

By contrast, accessible tree boles and branches in the woodland above the Forest Garden in Compartment One were largely bare, except for green encrusting algae. This may be due to a combination of higher air pollution and shading.

Parts of Compartment Two and the upper part of Compartment One conform to the moderately unpolluted mid range - Zones 5 and 6 out of 10 - of the scale of sulphur dioxide pollution[8] measured against epiphytic lichen community type. They

have some *Graphis scripta*, and *Parmelia caperata, P. perlata, Ramalina farinacea* and *Evernia prunastri* in quantity.

2.4.3.6. Fungi

No survey of the wood has been done, but we can identify two points of interest.

Firstly, the old Hawthorn scrub of Compartment Two has revealed troops of two Morel species, the Thimble, or Thimblecap Morel, *Verpa conica*, and the Semifree Morel, *Morchella semilibera*. Both these species like old scrub, and Thimblecap has been said to have a particular association with old Hawthorn scrub. Thimblecap has been described as a rarity, but it is a spring fruiting species (when most folk are not looking for fungi) and seems to fruit abundantly some years, and then have little above ground presence in intervening years. Together with the 'Tesco Morel', *Morchella elata*[9], which is present on wood chip in the Forest Garden, this makes three Morel species. These species are not usefully edible.

Secondly, the rotting fallen trees can be expected to produce good displays of dependent fungi. They have Dead Man's Fingers, *Xylaria polymorpha,* Aniseed Cockleshell fungus, *Lentinellus cochleatus*, Deer Shield, *Pluteus cervinus*, Liver-brown Polypore, *Polyporus badius/durus*, and other Bracket species.

By comparison, the old scrub on the south shoulder of the Wild Park is now producing Cep, *Boletus edulis,* and other interesting Agaric species, which means that such species can be expected to colonize Queensdown Wood, too, with time.

2.4.4. Other striking features of the Wood

2.4.4.1. Root plates. There is a striking prevalence of upturned root plates across the whole Wood, but particularly on the upper slopes of both Compartment One and Two. These form features on a sculptural or almost architectural scale. Indeed, collapsed root plates and root plate pits can be detected by archaeological investigation and are useful environmental evidence of past land surfaces. They are useful micro habitats for wildlife, as well as for children's play.

2.4.4.2. Festoons. The festoons of Ivy, Clematis and, rarely, of Privet (which does not usually act as a festooning species) provide very important structural variety, both for wildlife and aesthetically. They are great fun, and a constant reminder of the jungley lurking of nature, only waiting for an opportunity to take over!!

2.4.4.3. Badger sett. Like the root plates and festoons, the huge Badger sett in the middle valley of Compartment Two – and across into One – is on an almost architectural scale. It must be of great age - perhaps approaching the age of the surrounding suburb. The many moundings and tunnellings tumble down the slope for a considerable distance. They have a cover of Feather Mosses, as well as Mamillate Plait-moss, *Hypnum andoi*, and Enchanter's Nightshade, Elder, Nettle and Dog Violet.

2.4.5. Birds

The Wood is full of bird song in spring and there are many nesting species, although no comprehensive survey has been done. Green Woodpeckers have made nesting holes in two trees close together and have just excavated a fresh hole – leaving a dense scatter of wood chips in a 1.5 m radius of the hole.

2.4.6. The relationship with the Moulsecoomb Forest Garden

Many species will use both Wood and Moulsecoomb Forest Garden interchangeably for different parts of their life needs. Thus, the abundant Smooth Newts of the Garden will spend much of the year outside the breeding season in the Wood. Bees and Wasps that are attracted to the Garden may build their nests in the Wood – like the Wasps, *Dolichovespula sp.*, whose broken nest was found in the Wood.

The cover and dead wood resources, and the relative isolation and tranquility, would be useful to many species.

3. FACTORS AFFECTING DEVELOPMENT AND MANAGEMENT

3.1. Natural trends

The present wildlife, landscape, passive amenity and educational value of the Wood rely on the mosaic of habitats being retained at different stages of succession. Without some management the Wood will become more homogenous, for instance, by the loss of the scrub community of Compartment Two to Woodland.

3.2. Human influences

The vegetation communities are an artifact of the withdrawal of millennia old farming management.

3.3. Trampling

There are now many small informal and some made paths and steps in Compartment One, due to its proximity to the urban edge and the Forest Garden. This is itself a generator of diversity for the paths and rides will allow opportunities for different herbs and lower plants and animals.

8 - Where 0 on the scale is indicated by epiphytes being totally absent, and 10 on the scale having rich lichen communities with Lungwort, *Lobaria spp.,* and Sausage Lichen, *Usnea articulata*. Taken from Hawksworth, D. J. and Rose, F. *Nature, London*. 227, 145-148 (1948).

9 - So called because of its frequent appearance amongst shrub plantings in wood chip around supermarket car parks!

3.4. Disturbance

Compartment Two has no significant disturbance, but the other Compartments are used for dog walking and children's play, sleep-outs, and so on. This may disturb some nesting birds, and other species (such as the aerial nesting Wasps mentioned above).

3.5. Litter

Casual littering is not a major problem, although some rubbish, such as broken glass and cans, can be a hazard.

3.6. Tipping and abandoned vehicles

Fly-tipping adjacent to the housing on the west side is a moderate problem, and tipped garden material, discarded toys and furniture, can be a source of hazard and of the ingress of unwanted garden species in the Wood.

Abandonment of vehicles is a problem and will require the intervention of the landowner, the City Council. However, it may be that some abandoned vehicles, once cleared of hazards such as broken glass and noxious substances, may be judged better left in situ as objectives of incongruous interest, as play sites, and as wildlife habitat.

3.7. Vandalism

It may be that any woodland furniture or structures erected in the Wood will be subject to vandalism, as they have been in the Forest Garden. This will be a consideration in future plans.

3.8. External bodies

The electricity sub-station occupies the lower south side of the combe bottom. It is securely fenced.

The Alternative Centre for Education is at the centre of the site. Its boundaries with the Wood are porous.

The Home Farm Industrial Estate abuts the Wood on the east side. Housing abuts the lower west side. The railway owns and manages the rail embankment and bridge over the road to the combe.

The Wood's landform makes any development of the slopes very difficult, although the flat combe bottom could accommodate further building.

The Wood is to be within the new South Downs National Park, whose Authority will take over the planning powers of the present City Council by 2011.

3.9. Health and Safety

The landowner has responsibility for the safety of the Wood. There are several safety issues.
The wood is on slopes, some of which are steep.

Some tree species, particularly Ash, can be unstable and subject to rot from their base after coppicing. Such particular trees will be unsuitable to succeed to timber for safety reasons.

Abandoned vehicles and fly tippings may contain hazards for children playing on them.

PART B:
DEVELOPMENT AND MANAGEMENT PROPOSALS

4. Objectives

Our management objectives for the Wood are three fold.

4.1. Firstly, to conserve and enhance its landscape and wildlife resources.

4.2. Secondly, to use them for education and appropriate informal recreation, chiefly by communities local to the site.

4.3. Thirdly, we accept a responsibility as a gateway site to the new South Downs National Park.

5. DEVELOPMENT AND MANAGEMENT WORK

5.1. Nature conservation and landscape

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, or 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 Wood, an assessment is required as to whether management is needed to sustain their interest or whether they are best left alone. For this reason each Compartment is considered on its merits. 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.

The Wood 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 the combe as wooded, tranquil, separate, and antithetical to the busyness of the adjacent A270 corridor will remain central to any management work.

5.1.2. Compartment One. The western and northern sides of the combe.

5.1.2.1. This Compartment already has a network of

informal paths created by users from the MFG and neighbouring residential area. It is less tranquil than Compartment Two. Structurally, most of its young Sycamore and Ash poles have little individual long term stability on such a thin soil and steep gradient.

The question of whether wood cutting is appropriate on nature conservation grounds is evenly balanced.

Such work is of benefit on educational grounds, however, given that objective of the MFG and this Plan, and safety concerns add to the rationale for such work in this Compartment.

Such work can be executed in such a way as to enhance the nature conservation value of the Compartment.

5.1.2.2. Pollarding and Coppicing. Wood cutting work will be done by extensive use of pollarding. Coppicing will be used on only a minority of poles, and where coppice stools have already been created. 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.

Pollarding and coppicing will be focused on discrete coups, though there is no necessity to dictate coup sizes or intervals, and, indeed, some randomness may add to the naturalness of the Compartment's appearance

Unutilised brash and logs will be loosely piled on the woodland floor and will as far as possible not be cut up. This will create refuges and nesting opportunities for small animals and birds, and the plants of rotting wood.

The majority tree species of this Compartment - Sycamore, Ash and English Elm - are vigorous and spread rapidly. Our tree cutting work will seek to retain a balance between these species, all of which have relatively nutrient-rich barks with high ph, which provide good sites for epiphytic lower plants.

Wood cutting activity will decrease in intensity away from the MFG.

5.1.2.3. Boundary screens of trees. A 20 m wide screen of trees will be left both at the base of slope (alongside the road and the curtilage of the Alternative Centre for Education) and at the top slope woodland edge. This screen will maintain the enclosed character of the Wood and its relative humidity.

Beyond the upper Wood edge and break of slope a 10m buffer zone of thorn scrub, bramble and tall herbs will be encouraged, subject to the agreement of the City Council. Such ecotonal buffers serve the needs of the many species which have life cycle needs across a number of habitats.

5.1.2.4. Paths. Some work has already been done to open up the old sheep drove in Compartment One, which has a wide and relatively gently angled up-slope bank and an often sharper down-slope bank. This work will continue until the pathway and up-slope bank of the drove are returned to an open condition, with the objective of creating a ride of sufficient width to enable long daytime sunlight ingress, and thus the development of woodland edge and meadow vegetation. This work will also encourage attractive woodland edge butterflies, such as Orange Tip and Green-veined White, as well as Down pasture butterflies like Common Blue.

We will consider the introduction to this ride of naturally occurring, locally sourced herbaceous and shrub species to enhance its attractiveness.

To minimize disturbance to wildlife elsewhere in the Compartment, only other already-existing desire line informal paths will be consolidated by steps, levelling, and embanking. Such consolidated paths will be kept to a minimum. No other new constructed paths will be created.

5.1.2.5. New plantings. 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 Queensdown Wood over time, such as Twayblade orchis, native ferns, Morel fungi, Woodpeckers, and Badgers. Other species may be considered likely to colonize naturally from nearby populations, like Early Purple Orchis, *Orchis mascula*, and various macro-fungi.

That being said, there is no reason in principle why species native to the Brighton Downs should not be imported.

There are a range of tree species native to local old woodland and scrub, such as Maple, Hazel, Whitebeam, Holly, Wych Elm, and English Oak, which may be appropriate to import. Yew and Beech may be appropriate, too, though the bare field layer they leave under their canopy may not be so easily accommodated in a small wood. Shrub species, such as Wayfaring Tree, Spindle, several Rose species, and Buckthorn, may not fare so well in a woodland community, but would thrive on the woodland edge, for instance along the widened drove.

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. Some have already been introduced, such as Primrose and Sweet Violet.

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, in Coldean Woods, and, on a smaller scale, in this Compartment, may generate further sources of contamination for nearby Downland native Bluebell populations (such as those in Stanmer Great Wood).

5.1.2.6. Bird nest boxes and bat boxes. Bird and bat boxes will be placed in numbers around this Compartment, 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.

5.1.2.7. Badger sett. We have a legal obligation not to disturb the large and ramified Badger sett in the remote part of this Compartment around the boundary with Compartment Two, and all our woodland activities will be cognisant of that.

5.1.2.8. Litter and tipping. With the support of the City Council as necessary, we will remove all tipped material and dropped litter on an ongoing basis. Such detritus is both hazardous to wildlife and human users, and detracts from the naturalness of the site. We will consider whether to leave some long-abandoned vehicles in situ as play objects and wildlife habitats.

5.1.3. Compartment Two. The eastern slope of the combe.

5.1.3.1. A quiet area. Usage of this area will be encouraged to remain at the level of quiet, contemplative and non-intrusive activities, such as wildlife observation. It will not be used as a base for woodland craft activity.

5.1.3.2. Maintaining a degree of openness. Parts of this area have something of the character of thickets in old deer parks, where a degree of openness exists alongside the woody cover. This openness is good for epiphytic plants and enables blossom and fruit bearing shrubs, like Hawthorn to flourish, with benefits for invertebrates, birds and small mammals.

We will encourage the maintenance of this openness by the removal of a proportion of new tree poles, and the conservative pollarding of the larger tree specimens, which are reaching above the shrub layer. We will not, however, remove Bramble tangles or other low shrub structures, which have importance for wildlife and enhance the Compartment's seclusion.

5.1.3.3. Paths. No paths will be created or encouraged in this Compartment.

5.1.3.4. New Plantings. The same considerations apply to this Compartment as apply to Compartment One, with the rider that the arguments for allowing natural processes to take precedence are stronger here, given its character as a reserved area for nature.

5.1.3.5. Birds nest boxes and bat boxes. This Compartment is well suited for the installation of a range of such boxes, as outlined in Compartment One.

5.1.3.6. Badger sett. The same considerations apply here, where the majority of the Sett lies, as apply in Compartment One.

5.1.3.7. Litter and tipping. The same considerations apply as in Compartment One, with the rider that naturalness is a more primary consideration here, when considering whether to leave any car hulks in situ.

5.1.4. Compartment Three. The footings of the farm buildings.

5.1.4.1. Conservation of the farm footings. There is a tension in this Compartment between the archaeological interest in the visible remains of the old farm buildings and the naturally developed woodland cover.

Though this Compartment's character depends primarily upon such woodland cover, it may be judged desirable to uncover and perhaps restore some of the bungaroosh walling features.

If this is done we will do so in such a way as to retain the Compartment's overall woodland character.

5.1.4.2. Craft activities. The Compartment may be suitable for some constructional activities related to bungaroosh, but will otherwise not be suitable for woodland craft based activities.

5.1.4.3. Health and safety. There may be a need for some coppicing and pollarding for health and safety reasons in this compartment, but such activity will be kept to a necessary minimum.

5.1.4.4. Paths. As a gateway to the wider Downs, there may be a need for consolidating existing paths by step making, embanking and levelling. As in Compartment One, no entirely new paths will be created.

5.1.4.5. Bird and bat boxes. The area will be suitable for the installation of bird and bat boxes.

5.1.4.6. Litter and tipping. This Compartment is particularly tarnished by litter and occasional tipping. We will clear all such material, in cooperation with the City Council.

5.1.5. Compartment Four. The small Green.

5.1.5.1. This area's most attractive quality is its openness and its early successional vegetation of **bare ground and chalk grassland**. This should be restored and enhanced.

5.1.5.2. Scrub Control. The most important task is to eliminate the majority – 75% at least - of the low Bramble and thorn scrub in this Compartment. This eradication should be completed by the herbicidal stump treatment of all cut thorn growth.

5.1.5.3. Mowing. The flat component of the Green should be strimmed at 2 monthly intervals during the growth season and the cuttings removed off site.

5.1.5.4. Dog faeces. This is a major problem here. We will discuss with the Council how best to manage this problem.

5.1.5.5. New plantings. The Compartment has already received one cycle of new chalk grassland species planting some years ago. New planting of such local species may be considered appropriate, after discussion, to reinforce existing plantings.

5.2. Education and informal recreation

5.2.1. Woodland craft skills. Woodland craft skills practice will be held in Compartment One. In this Compartment we will use the cut over glades as bases for the teaching of a range of woodland craft skills.

5.2.2. Structures. In Compartment One, 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. Only benches along the ride will be left in situ. All other structures - except play structures and dens made informally by children - will be demounted after their immediate usage.

5.2.3. Signage and Interpretation. New Signage is required for the Wood. It may be that such signage is best located off site, for instance near Moulsecoomb Rail Station, or Brighton University campus, Moulsecoomb Library and Hall, or neighbouring residential areas.

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

5.2.4. Nature Trail. We will design a fixed Nature Trail within the Wood. 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.

5.2.5. 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 One, 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.

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

5.2.6.1. We will research the possibility of formalising the experience of watching the Badger social group, perhaps by the usage of a demountable hurdle hide.

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

5.2.6.3. 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.

5.2.6.4. 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.

5.2.7. 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.

5.3. A gateway to the wider Downs

5.3.1. 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.

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

APPENDIX ONE - GLOSSARY

Algae: Simple plants, mostly water-living. Seaweeds are algae.

Arable: Land tilled for the production of crops.

Bole: The trunk of a tree.

Bungaroosh: Walling made of a mix of flint, chalk, and brick rubble set in lime putty mortar made with sand and gravel.

Champion/champaign: Old landscape of strip-cultivated open fields and pastures with few hedges or trees.

Combe: Short bowl-shaped valley with three steeply rising sides.

Coppice: An area of trees or shrubs cut regularly to produce poles.

Coup: A cut over area of woodland.

Cretaceous: Last Age of Dinosaurs. From the Latin name for chalk: 'creta'.

Down pasture: Pasture found on the chalk hills and made up of naturally occurring species.

Drove: A path or road along which farm animals were regularly driven.

Ecosystem: Linked and mutually dependent network of life forms.

Ecotonal: The zone transitional between two ecological communities.

Epiphyte: A plant that grows on another plant but is not parasitic on it.

Fallow: Land left unseeded after the harvesting of a crop.

Festoon: A decorative chain of flowers or vegetation or ribbons.

Herbaceous: Plants or parts of plants that are fleshy, not woody.

Hoary *(in this context)*: White or whitish-grey.

Ingress: Going or coming in.

Lichen: Plants which are stable combinations of Fungi and Algae.

Liverwort: Small primitive green plants often mistaken for mosses.

Loam: Rich soil consisting of mixed sand, clay and decaying organic material.

Manor: A manor was a medieval landed estate under the regime of feudalism.

Periglacial: An area at the edge of glaciers.

Ph: A measure of acidity or alkalinity. Stands for the potential of Hydrogen.

Pollard: A tree retaining its trunk, but with its crown of branches periodically cut for use.

Quarternary: Of the fourth order: the 'Ice Age'.

Rendzina: A chalky, very thin – skeletal – soil.

Ride (as in woodland): A wide treeless strip within a wood.

Scree: An accumulation of rock fragments, often on a slope.

Scrub: A thicket of shrubs, often spiny. The word is a variant of 'shrub'.

Sett: The burrow of a Badger.

Steppe: Extensive grassy treeless plains (as in Russia).

Winterbourne: A stream on the chalk Downs that only runs in winter.

APPENDIX TWO - SPECIES LIST

Please note: - these are casual records only. They chiefly illustrate what recording efforts could be made.

Liverworts

Frullania dilatata, Dilated Scalewort - epiphyte COMPARTMENT 2

Metzgeria furcata, Forked Veilwort - epiphyte COMPARTMENT 2

Radula complanata, Even Scalewort - epiphyte COMPARTMENT 2

Mosses

Brachypodium rutabulum, Rough-stalked Feather-moss - epiphyte ALL COMPARTMENTS

Eurhynchium praelongum, Common Feather-moss - epiphyte ALL COMPARTMENTS

Eurhynchium hians, Swartz's Feather-moss - epiphyte ALL COMPARTMENTS

Hypnum andoi (mammillatum), Mamillate Plait-moss - epiphyte COMPARTMENT 2

Hypnum andoi, form filiforme, Combed Plait-moss - epiphyte COMPARTMENT 2

Hypnum cupressiforme, Cypress-leaved Plait-moss - epiphyte COMPARTMENT 2

Orthotricum affine, Wood Bristle-moss - epiphyte COMPARTMENT 2

Rhynchostegium confertum, Clustered Feather-moss - epiphyte COMPARTMENT 2

Tortula laevipila, Screw-moss - epiphyte COMPARTMENT 2

Lichen

Arthonia radiata - COMPARTMENT 2

Arthonia sp. - COMPARTMENT 2

Buellia punctata- epiphyte COMPARTMENT 2

Cladonia fimbriata- epiphyte COMPARTMENT 2

Chrysothrix candelaris- epiphyte COMPARTMENT 2

Evernia prunastri- epiphyte COMPARTMENT 2

Graphis scripta - epiphyte COMPARTMENT 1, 2

Lecanora conizaeoides - epiphyte COMPARTMENT 2

Lepraria incana- epiphyte COMPARTMENT 2

Opegrapha vulgata - epiphyte

COMPARTMENT 2

Opegrapha varia - epiphyte COMPARTMENT 2

Opegrapha sp. - epiphyte COMPARTMENT 2

Parmelia caperata - epiphyte COMPARTMENT 2

Parmelia glabratula- epiphyte COMPARTMENT 2

Parmelia perlata - epiphyte COMPARTMENT 2

Parmelia revoluta - epiphyte COMPARTMENT 2

Parmelia sulcata - epiphyte COMPARTMENT 2

Phaeophyscia orbicularis - epiphyte COMPARTMENT 2

Phlyctis argena - epiphyte COMPARTMENT 2

Physcia tenella - epiphyte COMPARTMENT

Ramallina farinacea - epiphyte COMPARTMENT 2

Xanthoria parietina - epiphyte COMPARTMENT 2

Fungi

Auricularia auricula-judae, Jelly Ear- epiphyte COMPARTMENT 2

Daldinia concentrica, King Alfred's Cakes - epiphyte COMPARTMENT 2

Lentinellus cochleatus, Aniseed Cockle-shell Fungus – COMPARTMENT 1

Mitrophora semilibera, Semifree Morel – COMPARTMENT 2

Morchella elata, Tesco's car park Morel - MFG

Pluteus cervinus, Deer Shield – COMPARTMENT 1

Polyporus badius/durus, Liver-brown Polypore - COMPARTMENT 1

Verpa conica, Thimble Morel - COMPARTMENT 2

Xylaria polymorpha, Dead Man's Fingers – COMPARTMENT 1

Algae

Green epiphytic species - epiphyte COMPARTMENT 1

Orange epiphytic species - epiphyte COMPARTMENT 2

Ferns

Hart's-tongue, *Phyllitis scolopendrium* COMPARTMENT 1, 2

Male Fern, *Dryopteris filix-mas* COMPARTMENT 1, 2

Polypody, *Polypodium vulgare* - epiphyte COMPARTMENTS 1, 2

Flowering plants including grasses

Arum, Lord's-and-Ladies, Cuckoo-pint, *Arum maculatum* - COMPARTMENTS 1, 2

Aster sp., *Aster sp.* – COMPARTMENT 4

Bird's-foot Trefoil, *Lotus corniculata* – COMPARTMENT 4

Bluebell hybrid, *Hyacinthoides non-scripta x hispanica* - COMPARTMENT 1

Bramble, *Rubus fruticosus* – ALL COMPARTMENTS

Canadian Goldenrod, *Solidago Canadensis* – COMPARTMENT 4

Cleavers, *Galium aparine*

Clematis, *Clematis vitalba* - ALL COMPARTMENTS

Common Dog Violet, *Viola riviniana* – COMPARTMENT 2

Cotoneaster sp, *Cotoneaster horizontalis* - COMPARTMENT 1

Cowslip, *Primula veris* – COMPARTMENT 4

Cow Parsley, *Anthriscus sylvestris* - COMPARTMENT 1

Daffodil, *Narcissus cultivar* – COMPARTMENT 3

Daisy, *Bellis perennis* – COMPARTMENT 4

Dandelion, *Taraxacum officinale agg.*

Dog Rose, *Rosa canina* – COMPARTMENT 4

Dogs Mercury, *Mercurialis perennis* - COMPARTMENTS 1, 2

Enchanter's Nightshade, *Circaea lutetiana* – COMPARTMENT 2

Hairy Violet, Viola hirta – COMPARTMENT 4

Herb Robert, *Geranium robertianum* - ALL COMPARTMENT

Hogweed, *Heracleum sphondylium*

Ivy, *Hedera helix* - epiphyte – ALL COMPARTMENTS

Irish Ivy, *Hedera helix ssp. hibernica- epiphyte* – ALL COMPARTMENTS

Gooseberry, *Ribes uva-crispa* - COMPARTMENT 1

Ground Ivy, *Glechoma hederacea* - COMPARTMENT 2

Ivy-leaved Speedwell, *Veronica hederifolia* – ALL COMPARTMENTS

Lanceolate Plantain, *Plantago lanceolata* – COMPARTMENT 4

Lesser Burdock, *Arctium minus* - COMPARTMENT 2

Lesser Celandine, *Ranunculus ficaria* - COMPARTMENT 1, 2

Lesser Knapweed, *Centaurea nigra* – COMPARTMENT 4

Mugwort, *Artemisia vulgaris* – COMPARTMENT 4

Nettle, *Urtica dioica* - ALL COMPARTMENTS

Primrose, *Primula vulgaris* - COMPARTMENT 1, 2, 3

Fairy Flax, *Linum catharticum* – COMPARTMENT 4

Salad Burnet, *Sanguisorba minor* – COMPARTMENT 4

Sweet Violet, *Viola odorata* – COMPARTMENTS 1, 2

Twayblade Orchis, *Listera ovata* – COMPARTMENT 1

Wild Garlic sp., *Allium sp.*

Wood Avens, *Geum urbanum* - ALL COMPARTMENT

Wood Sedge, *Carex sylvatica* - COMPARTMENT 1

Trees and shrubs

Ash, *Fraxinus excelsior* - ALL COMPARTMENT

Blackthorn, *Prunus spinosa* – COMPARTMENT 4

Buckthorn, *Rhamnus catharticus* - COMPARTMENT 1

Buddleia, *Buddleja davidii* – COMPARTMENT 1

Dogwood, *Cornus sanguinea* – COMPARTMENT 4

Elder, *Sambucus nigra* – ALL COMPARTMENTS

English Elm, *Ulmus procera* - COMPARTMENT 1

Hawthorn, *Crataegus monogyna* – ALL COMPARTMENTS

Holly, *Ilex aquifolium* - COMPARTMENT 1, 4

Japanese Spindle-tree, *Euonymus japonicus* – COMPARTMENT 3

Privet, *Ligustrum vulgare*

Sallow, *Salix caprea* – COMPARTMENT 4

Yew, *Taxus baccata* - COMPARTMENT 1

Sycamore, *Acer pseudoplatanus* COMPARTMENT 1, 2. 3

Walnut, *Juglans regia*, COMPARTMENT 3

Birds. (This list includes birds recorded in or above the MFG).

Blackbird
Blackcap
Black-headed Gull
Blue Tit
Carrion Crow
Chaffinch
Chiffchaff
Collared Dove
Dunnock
Feral Rock Dove
Goldcrest
Goldfinch
Great Tit
Greenfinch
Green Woodpecker, Yaffle
Herring Gull
House Martin
House Sparrow
Jackdaw
Jay
Kestrel
Linnet
Long-tailed Tit
Magpie
Meadow Pipit
Mistle Thrush
Pied Wagtail
Redwing
Robin
Skylark
Song Thrush
Sparrowhawk
Starling
Swallow
Swift
Wood Pigeon
Wren

Mammals

Badger- COMPARTMENTS 4, 5
Grey Squirrel
Mole - COMPARTMENT 5

Amphibians

Smooth Newt - MFG
Marsh Frog – MFG

Moths. All recorded in the MFG

TORTRICIDAE
Pandemis corylana
PYRALIDAE
Mother of Pearl
Rush Veneer
GEOMETRIDAE
Riband Wave
The Phoenix
Brimstone
Small Emerald
Small Fan-footed Wave
Purple Bar
ARCTIIDAE
Ruby Tiger
Common Footman
NOCTUIDAE
The Dun Bar
Flame Shoulder
Double Square-spot
Large Yellow Underwing
Lesser Broad-bordered Yellow Underwing
Common Rustic
Shuttle-shaped Dart
The Clay
Setaceous Hebrew Character
The Rustic
Garden Dart

Bees, Wasps, and Ants

Anthophora plumipes, Hairy-legged Flower-bee - MFG

Bombus lucorum, White-tailed Bumble-bee - COMPARTMENT 5

Bombus terrestris, Buff-tailed Bumble-bee – COMPARTMENT 3

Bombus pascuorum, Common Carder Bumble-bee - MFG

Diplolepis rosae, Robin's Pin Cushion / Bedeguar – COMPARTMENT 4

Dolichovespula sp., Social wasp sp. – broken tree-hung nest in Wood

Megachile lignisecа, Wood-carving Leaf-cutter Bee - MFG

Beetles

Onthophagus Coenobita, Burnished Coenobita - MFG

Halyzia 16-guttata, Sycamore Ladybird - COMPARTMENT 4

Molluscs

Cepaea nemoralis, Black-lipped Banded Snail - COMPARTMENT 4

Fossils

Siphonia koenigi, King Sponge COMPARTMENT 4