



Woodland Management Plan

Cooper's Wood



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1.0 Overview

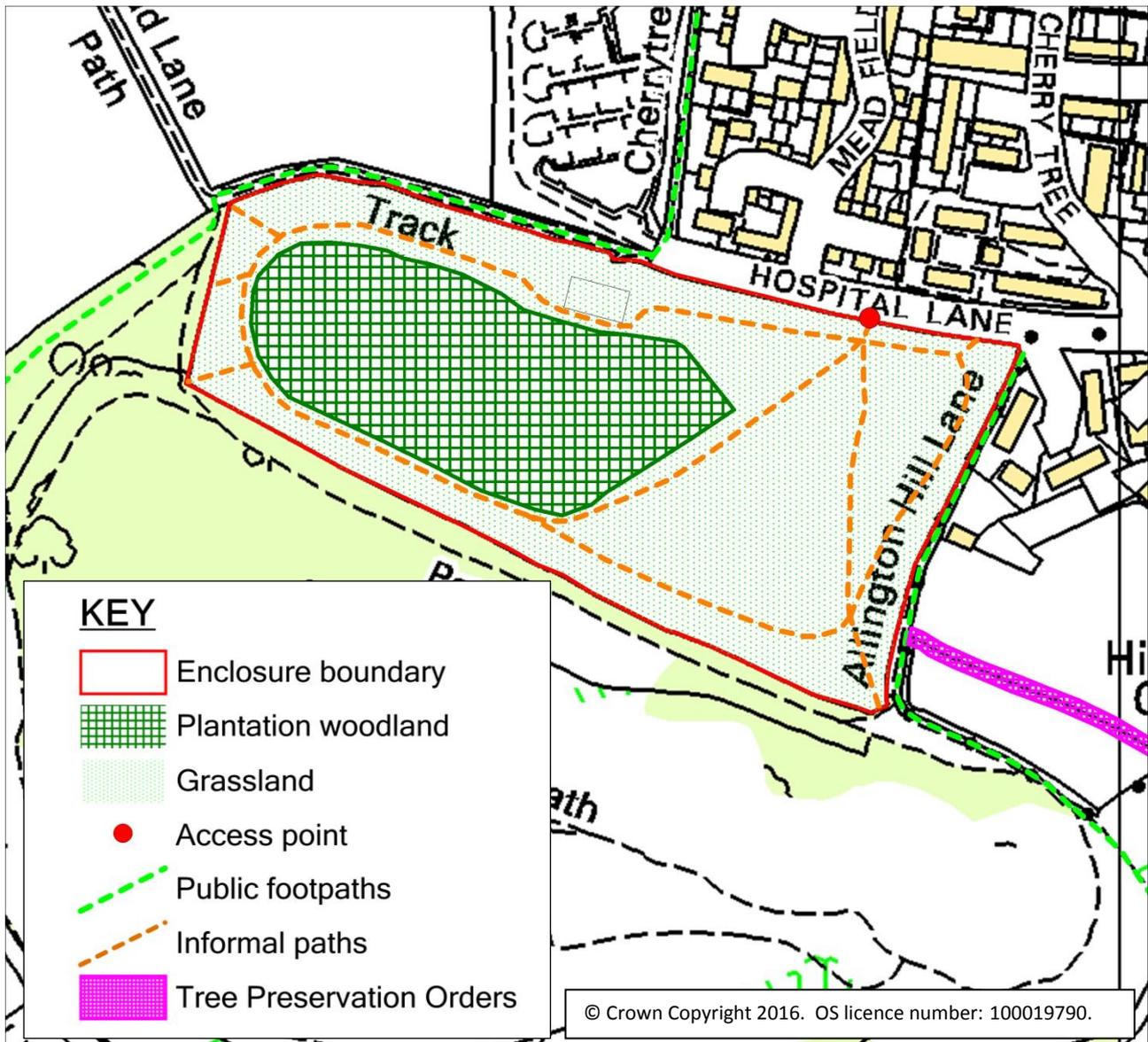
1.1 Site Details

Name of wood: Cooper's Wood

Address: Hospital Lane, North Allington, Bridport, Dorset (approx. DT6 5RG)

Central O/S grid ref: approx. SY 457 936

Area: a plantation of about 1.5 hectares within a wider enclosure of approx. 4.6ha



Above: Cooper's Wood and Field, the boundary of which is marked red.

1.2 Description

A mixed broadleaf plantation planted in 2004, covering about 33% of a greenfield site, on the northern boundary of Allington Hill on the outskirts of Bridport.

Situated at about 35m above sea level the wood sits on a north facing slope overlooking North Allington, Bridport Community Hospital and the wider landscape. The wood falls within the

catchment of the upper Brit on free draining silty South Petherton soils over Jurassic and Cretaceous siltstone and sandstone.

Planted in a field, the wood has an open grassland area to the east and a belt of grassland running about the remainder; the sum enclosure is bordered by hedges of varying ages and make up. The majority of the plantation is mix of ash and pedunculate oak, planted at 3m spacings, with groups of hazel and field maple interspersed along the southern fringe. The north-western corner of the plantation has a patch of planted willow (sallow or goat willow) as well as a mixed area of guelder rose and crab apple. The ground flora/grassland beneath the canopy has generally been subdued by summer shading and several more woodland associated plants, namely hart's-tongue fern, wood avens and bramble, have come in and are dotted about the plantation. It was very encouraging to see some natural regeneration/colonisation in the wood in the form of hazel saplings and the occasional pedunculate oak seedling. The odd sycamore seedling was also seen.



Above: a stand of predominantly ash.



Above: tall hedge on the northern boundary.

The boundary hedges vary in make up and structure. About half of the northern boundary hedge, bordering Hospital Lane, was likely planted at the same time as the plantation (2004) and is a mix of hazel, hawthorn, field maple and blackthorn. The hedge has been laid in the past and many of the field maple shrubs left as standards. The remainder of the northern boundary hedge is unmanaged and a mix of mature hazel, willow / goat willow and bramble with standard ash and pedunculate oaks amongst. The southern boundary is a bank with mature hazel stools growing along it, together with the occasional holly and field maple trees, and some elder.

The grassland is generally dominated by more tussocky species, such as cocksfoot, though a programme of sward enhancement is underway with the expert assistance of Dorset Wildlife Trust's Nick Gray. The open area of grassland on the east side of the enclosure has a number of pedunculate oak and a couple of ash planted at very wide spacings in parkland style. There are various paths and a range of benches and childrens climbing frames distributed about the area.

1.3 History

The 1840 Tithe map for Allington Parish shows the area divided into two fields. The western field was known as 'Trevets Close and Four Fields' and was down to arable (at the time it was owned and occupied by a Mr James Hodder). The eastern field, 'Abbots Close', was a meadow of about 3 acres (and was owned by John Cole and occupied by George Hallet).

By the start of the twentieth century the area was combined into one field, as shown on the 1902 25" O/S map, bordered by Mead Lane (now part Hospital Lane) to the north, Allington Hill Lane to the east, and there was an orchard on the eastern side of Allington Hill Lane. Both of the above maps show Allington Hill as being unwooded.

As mentioned above, Cooper's Wood was planted in 2004 on a greenfield site.

1.4 Current Management

Cooper's Wood Community Group have actively undertake a range of management works about the site. The grassland is routinely cut and there is an ongoing programme to increase the floristic diversity of the grassland, including the sowing of yellow rattle to reduce the grasses vigour. Part of the northern boundary hedge has been

laid in the past and is due to be laid in the future and some scrub on the eastern boundary has been recently cut back. Various benches and childrens play frames have been put up about the area.

In the wood, the Community Group has maintained open walkways running through the plantation and the resultant brush has been used to great effect to create a couple of dead hedges; one bisecting part of the wood and the other on the western boundary.

1.5 Wildlife

Given the age of the plantation and the fact that it was planted on relatively agriculturally improved grassland, there is currently not a great diversity of ground flora in the wood and its surrounding grassland. This written, active measures are in place to increase the diversity of the grassland and it is encouraging to see the likes of hart's-tongue fern within the wood, as well as self-sown hazel saplings.

No doubt various birds, mammals and invertebrates occupy the plantation at different times. It is, however, the boundary hedges and scrub that likely supports the greatest variety of wildlife at the moment. The tall unmanaged hedge on the northern boundary, along Mead Lane, is likely to be particularly accommodating, given the range of trees/shrubs, structures and flowering plants, such as bramble. Nest boxes were also noted in some of the mature hedgerow trees. The value of the wood to wildlife will continue to increase year on year and there is scope to monitor these changes and chart progress.

1.5 Protected Species

The dormouse and all species of British bat are afforded protection under various UK legislation, including the Conservation of Habitats & Species Regulations, 2010. On walking the plantation, no evidence of dormice was noted, nor were any crevices seen that might accommodate resting bats. Given the age and structure of the trees/shrubs, it is unlikely that either dormice or bats breed or rest during the day in the plantation.

I am not aware of any badger setts within the plantation; badgers are protected under the Protection of Badgers Act, 1992.

In general, the nests and eggs of all bird species are protected during the breeding season under the Wildlife & Countryside Act, 1981. It is highly probable that various species of bird nest in the

plantation eg woodpigeon and goldfinch in the trees and, in the dead hedge, wren. Nesting is generally restricted to the spring and summer months when trees are in leaf.

1.6 Infrastructure

Although no hardstanding tracks exist within the enclosure, vehicular access to the site is good, given the gateway off Hospital Lane. There is also a small area of hardstanding by the main gateway. The soil is relatively free draining and no ditches or drains were noted about the site.

1.7 Public Access

Cooper's Wood and Field is a community area; the entire enclosure is open to the public and a display board at the gate off Hospital Lane welcomes people to the site. The area is easily accessible from both Hospital Lane, to the north, and Allington Hill, to the south, and a public footpath runs up Allington Hill Lane, on the eastern boundary. Various paths run across the site and, given its close proximity to North Allington and Bridport, the area is heavily used by the public, including many dog walkers (waste bins are situated about the site).

1.8 Current Designations

The enclosure sits within the Dorset AONB (Area of Outstanding Natural Beauty). The land has no Site of Special Scientific Interest (SSSI) or Scheduled Monument (SM) statutory designations that I am aware of, nor is the wood a Site of Nature of Conservation Interest (SNCI).

I am not aware of any SSSIs or Scheduled Monuments within a 1km radius of the wood, although Asker's Meadow and Jellyfields Local Nature Reserves lie on the south-east side of Bridport.

The enclosure does not form part of a Conservation Area and I am not aware of any trees on the Cooper's Wood/Field ground being subject to a Tree Preservation Order (TPO), although a neighbouring line of trees to the east is covered by a TPO (see above map).

1.9 Landscape

Cooper's Wood sits on the boundary between town and countryside. The countryside to the west is a rolling landscape of irregular shaped fields, much of which is permanent pasture, divided by hedges and hedgebanks. Although not a particularly wooded landscape, Allington Hill lies immediately to the south and various other deciduous woods lie to the north-west, including one under ½ mile away and Park Copse about 1m away. Park Copse is recorded on the Ancient Woodland Inventory as a Plantation on an Ancient Woodland Site (PAWS), that is a site that has been wooded since 1600AD but planted with non-native trees in the meantime. Other than Allington Hill, connectivity to other woodland is weak.

The woodland was planted to a design (shape and size of plantation, species choice etc) that is sympathetic to the surrounding landscape and is not unduly out of character.

As far as Natural England's landscape based National Character Areas (NCAs) are concerned, the site falls within the 'Marshwood and Powerstock Vales' NCA (139).

1.10 Ownership/tenure

I understand that the wood is owned by the Woodland Trust and that it was let to Allington Parish Council in about 2005.

1.11 Sporting Rights

I presume that the sporting rights are included in the lease held by Allington Parish Council.

1.12 Interested Third Parties

- Local residents
- Allington Parish Council
- Woodland Trust

Local residents have a considerable interest in Cooper's Wood and Field, most particularly members of the local Community Group who volunteer their time and lead in the practical management of the site. Given the site's immediate proximity to North Allington and neighbouring Bridport, the area is in near continual daytime use by locals, including many dog walkers.

I understand some members of the community choose not to engage with the Community Group nor contribute to the site's management but continue to feel free to express their opinion on what should or what should not have been done.

Most unfortunately there have been some isolated instances of vandalism of trees and community installations.

1.13 Resources

Members of Cooper's Wood Community Group and other members of the public contribute their time to manage the site; such volunteer labour being a very valuable resource. I understand that machinery used in the routine management of the site, for example the lawnmower used to cut the grassland, is the property of volunteers – who generously undertake the work as volunteers in a public spirited fashion. The Community Group nor the Council have any livestock.

1.14 Grant Support, Standards etc

I understand that Cooper's Wood is not currently subject to any grant scheme agreements.

1.15 Contact details

Mrs. Cathy Harvey (of the Cooper's Wood and Field Community Group)

crichardjo@aol.com.

2.0 Aims, Objectives and Rationale

The aims in managing Cooper's Wood include:

- Social. To encourage the enjoyment and appreciation of the site amongst local residents;
- Environmental. To conserve and enhance the woodland habitat/wildlife;
- Economic. Where possible, to minimise the costs of management.

2.1 Social (Local Community)

To provide an area that is freely accessible to the majority of the local community and that can be enjoyed by a range of age groups and people with different interests.

Other aims relating to the local community include:

- Increase understanding and support for woodland management practices;
- Encourage a general interest in and enjoyment of the countryside;
- Improve understanding of woodland habitats and wildlife, the ecological requirements of wildlife and the associated management required to conserve it;
- The recruitment of volunteers to assist with woodland management work;
- The recording of wildlife in and around the wood;
- Encourage fitness and wellbeing amongst the local community;
- Provide opportunities for the local community to meet, socialise and work together.

2.2 Environmental (Woodland Habitat, Wildlife and Biological Diversity)

The basic aims in managing the woodland are to:

- Maintain and enhance a sustainable woodland habitat;
- Increase structural and age diversity amongst trees/shrubs;
- Increase diversity in plant species (trees, shrubs, grasses, flowers etc);
- Support a greater number and range of woodland related wildlife;
- Conserve soil and water resources.

Woodland with a greater range of structures and plant species supports a much greater diversity of other wildlife and increases the habitat's flexibility and ability to survive change eg as a consequence of disease or extreme weather events.

More specifically the aims and objectives include:

- Thin the plantation to allow the balanced growth of tree canopies;
- Actively encourage and manage the natural succession of trees and shrubs;
- Plant more species to increase the diversity of trees/shrubs in the wood;
- Maintain and create open areas;
- Develop a sloping profile to the woodland edge;
- Increase and manage patches of scrub of varying heights;
- Preventing soil erosion and the pollution of water waterbodies.

Woodland is, in most instances, the climax plant community; that is grassland, heathland and scrub is evolving, through a process of natural succession, towards woodland. Active intervention and management is required to increase and maintain structural diversity within woodland; the reshaping of woodland that, in the prehistoric past, might have been as a consequence of storms, fire or disease or the activities of so-called 'keystone species' such as the woolly mammoth.

With reference to wildlife, the aims and objectives include:

- Increase the diversity of the wood's ground flora, shrubs and trees, which, in turn, will support a greater range of wildlife;
- Increase the availability of pollen and nectar from different flowers and shrubs for pollinators to utilise throughout the year;
- Increase the numbers of potential nesting/breeding sites for wildlife;
- Increase the quantity of deadwood about the site.

Some trees/shrubs are utilised by wildlife more than others, as illustrated in a paper written by the late Prof Sir Richard Southwood (Southwood, T. R. E. 1961. The numbers of species of insect associated with various trees. J. Animal Ecology 30: 1-8). The four groups of trees he identified as having the greatest number of insect associations are listed below; the presence of these trees within woodland will obviously help enhance the areas biological diversity.

- Oaks (pedunculate and sessile): 284 insect species associated
- Willows (incl goat willow and sallow): 266 insect species associated
- Birches (incl silver and hairy): 229 insect species associated
- Hawthorn: 149 insect species associated

Given that, in Britain, there are some 5,500 species of flies, 4,000 species of beetles, 2,500 species of moths (including micro moths) and 6,000 species of parasitic wasps, Southwood's study likely underestimates the number of different insect species associated with these groups of trees.

2.3 Economic (Economic Sustainability)

The management of semi-natural woodland is very unlikely to be a financially profitable operation – though the site's value to the community and the value of conserving species, habitats and parts of the landscape are fundamentally valuable achievements in their own right.

In financial terms, the cost of managing a small community woodland can be reduced with the help of the volunteer effort of local residents. Such volunteer effort can be very valuable when undertaking a range of tasks. However, volunteers may not possess the machinery or may not have the appropriate training/qualifications to undertake operations such as tree felling.

Professional contractors can be employed to undertake more involved or more hazardous works. When using a contractor, costs can be reduced or occasionally completely mitigated when the contractor can make use of the underwood or timber you have identified for removal eg firewood or charcoal. On rare occasions, a small profit might be made by selling standing timber for firewood or other uses. Small scale thinning work conducted by a professional will rarely generate any income.

Possible uses for extracted timber and underwood include:

- Firewood
- Charcoal
- Hurdles
- Basket making
- Bean poles
- Wood turning and carving
- Furniture
- Construction (ranging from structural timbers to floor boards)

3.0 Future Management

3.1 Natural colonisation/regeneration

It was great to see various hazel seedlings and saplings growing about the wood, as well as a few oak (and sycamore); such shrubs likely being 'planted' by squirrels and jays. If they survive, these hazel shrubs will increase the structural and species diversity within the wood, giving the plantation a more natural appearance and supporting a greater range of wildlife. The presence of these saplings also indicates that overgrazing by deer is not currently a problem in Cooper's Wood, most probably thanks to the frequent use of the site by walkers and their companion dogs.



Above: one of various hazel saplings.

Hazel seedlings/saplings, and those of other trees and shrubs, should be conserved; where necessary, mark them with white topped stakes to reduce instances of damage during thinning operations (see section below) and influence tree removal. Given that the seedlings appear healthy and ungrazed by deer, I do not currently see the value or benefit of placing protective tree tubes about them.

On visiting the wood in December we noted several sycamore seedlings. Whilst my advice at the time was to remove them, on account of sycamore being a non-native and sometimes a highly invasive species, I have changed my view. The odd sycamore seedling allowed to grow up would further increase diversity in the wood and provide one more species that could take the place of ash, should the ash succumb to ash die back disease in future (see section below). As such I recommend leaving sycamore seedlings with a view to allowing them to grow up or thinning them out a later date.

3.2 Thinning



Above: a group of ash trees in the plantation.

The plantation would benefit from thinning, to enable the tree crowns to continue to develop and encourage the growth of well-proportioned trees that are not too tall and thin (tall thin trees are more vulnerable to being blown over). Thinning will also help make space for planting trees and shrubs within and on the edge of the wood (see Planting section below). The timing is about perfect for a first thinning in Cooper's Wood, considering the current height and spacing of trees.

On securing a felling licence, I suggest a 30% thinning in the wood, concentrating on the oak, ash, field maple and crab apple trees. For the

time being, given their current size and the maximum size that they will grow to, I suggest leaving the hazel and guelder rose shrubs.

Although ash should be retained in the plantation, due to the threat of disease (see section below), where appropriate, I suggest thinning ash trees in favour of neighbouring oaks. Given the nature of grouped species planting in the wood, a significant proportion of ash trees should remain post thinning.

Ideally some of the felled timber should be retained on site and several habitat piles created (see Dead Wood section below). This written, I appreciate that small quantities of cut timber left on site may disappear and find its way on to the log piles of local houses. Running a couple of strands of plain fencing wire over such piles and putting up an explanatory notice may help. All other timber extracted during the thinning process could be used for firewood or could be made into charcoal (a traditional use of underwood and a skill still practiced by a few woodsmen). I have detailed the name of a local charcoal maker (Ben Short) in Appendix C. Ideally cut timber should be stacked on site and only removed or processed when ground conditions are sufficiently dry so not to cause excessive soil compaction and rutting.

Brash can either be burnt or laid into dead hedges. Although brash can be left lying all about the site, such a practice does not benefit the target ground flora. Burning should be restricted to as few sites as possible and in locations where there is no tree canopy immediately overhead. Dead hedges have already been built to great affect at Cooper's Wood and have the benefit of providing more dead wood habitat and cover for small mammals, some nesting birds and a wide range of invertebrates.

The above proposed thinning operations will entail felling approx. 495 trees with an approx. total volume of 30m³ over approx. 1.5ha and could be conducted over a five year period. Although the thinning operation should result in a relatively even reduction of trees throughout the plantation, there is scope to target trees for removal with reference to natural regeneration and planting. At the same time of the thinning operations, an additional 5m³ of trees can be felled per calendar quarter, under the felling licence allowance, to create additional space to further accommodate natural regeneration and planting (see section below).

Thinning operations should be regarded as an ongoing and routine task to be conducted periodically to facilitate the balanced growth of tree canopies within the plantation.

3.3 Planting

Ancient semi-natural woodland that supports a wide range of native trees and shrubs should, ideally, regenerate itself without the need for planting. Natural regeneration has the advantage of propagating stock of local provenance that is suited to growing in local soils and climates; it also reduces the chances of bringing in disease and pests. Cooper's Wood, however, is a new wood planted on a green field site with limited neighbouring woodland and so the seed bank and sources of seeds of native trees and shrubs in the local area are non-existent or limited.

After conducting the proposed thinning, I suggest planting a selection of the following tree species in the heart of the plantation, amongst the ash and oak trees. I have detailed the numbers of trees to be planted in brackets. I have only suggested a few of each species to increase the diversity of the wood and help make it more resilient to change, as might be forced by disease

(see section below). The felling of additional trees to those thinned, under the 5m³ per calendar quarter felling licence allowance (see Appendix B), is recommended to create additional space in the surrounding canopy to sustain and encourage the growth of newly planted saplings.

- Small-leaved lime (5)
- Wild cherry (5)
- Hornbeam (5)
- Beech (5)
- Yew (3) (northern side of plantation)

I also suggest planting a range of smaller tree species and shrubs, named below, about the perimeter of the core ash and oak plantation. Again the objective is to increase diversity within the wood but also to create a more sloping edge to the wood with a greater range of flowering shrubs. I have listed the species as tall, medium and short. Short species, such as dogwood, should be planted on the edge of the wood, taller species, such as silver birch and, should be planted next to the ash and oak trees and the medium species in between. The silver birch and wild privet would benefit from being planted in single species groups; all other species can be mixed up and planted individually. Planting of the below mentioned shrubs and trees should be biased towards the southern side of the plantation.

- Silver birch (tall) (20)
- Rowan (tall) (10)
- Holly (tall) (10)
- Common whitebeam (5)
- Hawthorn (medium) (30)
- Buckthorn (medium) (5)
- Dogwood (short) (30)
- Wild privet (short) (30)
- Dog rose (30)
- Spindle (short) (15)

All tree and shrub saplings should be grown from seed of British provenance – ideally as local provenance as possible. Planted trees should be protected by a 1.2m tall tree tube and stake.

3.4 Coppicing and Pollarding

The coppicing of hazel was traditionally undertaken to obtain hazel branches (rods) for hurdle making. Coppicing is now primarily undertaken as a woodland management practice to conserve wildlife. Coppicing discrete areas (coupes) on a six or seven year rotation periodically allows more light onto the woodland floor and so encourages the growth of woodland flowers and low growing shrubs, which in turn accommodates a greater range of other wildlife such as warblers and some butterflies.

The hazel growing along the southern side of Cooper's Wood would benefit from being coppiced in discrete coupes, to ensure that there is an ongoing range of heights/ages of hazel regrowth. Given the current height of the hazel and other more immediate management requirements, there is no need to start a coppicing rotation in the short term; coppicing can be put off for another two to five years without issue.

Coppicing works should not require a felling licence (see Appendix B) and I suggest coppicing hazel in coupes of about 10m x 10m, which might contain five to ten hazel stools. Any usable underwood can be removed from site for firewood etc. Some brash can be laid wigwam style over coppiced stools or used to make a dead hedge and excess brash can be burnt on site. Burning should be restricted to as few sites as possible and in locations where there is no tree canopy immediately overhead.

After hazel stools are coppiced, a common problem is that regrowth is subdued or prevented by grazing by deer (roe, fallow, sika etc). With reference to the natural colonisation of hazel through the plantation, I do not think that overgrazing by deer is currently a problem in Cooper's Wood. This written deer grazing/damage should be monitored (see below section). Methods of lessening or preventing the overgrazing of regrowth includes laying cut brash over recently cut hazel stools or building a dead hedge enclosure around recently coppiced coupes.



Above: patch of willows at Cooper's Wood.



Above: beefly feeding on goat willow blossom.

The patch of willows (goat willow or sallow) on the north-western corner of the plantation have been planted at relatively close spacing, considering the typical spreading form of these species. The willow stand will benefit from some periodic coppicing, although I recommend that two or three plants are left to grow into larger more mature trees. Goat willow and sallow are both very good spring sources of pollen and nectar, often being one of the first shrubs to flower in the year, and provide an essential source of food for many pollinators, including various species of queen bumblebee. Larger more mature trees will grow more flowers and support more insects. As and when necessary, large willows can be coppiced, without causing long-term harm to the tree.

The Group might also consider pollarding one or more of the oaks planted at very wide spacing, parkland style, in the grassland area to the east of the main plantation. Pollarding is a process similar to coppicing but involves cutting the tree at about head height (1.8m above the ground), rather than at ground level. Pollarded trees take a different form and, if pollarded periodically on a 15-20 year cycle, will live significantly longer than an unpollarded tree. Oaks are suited to pollarding but should be first pollarded when relatively young. A newly pollarded tree is not guaranteed to survive and, in the first instance, the practice may be viewed unfavourably by the public. This written, these oaks are currently well suited to the practice and pollarding some of the trees would add a different element of traditional woodland management to Cooper's Wood. Please note, however, that pollarding, like coppicing, should be an ongoing commitment that will

most likely require professional contractors to undertake the work. The pollarded timber can be used for firewood, charcoal etc.



Above: standard trees suited to pollarding.



Above: young oak pollard, Powerstock Common.

3.5 Woodland Edge

The edge of woodland is often particularly biologically diverse given the range of different habitats that wildlife can access in a small area. Ideally the woodland edge is graduated, as illustrated in the below diagram, to accommodate more plant species, ranging from trees to shrubs to flowers, which in turn provide wildlife with different flowers and fruits at different times of the year. A staggered woodland edge also tends to offer more combinations of sunlight and shade, cover and open ground.



Above: graduated woodland edge (FC).

Where appropriate, thinning, planting and coppicing operations should help create and maintain a graduated woodland edge.

3.6 Boundary Hedges

The Cooper's Wood enclosure is bordered by hedges of varying descriptions. The northern boundary hedge bordering Hospital Lane was likely planted in 2004 and has been laid in the past and the uncut regrowth would benefit from being laid in the next couple of years. On this hedge being laid in the past many of the field maples growing along the hedge were left as standard trees. Whilst it is great to see standard trees in a hedge, in my opinion too many field maples were left as standards and shade cast over the hedge beneath will be considerable in summer months now and in the future. I suggest considering felling (or perhaps trying to lay) 50% of the standard field maple trees growing in the Hospital Lane length of hedge.

Given the absence of any bank, you might consider laying the Hospital Lane hedge South of England style with stakes and top binding, rather than being laid flat to the ground in a Devon style. However, if laid South of England style, the hedge would benefit from being periodically cut every year or three, to maintain the character of the hedge; rather than simply being periodically laid without intervening cutting (as Devon style is better suited to). The choice of hedge laying

style should be made with consideration of the labour and machinery available to the Community Group responsible for managing the site.



Above: hedge bordering Hospital Lane.



Above: hedge bordering Mead Lane.

The northern boundary hedge bordering Mead Lane is currently tall and relatively unmanaged and contains a range of species including hazel, goat willow and bramble, together with standard ash and pedunculate oak trees. Given that the hedge is uncut and contains quite a lot of bramble and goat willow, it offers many insects and other wildlife a range of food, shelter and nesting sites. Ideally this length of hedge should generally retain its tall uncut character. Should you feel that the incursion of bramble or willow into the open ground is excessive, I suggest cutting back discrete section of scrub in different years – to retain continuity in the provision of blossom and cover.

The southern boundary consists of bank, along which are growing a number of mature hazel stools, together with the occasional mature holly and field maple. In my opinion, the hazel is probably too large to be laid. I see nothing wrong with maintaining the existing character of the boundary, perhaps coppicing the odd hazel stool every couple of years to increase structural diversity.



Above: hedge laid on a bank Devon style.



Above: hedge laid Midland style (somewhat similar to South of England style).

3.7 Deadwood

Just as leaves, blossom and fruit provide an essential source of food for an array of wildlife, so does deadwood. 13% of all species of plants and animals known in the UK are estimated to be directly dependent upon deadwood habitats and deadwood is also a form of carbon storage. The greater diversity of deadwood the greater the range of species will be accommodated: standing deadwood, fallen deadwood, deadwood in shade, in sun and in the water and different species of tree in different phases of decay.

Cooper's Wood Community Group have worked to excellent effect to build a valuable provision of deadwood in the form of the dead hedge running through the plantation and on the western boundary of the wood. Additional stacks of deadwood of a larger diameter would accommodate an additional range of fungi, mosses and invertebrates. I appreciate that stacks of potential firewood may go missing and so it may not be practical to create log piles. Log piles could be secured with plain fencing wire ran over the pile and staked into the ground; an alternative option would be to incorporate some larger logs into the base of any new dead hedges built.



Above: dead hedge bisecting the plantation.



Above: an example of a wildlife habitat log pile.

3.8 Tree Damage

Both deer and squirrel are responsible for significant damage in British woodlands; deer by overgrazing the ground flora and preventing the natural regeneration of trees and shrubs; and squirrels by ringbarking young trees, such as beech and sycamore, and causing subsequent deformities in growth. On walking Cooper's Wood no significant deer or squirrel damage was noted, indeed there is evidence of uninhibited natural regeneration of trees and shrubs. I suspect that regular dog walking in and around the plantation helps to reduce the occurrence of deer and related damage.

Deer and squirrel damage should be casually monitored on a regular basis whenever walking the site and the impacts of these species periodically reviewed. Should significant damage be noted then methods of damage limitation and species management can be considered; accepting that the range of management techniques available for use is likely to be limited by the degree to which the woodland is used by the public.

Ivy is sometimes thought to damage trees by strangling its host – this is not the case, although ivy can make weakened trees more vulnerable to wind blow. On the positive side, ivy provides a

critical source of pollen and nectar to various bees and hoverflies in the autumn, when most other plants are no longer in flower. In the autumn, warblers, such as chiff chaff, can often be seen feeding up on pollinating insects. Ivy berries are also a valued source of berries in late winter and early spring for various birds, including blackbird and song thrush.

Although no ivy was noted on any plantation trees, there is ivy growing up some of the hedgerow trees. I recommend that ivy plants are generally left to grow up trees to provide a variety of food sources as well as nesting and hibernating cover.



Above: bee and hoverfly feeding on ivy flower.

3.9 Tree Disease

There is little the Community Group can do to prevent the spread of tree diseases into the wood. However, casual monitoring for disease is recommended and suspected cases of disease should be reported to the Forestry Commission.

Of the various tree diseases about, ash dieback and acute oak decline are two diseases that are likely to threaten the wood's current state.

Ash dieback is caused by the fungus *Hymenoscyphus fraxinea* and causes leaf loss, bark lesions and crown die back and typically leads to the tree dying (mature trees survive for longer). The disease is spread by airborne spores and by the movement of trees, for example infected stock bought in from a nursery. I understand that there are only a couple of confirmed cases of ash dieback in Dorset, though the disease is expected to spread across the county. Symptoms of the disease are pictured and described on the Forestry Commission's website (www.forestry.gov.uk).

The current recommendation is not to remove ash on account of the disease (the more trees there are the greater the chance of individual trees proving to have resistance to the disease); this written ash should be thinned as necessary in routine woodland management. On managing the wood, thought should be given to replacement trees/species as might retain some of the wood's character, should the disease kill the wood's ash trees in the medium term (as currently seems likely).

Acute oak decline affects Britain's two native oaks (pedunculate and sessile). It is thought to be caused by a bacteria and possibly spread by a native species of beetle. The disease is characterised by dark fluid oozing from cracks in the bark and infected trees suffer rapid canopy dieback before death. I am not aware of any confirmed cases in Dorset, though the disease has been recorded in Somerset. For more details of the disease see the Forestry Commission website.

3.10 Surveys, Monitoring and Review

Increased knowledge of the ecology and biological diversity of the wood will enable more informed decisions to be made about the wood's future management. Ongoing monitoring will allow the Community Group and others to assess whether existing management is helping to meet objectives or not. Periodic review of the wood's management is recommended.

Thorough structured surveys that can be repeated and compared are ideal, though such work requires expertise, resources and time and the most established conservation organisations often fail to organise such surveys on land they manage. Casual observations and informal records can be almost as valuable. The compilation of a species list is a start and the number of species recorded and the dates they were seen can also prove useful.

Individual recorders might also consider passing their records onto the Dorset Environmental Records Centre (DERC) (see www.derc.org.uk) or entering records onto the internet facility Living Record (www.livingrecord.net). I understand that all data entered onto Living Record is subsequently shared with Dorset Environmental Records Centre.

3.11 Grant Schemes and Standards

Unfortunately Cooper's Wood is not eligible to receive grant funding under the new Countryside Stewardship scheme due to its size; the total area of woodland entered into the scheme must be 3ha or more. (The Countryside Stewardship scheme replaces the previous English Woodland Grant Scheme.) Although this may be a disappointment, in practice the annual 'woodland improvement' payment would have amounted to £150 (£100/hectare) and the associated application and administrative requirements are relatively burdensome.

Other than the Dorset AONB funding, I am not currently aware of any other government or non-governmental organization grants that are applicable to Cooper's Wood.

The government has set out a UK Forestry Standard (UKFS), as regulated by the Forestry Commission, which is primarily targeted at larger scale woodlands and forest estates. The standard sets out requirements and guidelines to promote sustainable forest management under headings including biodiversity, climate change, the historic environment, soil and water. Some of the stated requirements relate to existing legislation, whilst other requirements are more vague. Adherence to the UK Forestry Standard is not a requirement or a formal process but essentially raises awareness of existing legislation and good practice guidelines. The document itself, as referred to in Appendix D, is long and quite repetitive and I have tried to incorporate some of the more relevant elements into this plan.

Related to the above is the UK Woodland Assurance Standard (UKWAS). The UKWAS is simply a document that lists compulsory requirements for woodland management that relate to planning, woodland design, forestry operations, wildlife conservation and the community. Woodland managed to these standards is regarded as being managed sustainably. Organisations such as the Forest Stewardship Council UK (FSC UK) and the Programme for the Endorsement of Forest Certification UK (PEFC UK) oversee certification to verify that areas of woodland are managed according to the UKWAS. Timber and wood products from certified woodland can be branded with the FSC or PEFC logo and may command premium prices as they are recognised as being responsibly sourced from well-managed woodland. However, the concept is not designed to apply

to small areas of woodland. In my opinion there is no advantage of securing a certificate for a small wood that secures little to no income from sales, given the bureaucracy and considerable expense related to accreditation.

Grown in Britain is another assurance scheme related to the branding of timber and wood products from sustainably managed woodland. Whilst this scheme is perhaps more applicable to smaller scale woods and enterprises, at the current time I do not see the benefit of applying for a Grown in Britain licence.

3.12 Health & Safety and Insurance

There are various health and safety considerations when managing woodland. Health and safety is particularly important given that a disproportionate number of accidents occur in the forestry sector. Users of potentially dangerous equipment should be suitably trained and be able to demonstrate a level of competence appropriate to the type of work they are undertaking. Following good practice guidance should reduce the likelihood of accidents and equipment should be suitably maintained and appropriate personal protective equipment (PPE) should be worn.

Various bodies, such as City & Guilds and Lantra, accredit training and assessment courses that award certificate of competence qualifications. Local organisations that run accredited training courses on the safe use of machinery, such as chainsaws and brushcutters, include Dorset Training and Newlands Training.

Risk assessments should help identify the main hazards on site and hazards related to management activities, including those involving volunteers. Simple and reasonably practicable measures can be identified and put in place to reduce risks and protect people. For example, whilst standing dead wood is undoubtedly a valuable habitat, there may be instances where an associated risk to human safety is deemed to outweigh the benefit to wildlife, resulting in standing dead wood being laid down, reduced in height, secured etc.

Signage should be put up to stop or divert public access when potentially dangerous woodland operations are being conducted. Advanced notice to the public of planned operations can help raise awareness and reduce unexpected inconvenience to walkers etc.

Harm can also be caused to the wider environment as a consequence of accidental or reckless actions, for example the incorrect application of herbicides or spillages of fuel or oil. Pesticides, including weed killers, should be applied only by suitably qualified individuals and operators should follow the usage instructions on the pesticide product label.

More complete information and guidance on health and safety issues is provided by organisations including:

- Health & Safety Executive (HSE)
- HSE Arboriculture & Forestry Advisory Group
- Forest Industry Safety Accord

Public liability insurance should also be held that includes cover for volunteers working on site.

4.0 Work Plan

Ongoing annual checks/actions (informal or otherwise)	Section
<ul style="list-style-type: none"> • Mark natural regeneration saplings of hazel etc 	3.1
<ul style="list-style-type: none"> • Monitor saplings and trees for deer browsing damage 	3.8
<ul style="list-style-type: none"> • Monitor trees for squirrel damage (spring) 	3.8
<ul style="list-style-type: none"> • Monitor trees for signs of disease 	3.9
<ul style="list-style-type: none"> • Record wildlife seen in and around Cooper's Wood 	3.10
<ul style="list-style-type: none"> • Clean out nest boxes (winter) 	

Action	Section
Autumn/winter 2015/16	
<ul style="list-style-type: none"> • Apply for felling licence 	3.2
<ul style="list-style-type: none"> • Start thinning programme 	3.2
Autumn/winter 2016/17	
<ul style="list-style-type: none"> • Lay Hospital Lane hedge 	3.6
<ul style="list-style-type: none"> • Continue thinning programme 	3.2
<ul style="list-style-type: none"> • Start planting programme 	3.3
Autumn/winter 2017/18	
<ul style="list-style-type: none"> • Continue thinning programme 	3.2
<ul style="list-style-type: none"> • Continue planting programme 	3.3
<ul style="list-style-type: none"> • Start hazel coppicing programme 	3.4
Autumn/winter 2018/19	
<ul style="list-style-type: none"> • Review management plan 	
<ul style="list-style-type: none"> • Continue thinning programme 	3.2
<ul style="list-style-type: none"> • Continue planting programme 	3.3
<ul style="list-style-type: none"> • Continue hazel coppicing programme 	3.1
Autumn/winter 2019/20	
<ul style="list-style-type: none"> • Continue thinning programme 	3.2
<ul style="list-style-type: none"> • Continue planting programme 	3.3
<ul style="list-style-type: none"> • Continue hazel coppicing programme 	3.4

Appendix A – Native Trees and Shrubs

The below list is in no way exhaustive but details the common names of many trees and shrubs that are considered to be native to Britain. The list has been divided into the categories of trees and shrubs; the difference between the two is arbitrary but generally speaking a shrub is a woody plant that often has several main stems arising at or near the ground and grows to a height of less than 6m tall (definitions vary). I have excluded from the list the smaller woody plants such as the heathers.

I have detailed in bold capital letters some of the species that might likely be found in semi-natural woodland in the vicinity of Bridport, taking account of the soil type at Cooper's Wood (again, the list is no way definitive).

With reference to an excellent study by the late Prof Sir Richard Southwood (Southwood, T. R. E. 1961. The numbers of species of insect associated with various trees. J. Animal Ecology 30: 1-8), I have marked with an asterisk those tree/shrub species that have the greatest number of insects associated with them.

Trees	Shrubs
<ul style="list-style-type: none"> • Alder • ASH • Aspen • BEECH • Bird Cherry • Black Poplar • CRAB APPLE • Crack Willow* • Downy Birch* • English Elm • FIELD MAPLE • HOLLY • Hornbeam • Large-leaved Lime • Lime (common) • PEDUNCULATE (COMMON) OAK* • Rowan • Sessile Oak* • Scots Pine • SILVER BIRCH* • Small-leaved Lime • Whitebeam • White Willow* • WILD CHERRY • Wild Service Tree • WYCH ELM • Yew 	<ul style="list-style-type: none"> • Alder Buckthorn • BLACKTHORN • Box • BRAMBLE species • Broom • BUCKTHORN • DOGWOOD • ELDER • GOAT WILLOW* • Gorse species eg Common Gorse • GUELDER ROSE • HAWTHORN* • HAZEL • HONEYSUCKLE • Hop • IVY • Juniper • PRIVET (WILD) • ROSE SPECIES eg Dog Rose • SALLOW / GREY WILLOW* • SPINDLE • TRAVELLOR'S JOY • Wayfaring Tree

Appendix B – Related Regulations and Requirements (as of Jan. 2016)

The below list provides brief reference to some of the regulations and legislation that may relate to woodland and woodland management (the list is not exhaustive). Please note the below references are in no way comprehensive and full details of the respective regulations and legislation should be sought from the appropriate authority.

Felling Licence (see www.forestry.gov.uk for more details, including application form)

- Responsible authority: **Forestry Commission (Defra)**

Permission is required, by way of receiving a felling licence from the Forestry Commission, before felling trees and shrubs. Various exemptions apply that enables some works to be undertaken without a felling licence; some examples of these exemptions are listed below:

- Felling 5m³ or less on your property in any calendar quarter as long no more than 2m³ is sold.
- Felling trees with a diameter of 8cm or less at 1.3m above ground.
- Thinning trees with a diameter of 10cm or less at 1.3m above ground.
- Coppicing trees with a diameter of 15cm or less at 1.3m above ground.
- Lopping and topping (usually includes tree surgery, pruning and pollarding)
- Felling necessary for the prevention of danger or the prevention or abatement of a nuisance.
- NOTE: If a tree/area is subject to certain designations eg TPO, CA, SSSI etc (see below) other permissions may be required, irrespective of whether the above exemptions apply – check for designations before applying.

The Forestry Commission may impose conditions on granting a felling licence, for example restocking conditions.

From the date of submitting an application, it is likely to take two months before a decision is made, unless the application relates to thinning work in which case a response may be received after one month.

Protected Species (see www.legislation.gov.uk and www.forestry.gov.uk for more details)

- Responsible authorities include: **Natural England (Defra)**

Various species of British wildlife are protected to some degree by a range of different legislation. Brief and incomplete references to some of the laws and some of the species they relate to are detailed below:

- It is an offence to take, damage or destroy any nest or egg of any wild bird (Wildlife & Countryside Act, 1981).
- It is an offence to cause significant disturbance to European Protected Species or damage or destroy their resting place. Listed species includes all species of bat, the dormouse and the great-crested newt (Conservation of Habitats & Species Regulations, 2010).
- It is an offence to disturb, damage or destroy a badger sett (Protection of Badgers Act, 1992).

There is scope to inadvertently break the law when undertaking various woodland management operations, for example felling a tree with a hole that happens to be accommodating bats. Some licences can be applied for to permit work that is likely to disturb some protected species. The Forestry Commission has written comprehensive guidance on processes to follow when planning woodland management operations at sites that may contain European Protected Species.

Protected Sites (see www.gov.uk and www.natureonthemap.naturalengland.org.uk for details)

- Responsible authorities include: **Natural England (Defra) and Historic England.**

Various designations exist that afford sites some form of statutory protection. Such designations prohibit damage to the identified feature and may require consent from the respective authority prior to undertaking certain operations. Some designations listed below:

- Site of Special Scientific Interest (SSSI). Sites designated on account of their biological or geological interest. Natural England.
- Scheduled Monument. Sites designated on account of their historic interest. Historic England.

Sites of Nature Conservation Interest (SNCIs), as designated by Dorset Wildlife Trust, are not afforded statutory protection but the designation recognises the importance of the wildlife habitat. The DWT can also provide free guidance on the management of the habitat.

See the Defra 'MAGIC' website (www.natureonthemap.naturalengland.org.uk) for the location and details of various statutory designations including SSSIs and Scheduled Monuments.

Tree Preservation Orders (TPOs) (see planningguidance.communities.gov.uk for details)

- Responsible authority: **local planning authority eg West Dorset District Council**

An order to protect specified trees, groups of trees or woodlands that have been deemed to have an amenity interest. Written consent from the local planning authority must be secured before listed trees are felled, topped, lopped or uprooted. Contact the local planning authority Tree Officer to establish the location of TPOs.

Conservation Areas (see historicengland.org.uk for more details)

- Responsible authorities include: **local planning authority eg West Dorset District Council**

A designation typically made by the local planning authority on account of an area's special architectural or historic interest. Trees within a specified area are also afforded protection. The local planning authority should be given written notice six weeks in advance of any planned actions to cut down, top, lop or uproot a tree within a Conservation Area.

Cross Compliance (see www.gov.uk for more details)

- Responsible authority: **Rural Payments Agency (Defra)**

Defra's Cross Compliance rules are applicable to holdings that receive Basic Payment Scheme payments and holdings subject to grant scheme agreements such as the English Woodland Grant Scheme, Environment Stewardship and Countryside Stewardship.

There are many conditions and requirements that form part of Cross Compliance, some of those that are more likely to be applicable to woodland are listed below:

- GAEC 7c: do not cut or trim trees on your holding between 1st March and 31st August inclusive (various exceptions).
- GAEC 7a: do not cut or trim hedges on your holding between 1st March and 31st August inclusive (various exceptions, including: can cut hedge if obstructing the passage of vehicles or pedestrians; can lay or coppice a hedge during April).

Breaching any Cross Compliance conditions and requirements may result in a proportion or all of scheme payments being withheld.

EIA (Forestry) Regs 1999 (see www.forestry.gov.uk for more details)

- Responsible authority: **Forestry Commission (Defra)**

The Environmental Impact Assessment (Forestry) (England and Wales) Regulations 1999 specify the need for an environmental impact assessment to be conducted if proposing projects involving afforestation and/or deforestation over specified threshold areas, depending upon whether the land is in a 'sensitive area' or not. For the purposes of the Regs, the Dorset AONB is a sensitive area. The Regs do not apply to most general woodland management works, such as thinning, coppicing and restocking.

Defra = Department for Environment, Food & Rural Affairs

Appendix C – Contact Details (as of January 2016)

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Chris Gibbard

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Ron Martin

Trees Officer (Tree Preservation Orders etc)

WEST DORSET DISTRICT COUNCIL

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Carolyn Steele

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DORSET ENVIRONMENTAL RECORDS CENTRE

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A couple of West Dorset contractors that I am aware of:

- Ben Short, 07568 071350, charcoalben46@gmail.com (woodcollier: charcoal, general woodland work, hedge laying etc)
- Ian Geddes, 07592 413917, ian.geddes@googlemail.com (contractor: tree surgery, hedge laying, general woodland work etc)
- EuCAN (Nigel Spring), 07981 776767, nigel@eucan.org.uk (contractor: scrub management, some woodland work, works with volunteer groups)

Please note that the above list is far from exhaustive and the inclusion of a contracting business in the above list does not constitute any form of recommendation.

Appendix D – Woodland Related Websites, Documents, Books etc

Websites

Forestry Commission: <http://www.forestry.gov.uk/>

- Guidance, advice, information sheets etc on woodland related grants, pest and disease identification and control, good practice, general management etc.

Natural England: <https://www.gov.uk/government/organisations/natural-england>

- A notably user-unfriendly website, where information is difficult to find. Includes details of the Countryside Stewardship Scheme. Easiest find information pages via search engines.

Woodland Trust: <http://www.woodlandtrust.org.uk/>

- Includes information on tree species, woodland related wildlife, pests and diseases and Woodland Trust initiatives and grants.

Deer Initiative: <http://www.thedeerinitiative.co.uk/>

- Various informative and helpful guides on a wide range of deer related subjects, including species ecology, surveying deer and management – see ‘Best Practice’ section.

Tree Council: <http://www.treecouncil.org.uk/>

- Information about charity, including their small grant programme.

Tree Register: <http://www.treeregister.org/>

- Details of an organisation that keeps a database of some of Britain’s most notable trees.

MAGIC / Nature on the Map: <http://www.natureonthemap.naturalengland.org.uk/>

- Excellent interactive mapping website providing various geographical information including the location of statutory designations, wildlife records, soilscape details etc.

Dorset Explorer: <http://explorer.geowessex.com/>

- Useful interactive mapping website with various geographical layers including historic aerial photographs.

Living Record: <http://www.livingrecord.net/>

- Online map based wildlife recording website.

Health & Safety Executive: <http://www.hse.gov.uk/treework/index.htm>

- Information, guidance and leaflets on forestry related Health & Safety issues.

Forestry related documents

Forestry Commission. 2011. The UK forestry standard, the governments’ approach to sustainable forest management. Forestry Commission, Edinburgh.

- A document that details forestry related regulations and a series of related guidelines; aims to raise awareness and encourage sustainable forest management. Some content most relevant to large scale forests; a long winded document, not concise and often repetitive.

Oliver Rackham

Oliver Rackham, who died in 2015, was the leading authority on woodland history and the history of the British countryside and the author of various books on these subjects. Rackham was very much an academic, although his work is enlightened by a thorough understanding of woodland ecology and the practicalities of management. Rackham’s books provide an understanding of how British woodland and its associated biological diversity has been managed, conserved and lost over the past one thousand years and more. Some books are more easily read and digestible than others and some are now out of print.