

Brandy Hole Copse Local Nature Reserve

Chichester, West Sussex

Draft document

Management Plan 2017 - 2021

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1 Management Plan: Aims

The purpose of this Management Plan is to identify objectives for managing the Copse, and to establish a work programme that will enable these objectives to be met. The Plan is thus a framework for action, for ensuring effective coordination between all those agencies which have a stake in the future of the Copse.

There are many potential threats, but also many opportunities, facing the Copse in the next five years (2017/21). The West of Chichester Strategic Development Location, more commonly known as the Whitehouse Farm site, envisages 1600 houses being built here between now and 2029, by the developers Linden Homes and Miller Homes. This large site is immediately to the south of the Copse.

So it is imperative that supporters of the Copse explain its key role in contributing to the biodiversity of this area. Building development must not be allowed to take place either in the Copse or in the two fields just south of the Copse. The incorporation of these two fields into an extended Brandy Hole Copse Local Nature Reserve will form part of this Management Plan. This is a real opportunity for the BHCLNR. What is at stake is protecting the Copse as a wildlife corridor between the South Downs to the north and Chichester Harbour to the south.

According to the local naturalist, Richard Williamson, the Copse has over 15,000 day visits per annum, by people wishing to enjoy this rural location which is so near to the city of Chichester. But so many species other than humankind, and their dogs, enjoy the Copse. According to Richard, 44 bird species have been recorded in the Copse, 114 different fungi, 26 species of butterfly, over 200 different moths, 174 different flowering plants, 282 types of beetle. As Richard has rightly written, '*Brandy Hole Copse is a wildlife city in its own right*' (FBHC Newsletter, Winter 2010).

The objectives of the Management Plan are as follows:

- to maintain the Copse as an informal woodland area and Nature Reserve
- to ensure that the Copse is a safe, clean, and well maintained site
- to protect and enhance the biodiversity of the Copse
- to extend the Local Nature Reserve by incorporating the Two Fields into it
- to protect its archaeological sites from further damage, wherever possible
- to increase community awareness of, and involvement with, the Copse
- to develop the educational uses of the Copse through an activity programme

The caveat should be added that efforts to achieve one particular objective should not be at the expense of any other objective. All activities undertaken must be consistent with the Management Plan, and have the prior approval of the Management Board. At its meetings, the Board will monitor the implementation of the Plan, and identify which of the objectives may require greater emphasis.

2 Location and Description of the Copse

Brandy Hole Copse, covering an area of 6.5 hectares (15 acres), is situated on the northern outskirts of Chichester (O.S. SU852066).

It was the first Local Nature Reserve to be so designated by Chichester District Council, in 2001. Previous to this it had been, successively, used by the Bishop of Chichester as part of the rough hunting grounds known as 'the Broile', then as a source of gravel for roadbuilding, then an area of sweet chestnut woodland which has been coppiced continuously since the 18th century. Many trees, however, have not been coppiced, and there are many fine examples of mature oak, ash, and sweet chestnut.

Although most of the Copse is secondary woodland, with trees dating to the mid C19th century, the existence of clumps of butcher's broom - that small holly-like plant - indicates that the Copse can be classified as ancient woodland, generally defined as woodland for which there is documentary evidence of being in existence pre-1600.

The Copse has three small ponds. The Brandy Hole is fed by a natural spring, whereas both Willow Pond and Cops Pond were dug out, the latter in 1990 by the RMP soldiers at the Roussillon Barracks.

Within the Copse there are two late Iron Age boundaries forming part of the Chichester Entrenchments, which stretch from East Ashling in the west to Halnaker in the east. They probably were tribal defensive boundaries, or corridors for movement between them. Within the Copse, they run from west to east across the northern boundary of the Copse, and from north to south along the eastern boundary.

The Copse is crossed north – south by the former railway line (1881) from Chichester to Midhurst, which is now used as a cycle and footpath, the 'Centurion Way' (1995).

There are also some unusual in situ remnants of Chichester's wartime concrete defensive anti -invasion structures dating to 1940. These are of four types: large square concrete blocks, pyramidal 'pimples' or 'dragons teeth', and conical cylinders, all attempting to prevent Panzer tanks from reaching Chichester.

The Copse is much loved and much used by locals, whether for walking, either with or without a dog, observing nature, and enjoying its tranquillity. There are at least a dozen public access points to the Copse. Cyclists can access Centurion Way along the causeway from the Pond to the railway bridge crossing, although cyclists are not permitted in the rest of the Copse (though this is difficult to enforce!).

3 Ownership of the Copse

The Copse is partly owned and partly leased by Chichester District Council. There are four Compartments (see Appendix 2). The District Council owns Compartment 1 and 3. It has a 50-year lease over Compartment 2, which is owned by Mr. John Henty of Petersfield; the lease expires in 2043. The Council has an ongoing legal agreement over Compartment 4, which is owned by Mr. James Rank of Sennicotts.

Compartment 1 East of Centurion Way

This is a thin strip of land from Brandy Hole Pond to the Centurion Way. It is mainly a wetland habitat on either side of the raised causeway which enables cyclists to access Centurion Way. Saplings need to be removed to prevent the land drying out. Annual cutting of this area should encourage the growth of wild flowers. The pond is periodically dredged, to remove silt. Small trees and scrub vegetation on the pond banks are periodically removed to reduce leaf litter. The pond often has algae cover, which inhibits its use by water fowl. A remedy to this problem of algae is urgent. On the western edge of the pond is a dipping platform. Residents of the East Broyle Estate use a path just north of the pond to access the Copse, and this has led to an area of exposed earth bank.

Compartment 2 Woodland and Entrenchments west of Centurion Way

This compartment has many mature trees, mainly oak and sweet chestnut. Juvenile woodland should be discouraged, to avoid desiccation. However, the undergrowth beneath the entrenchment bank needs maintaining to prevent erosion. There are many rotting or dead trees in this area, which should be left as fallen, for the benefit of woodpeckers and insect populations. Fallen trees sometimes led to the creation of unofficial footpaths and cycle tracks; these should be discouraged by creating dead-hedge barriers (a habitat which is good for birds and hedgehogs), or by growing holly or hawthorn, or using coppiced chestnut fencing. In winter there are large areas of standing water. The moisture content here prevents the Entrenchment banks from drying out. The anti-tank concrete blocks should have graffiti or ivy removed, but otherwise left in situ undisturbed, though monitored for stability. Any evidence of garden plants, such as iris, should be removed, and replaced with native marshy varieties, obtained from mud plugs adjacent to the Copse pond

Compartment 3 Brandy Hole Lane West

This compartment contains a mix of coppiced and mature sweet chestnuts, the two ponds (1990) and a specially created clearance glade east of the ponds. The many footpaths in this area should be kept clear; small trimmings could be used as a path surface. Coppiced poles can be used in dead hedging, alongside pathways and in habitat piling. The two pond have been cleared around their margins, to open them up to natural light penetration. However, Cops Pond has become heavily silted. I

Compartment 4 East Broyle Copse

Sweet chestnut has been coppiced here for over 250 years, on a regular rotation, during the winter months. The coppiced wood has commercial uses as post and rail fencing, and biomass. Coppicing by contractors for CDC is done on a 9 year cycle in nine sections. There are few standards left; these should not be felled. The Copse is crossed by many footpaths, some of which have been enlarged into 'rides', more open to sunlight. "Scalloping" of the rides' edges to produce a non-linear effect can be very valuable for butterfly species. Bramble should be cut back on certain rides to encourage the growth of other species, but retained elsewhere to promote its nectaring benefits to insects. More frequent coppicing of this area, creating more open glades with more warmth and light would lead to more plants, and hence more invertebrates and birdlife.

4 BHCLNR Management Board

The Copse has had a Management Board since 1992. Its members were as follows:

Chichester District Council	(one elected member)
Green Spaces and Street Scene Manager	(CDC officer)
Chichester City Council	(CCC councillor)
Landowner	James Rank, Sennicotts, Chichester
Landowner	John Henty, Petersfield
Lavant Parish Council	
Friends of Brandy Hole Copse	(two members)
Crumbles Conservation Volunteers	(two members)
Chichester Natural History Society	
Natural England	
Parklands Residents Association	
East Broyle Residents Association	
Summersdale Residents Association	
The Conservation Volunteers	
Sussex Wildlife Trust	
Chichester and District Archaeology Society	
.....any other bodies agreed by the Management Board	

Management Board meetings were scheduled to be held twice a year in the CDC offices in East Pallant House. Board members serve for four years. **However, the Board has not met since February 2013.**

A redrafted constitution for the Management Board needs to be approved, and the Board resurrected, in order to approve the newly drafted Management Plan for 2017/2021, and oversee its implementation.

This will enable the Board to have more authority in preparing grant applications for funding projects to enhance the community usage of the Copse.

It should be noted that Board members do not have any financial responsibility for the Copse.

The responsibilities of the Management Board are as follows:

- to prepare, implement and review the Management Plan and Work Plan
- to undertake regular risk assessment visits of the Copse
- to monitor external pressures to the Copse, eg. from housing development
- to determine the coppicing plan for the Copse
- to take steps to discourage the dumping of garden waste in the Copse
- to liaise with Chichester Access Group re improved disabled access
- to monitor inappropriate use of chemical spraying of brambles
- to monitor signage in the Copse
- to encourage care and respect for the Copse, and good behaviour in it
- to discourage litter, dogfouling, fires, camping and vandalism in the Copse
- to lobby CDC to produce Copse byelaws enforce them.
- to ensure that the Copse website is updated (www.brandyholecopse.org.uk)

5 Finance

The Copse is within the remit of Chichester District Council's Green Parks and Open Spaces Department. Within the confines of a tight budget under severe pressure, it is responsible for the following:

- dredging of the ponds on a periodic basis
- inspecting trees regularly, and felling dead, diseased or dangerous trees
- planning a cycle of winter coppicing, in conjunction with contractors, and ensuring the removal of the cut chestnut wood and chippings
- installing signage and nature interpretation boards
- carrying out risk assessments of all aspects of the Copse

6 Friends of Brandy Hole Copse

Formerly known as the Brandy Hole Copse Conservation Group, the Friends of BHC came into existence in 1988 as a result of the Great Storm in October 1987. This had a real effect on the Copse. Since then the Friends (a term adopted in 2007) have sought to conserve and improve its biodiversity, by taking an ongoing interest in its future. The Friends working party meets at the metallic tool storage container near Willow Pond each Wednesday afternoon at 2pm, weather permitting. Their efforts have contributed enormously to the wellbeing of the Copse, as have those of the Crumbles group who mainly concentrate on hedge maintenance. The main tasks of the working parties are listed below:

- lay and repair hedges, fences and gates
- clear footpaths in the Copse of brambles, bracken and undergrowth
- create or rebuild log piles as valuable habitats for insects and reptiles
- create temporary barriers where habitat enhancement is being carried out
- block off unnecessary access points with coppice thinnings
- build and maintain wooden steps in steep locations, to ease access
- remove litter and other such debris
- identify trees at risk of being blown down, on the advice of tree specialists
- monitor incidents of dogfouling

The volunteer working parties will seek to implement the Work Schedule as indicated in Appendix 5. Much of the work in the Copse will be essential ongoing maintenance, and the volunteers provide excellent service to the Copse. It must be recognised that there are severe constraints on what can be achieved in the Copse. Financial support from the District Council is limited, as are the numbers of Friends who attend the weekly working parties. Any proposals listed in the annual Work Schedule must be realistic and achievable within these constraints.

Friends of the Copse pay an annual subscription, and these funds assist in financing improvements to the Copse. The Friends prepared the Copse Code, a set of guidelines for users of the Copse. Copies of this Code have been laminated, and placed on posts in the Copse. There are also two large Interpretation Boards at the entrances to the Copse, by the Brandy Hole Pond and Willow Pond. These have information about the Copse's history and habitats. There is also a notice board, to inform visitors of forthcoming events. Further signage, explaining the reasons for coppicing, and the importance of the Entrenchments, would be welcome.

The Friends have an active Committee and membership, with its own website (www.brandyholecopse.org.uk). It publishes a regular Newsletter for members. Anyone with an interest in the Copse will be warmly welcomed as a Friend. Membership details can be found on the above website.

7 Biodiversity

7.1 Aims of Biodiversity

Biodiversity is best defined as all those living organisms – plants, animals, fungi, invertebrates – which ensure the survival of our natural environment. Biodiversity underpins all those healthy natural ecosystems on which the human race relies for its food and water, as well as natural resources such as wood and animal products. So action to preserve and enhance biodiversity is crucial. In the context of the Copse, the aim is to create habitats which will achieve this, and also to protect endangered species and habitats from extinction.

In past years, members of the Chichester Natural History Society conducted regular surveys of various aspects of the Copse's habitat, and shared its findings with the Friends. This was much welcomed, and would still be so. There were surveys of birds, butterflies, dragonflies, fungus and lichen. In 2014 the Sussex Biodiversity Record Centre produced a detailed report on the land to the west of the Centurion Way, ie. the land just to the south east of the Copse

7.2 Trees

The Copse is a significant area of woodland, and is important for biodiversity, particularly being so close to an urban area. The Copse has a mix of mature standards (oak, ash, sweet chestnut) and coppiced sweet chestnuts. Many of the standards are over a century old, and provide habitats for nesting birds, bats and many insects. The long stand of mature oaks south from the Copse towards Whitehouse Farm is perhaps the finest in the area. There are some equally fine ash trees on the western side of the Centurion Way, again just north of Whitehouse Farm, and to date there is no evidence of Chalara Ash dieback disease. During the Great Storm (1987) a number of mature trees were blown down from the south along the top of the Embankment. The removal of these trees also caused much clearance damage, and also led to more colonisation by birch, sycamore and bramble.

The sweet chestnuts are distinguishable by their large leaves, which are dark green, serrated, and lanceolate (spear-like, tapering to each end). Sweet chestnut wood is very hard and slow to rot, so is excellent for making split chestnut fencing.

There is plenty of fallen deadwood in the Copse, which has been collected into logpiles in various locations. These rotting, damp logpiles have contributed to the Copse's biodiversity, by providing a welcoming habitat for a range of invertebrates (lacking a backbone) and vertebrates. They provide shelter for insects, beetles, slowworms, newts, frogs, mice which in turn provide food for animals higher up the food chain – lizards, shrews, wood mice. Small birds – robins, wrens, tree creepers, nuthatches – feed on the insects in the logpiles. The close proximity of the Copse to residential housing both in Brandy Hole Lane and the East Broyle Estate has caused such certain non-native garden shrubs and species as laurel to colonise the Copse, and their removal may be considered advisable.

Trees in the Copse: Alder; Birch; Box; Cherry; Field Maple; Hawthorn; Hazel; Holly Holm Oak; Laurel; Myrtle; Oak; Rowan (Mountain Ash); Sallow; Silver Birch; Scots Pine; Sweet Chestnut; Sycamore;

7.3 Coppicing

Most of Compartment 4 is coppiced sweet chestnuts. Coppicing is a traditional form of woodland management, where the trees are cut back close to the ground on a regular cycle, producing a multi-stemmed stool. This also serves greatly to extend the life of the tree. The importance of coppicing for the Copse as a nature reserve is that the removal of the woodland canopy enables both warmth and light intensity to reach ground level, encouraging new plants to establish themselves, so increasing the range of habitats and biodiversity (insects, birds, small mammals). A coppiced habitat, with its repeated cycles of light and shade, is very different from that of a mature woodland.

The Management Board agrees the coppice management schedule with the CDC. Any additional coppicing works required should be approved by the Management Board. All coppice work should be done during the winter to avoid disturbance to bird and bat roosts, but even during this period checks should also be made prior to work commencing. If there is evidence of roosts, then additional roosts may need to be created, by retaining some standing trunks of cut trees to provide valuable bat and bird habitat.

The sale of coppice products (eg. log fuel, biomass chips, chestnut fencing or stock 'hurdles') should be used to offset the cost of the cutting work where possible, to encourage sustainable management. Coppiced wood should also be used within the copse for habitat creation, fencing and other various activities.

During the actual coppicing period, contractors must prevent public access, for reasons of Health and Safety. Vehicular access for the contractors is from the Old Broyle Road.

7.4 Ponds

The existence within the Copse of the three ponds adds significantly to the biodiversity of the Copse, with its wetland habitats. Pond dipping sessions at Brandy Hole Pond, mainly aimed at schoolchildren, have discovered freshwater shrimps, flatworms, snails, leeches

The pressing need in the Brandy Hole Pond is to remove the thick layer of algae, which is to the detriment of wildlife, particularly mallards and moorhen. The biotic index of the Pond is low, about 3.5 (as against 10.0 for a clear stream). Should elodea be introduced to the pond, to assist oxygenation? There is also the ongoing need to clear the ponds of logs which are regularly thrown into them

As for Willow Pond, it needs to be repopulated with such plants as marsh marigolds (kingcups) and yellow iris. It is also suffering from the invasive parrot's feather water weed, as is Cops Pond. Both have plenty of frog spawn in the spring, leading to a profusion of tadpoles, frogs and newts.

7.5 Birds

Birds seen or heard in the Copse: Blackbird; Blackcap; Buzzard; Chaffinch; Chiffchaff; Dunnock; Great Tit; Great spotted woodpecker; Greenfinch; Green woodpecker; Grey wagtail; Jay; Nightingale; Nightjar; Nuthatch; Robin; Rook; Songthrush; Whitethroat; Wren; Yellowhammer

7.6 Butterflies

There are 58 species of butterfly currently in England; of these at least 25 have been recorded in the Copse, which is a good total for a small urban Nature Reserve.

The Copse's varied habitats helps to attract them here. Each species has its own requirements, and will only lay its eggs on a particular plant, to provide food for the larvae. For example, Holly Blues search out ivy, so that their caterpillars will get a good meal when they hatch. Dense clumps of ivy are also vital to butterflies that hibernate over winter such as the pale yellow brimstones. In the autumn the nectar produced by ivy flowers is invaluable for Red Admiral, Peacock and Comma butterflies. Honeysuckle, whose old stems are numerous in Willow Glade, is the larval food plant of the White Admiral. Bramble is also valuable in this regard. A butterfly seldom seen is the Purple Hairstreak as it feeds on honeydew secreted by aphids at the very tops of the mature oaks.

The following butterflies were seen in the Copse in 2015:

Spring – Brimstone (pale yellow), Comma, Holly Blue, Orange Tip, Peacock, Small Tortoiseshell, Speckled Wood

Summer – Comma; Gatekeeper; Marbled White; Meadow Brown; Purple Hairstreak; Silver-washed Fritillary; Skipper (Large, Small, and Essex); White Admiral

As for migrant butterflies the Copse is regularly visited by the Painted Lady and the Clouded Yellow. Famously, in 2008, it was visited by the rare Queen of Spain fritillary, probably from Normandy. It was one of only six sightings in the UK in that year, but it does not seem to have

7.7 Flowers and Shrubs

As previously mentioned, there are some woodland species associated with ancient woodland such as butcher's broom, wood anemone and wood sorrel, though not in large numbers.

Bluebells are profuse in early spring, but the proximity of nearby residential housing has led invasive Spanish bluebells to hybridise with the native bluebell. Perhaps Spanish bluebells should be uprooted, if seen, to encourage flowering of the native bluebell

The following flowers and shrubs were seen in the Copse in 2015:

Spring: Bluebells; Broom; Butcher's broom; Cuckoo pint (wood aven); Foxgloves; Gorse; Herb Bennet; Lesser Celandine; Marsh Marigolds; Primroses; Snowdrops; Violets; Water irises; Water lilies; Wood anemone

Summer: Figwort; Forget me knots; Germander Speedwell; Greater Stitchwort; Ground Ivy; Herb Robert; Honeysuckle; Jack by the Hedge; Sorrel; St. John's Wort; Weld; Whitethorn

7.8 Reptiles

A reptile survey (2014) found slow worms and field mice.

8 Archaeology

The earthworks known as the Chichester Entrenchments are listed as Scheduled Monuments, giving them legal protection from damage. Unfortunately much damage and erosion of them has occurred through pedestrians and cyclists, mainly youngsters on mountain bikes. The tree roots, contrary to popular belief, may well be helping to stabilise the earthen bank, rather like ivy on brickwork. Although a Scheduled Monument, little at present appears to have been done in recent years to protect this site of nationally recognised archaeological importance. A visit to the site by the CDC Archaeology Officer would be useful.

9 Community Involvement: Recreation and Leisure Activities

Although there are no definitive Rights of Way in the Copse, the public have had access to it for many years. This has increased since the creation through it of the Centurion Way, which runs for five miles from the Fishbourne Crossing north to West Dean. At the railway bridge in the Copse there is access off the Centurion Way to Broyle Road in north Chichester. Centurion Way is very popular both with pedestrians and cyclists. The dilemma is how to encourage cyclists not to make use of the Copse pathways. At present there are no No Cycling notices and even the access gate to the Copse has been removed, making cycle access to the Copse even easier.

Unfortunately the Copse does suffer from minor bouts of vandalism, such as periodic damage to the pond viewing platforms. The amount of litter, though regrettable, is not so great as to be unmanageable.

Fires and Barbeques are not allowed in the Copse, nor is camping. All this should be clearly stated on signage. It is unclear whether a programme of byelaw implementation for Brandy Hole Copse exists, but if not, it should.

Active consideration should be given to the development of a programme of educational activities based in the Copse, so that schoolchildren can be made more aware of issues relating to nature conservation and biodiversity. The Copse has real potential for the provision of environmental education on a formal and informal basis, and this should be maximised wherever and whenever possible. In the past a variety of such events have taken place – bat walks, butterfly walks, bird watching, moth trapping, pond dipping, woodcraft and open evenings. Such activities obviously require members who are expert in such areas, and capable of leading such events. At present the Friends have few such members, so few activities have been arranged. Ideally, assistance should be sought from local experts from other organisations, with one of the Friends acting as coordinator, and publicising them to local residents, local schools, and in the local press. This could lead to other sessions such as flora and fauna recording, charcoal burning, even sculpture.

The Friends website and newsletter should be used to publicise these events, and findings from any surveys undertaken of wildlife in the Copse could be recorded on the website, for future reference and comparison.

The Friends will liaise with such national organisations as The Conservation Volunteers to prepare grant applications to access funding for enhanced community involvement with all aspects of conservation of the Copse's varied habitats.

First draft prepared by Andrew Berriman, Chairman, FBHC, September 2016