

Management Plan

2008 - 2013

Developed in partnership with
Bramcote and Stapleford Hill Public Open Spaces Forum,
Broxtowe Borough Council and the
Nottinghamshire Wildlife Trust

INTRODUCTION

This management plan was produced by Nottinghamshire Wildlife Trust on behalf of Broxtowe Borough Council.

The management proposals contained within this plan have been agreed in consultation with the Bramcote and Stapleford Hill Public Open Spaces Forum, representatives of the local cycling fraternity who regularly use the site, Members and Officers of Broxtowe Borough Council, BTCV and the local community.

Local Nature Reserve status will be sought for the Stapleford Hill Woodland during the period of this plan, which will afford the site greater protection. LNR status will not only protect the area's habitats and wildlife but will also increase people's awareness of their environment. It will be a place where children can learn about nature, and the local community can become involved in the management of their local green space.

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PART 1: DESCRIPTION

1.1 Location

Grid reference SK 499 388, in the Borough of Broxtowe, County of Nottinghamshire (Vice County 56) (see Appendix 1 for location map). The woodland lies within English Nature's Natural Area 32, 'Sherwood'.

1.2 Map Coverage

Ordnance Survey Landranger map no.129 (1:50 000 scale) & Ordnance Survey Explorer map no. 260 (1:25 000 scale).

1.3 Owner

Stapleford Hill Woodland is solely owned by Broxtowe Borough Council and forms part of the chain of sites known locally as Bramcote Ridge.

1.4 Size

7.5 hectares (approx.)

1.5 Soil and geology

<u>Soil</u> – The soil is coarse yet loamy over soft sandstone (The Soil Survey of England and Wales (1983)) and is typical of soils derived from sandstone, which tend to be free-draining, slightly acidic and typically support oak-birch woodland and heathland.

<u>Geology</u> – The geology underlying the woodland consists of the Nottingham Castle Sandstone Formation (formerly known as the Bunter Pebble Beds) and the Lenton Sandstone Formation (Lower Mottled Sandstone) both of which form part of the Sherwood Sandstone Group (Bunter Sandstones). The formation consists of buff and red mottled medium to coarse-grained sandstones with fine parallel laminations and cross bedding (Frost & Smart 1979) 1909: Geological survey Great Britain: (England & Wales) Sheet 125: Derby 1" to 1 mile.

This formation was laid down in the Triassic period approximately 230 million years ago and covers nearly a quarter of the County, occurring as a broad belt between Nottingham and South Yorkshire.

The Hemlock Stone, a RIGS (Regionally Important Geological Site) is situated to the SE of the woodland. The sandstone platform on which the pillar stands, plus the lowermost 2m part of the pillar itself is Lenton Sandstone, the remainder is the overlying Nottingham Castle Sandstone formation. Towards the top of the Hemlock Stone the Nottingham Castle sandstone contains high concentrations of extraformational quartzite pebbles, forming a much stronger cap to the stone than the underlying sandstone. This factor gives rise to the

theory that the Hemlock Stone was formed over many years by erosion. However, the British Geological Survey's view is that it was caused by quarrying (Howard 2002). There is evidence of quarrying in other parts of the woodland causing some exposed steep sandstone quarry outcrops much favoured by off-road cyclists but these were formed much later in history, in the 20th century.

1.6 Aspect, topography and altitude

The wood lies 74 metres above sea level at its lowest point, rising to 101 metres above sea level at its summit. Its aspect varies as the woodland occurs around the slopes of a hill.

1.7 Access

The main vehicular access point is located off the A6002 (Coventry Lane) via a field gate. There is a National Trail path (the Robin Hood Way) which bisects the woodland SE to NW.

1.8 Surrounding land use

Stapleford Hill Wood is incorporated within Bramcote Ridge, a sandstone ridge that forms a linear open green space and wildlife corridor extending over 2 ½ miles from Wollaton Park in the City of Nottingham to agricultural land to the south of Trowell.

The wood is bounded to the SW by a residential estate, to the east by the A6002, to the NE by land associated with Bramcote Crematorium and to the west by agricultural land.

The boundary of the site with land associated with the Bramcote Crematorium is not clear on the ground. A large section of the former quarry lies between the Stapleford Hill Woodland site covered by this plan and the current crematorium boundary fence. This wet woodland area is owned by Broxtowe Borough Council and was purchased as part of the crematorium site. Its future use is not clear and it has therefore not been included in this plan.

1.9 Site Description

Stapleford Hill Wood is a deciduous oak / birch woodland characteristic of the Sherwood sandstone geology and landscape character area.

The site is less used by walkers as the neighbouring Bramcote Hill Park Woodland but is more subject to high levels of use by off-road bikers as the woodland is undulating with some quite steep slopes and drops caused by historic quarrying activities. Biking activities has caused soil and sandstone erosion and throughout the woodland, particularly to the SE and the hills and holes area to the NW of the site. Biking activities has also, on occasion, posed a safety risk to pedestrian users of the site and their dependents as the series of consolidated and desire line pathways allow access to all areas of the site

for all users. Panoramic views of the surrounding areas can be seen from the summit of the woodland and it is planned to enhance these views further with judicial pruning of trees.

1.10 Statutory Designations

No statutory designations.

It is proposed to seek designation as a Local Nature Reserve (LNR) in the near future.

LNR status applies to land of at least local wildlife interest, and allows the local authority (which must have close involvement through ownership or written agreement) to protect that interest through creation of special byelaws. LNRs are usually close to or within urban areas and provide considerable opportunities for introducing large numbers of people to sustainable enjoyment of the countryside.

1.11 Non-statutory Designations

The Hemlock Stone is designated a RIGS (Regionally Important Geological Site).

RIGS are geological or geomorphologic sites of regional importance that are considered worthy of protection for their educational, research, historical or aesthetic importance (Nature Conservancy Council 1991).

The woodland is designated a Public Open space and in 1975 the whole of the Bramcote Ridge area incorporating Stapleford Hill Woodland, was designated by Broxtowe Borough Council as an 'Area of Restricted Development'.

The woodland is not designated for its nature conservation interest.

PART 2: EVALUATION & OBJECTIVES

2.1 Evaluation of site features (Ratcliffe's criteria)

2.1.1 Size

The wood is approximately 7.5 ha (18.5 acres) and is therefore a significant ecological resource for an urban location. However, Stapleford Hill is part of the much larger green / wildlife corridor of Bramcote Ridge, which links the urban deer parkland of Wollaton Hall Park with the open countryside to the south of Trowell. This corridor is therefore a highly significant ecological resource within the borough providing opportunities for transitory migration of species between urban and rural habitats.

2.1.2 Diversity

The woodland contains a diverse range of habitats as it is situated around a summit and therefore contains slopes on all aspects; north, south, east and west. The woodland contains areas of acid grassland, north facing wet or damp woodland and light and grassy south facing woodland. It is therefore likely that the woodland accommodates a wide range of faunal species, which will be confirmed at a later stage through surveys and monitoring.

2.1.3 Naturalness

It is likely that the woodland occurred naturally as it is situated on an undulating hill with sandstone outcrops, which would not have been cultivatable for agriculture or suitable for building development at the time when many woodlands were lost to agricultural clearance. Compartment 6 however, which contains abundant sycamore may have been used as an access point for quarrying activities (unconfirmed) and may well have been planted with sycamore when quarrying ceased to provide rapid revegetation and restoration.

The flora present within the woodland is highly characteristic of woodland found on sandstone. Slopes on each aspect i.e. north, south etc, also consist of species characteristic of those aspects. The woodland has not been subject to nutrient input through adjoining land use and its flora is therefore typical of woodlands found on nutrient-poor free draining acidic soils.

2.1.4 Rarity

The Sherwood Natural Area has a high proportion of woodland cover but much of the classic oak/birch woodland and heathland that is indigenous to the area has been lost to coniferous woodland. Stapleford Hill occurs at the southernmost tip of this Natural Area and is situated in a predominantly urban environment. This makes the wood an unusual and valuable ecological and recreational resource that is of local and county importance.

Oak/birch woodland is a Nottinghamshire Biodiversity Action Plan priority habitat as is Lowland Dry Acid Grassland, which occurs in compartment 1.

A site such as this one that supports a number of priority habitats is not common and should be managed to protect and enhance those habitats.

2.1.5 Fragility

The woodland is not at risk to the usual threats of nutrient enrichment from agricultural practices or encroaching development as it is protected by its designation as an 'Area of Restricted Development'.

The high level of off-road bike use within the wood poses a threat to the woodland through soil erosion and erosion of geological outcrops. It is proposed, in consultation with relevant groups and cycling organisations, to limit areas where bikes can be ridden with fencing and obstacles and engage cyclists in the practical management and strategic management of the woodland.

2.1.6 Typicalness

The site and its flora is typical of woodland found on sandstone geology and situated on a variety of aspects.

2.1.7 Recorded history

The woodland exists in the same proportions as today on Sanderson map of 1835 (Sanderson 1835) (see Appendix 2). It is therefore likely that the woodland has been in existence for much longer than this.

2.1.8 Position in an ecological/geographical unit

The wood forms part of a much larger linear habitat or wildlife corridor, which stretches from Wollaton Park in the City of Nottingham to agricultural land to the north and west of the wood. Its individual value, whilst great, is far outweighed by its value as part of this corridor connecting urban habitats to rural habitats, aiding floral and faunal transitory migration.

2.1.9 Potential value

Stapleford Hill is already realising great potential value as a recreational resource and a nature conservation resource. However, both of these aspects can be further enhanced and can be enlarged to

encompass an educational element, which is as yet an untapped resource.

The educational value of the site could be enhanced through the provision of interpretation material identifying habitats and species and through engaging local schools in educational activities linked to the curriculum.

The woodland also has potential as an educational resource for schools and local communities through the provision of volunteer days, guided walks, open days, and participation in survey training and subsequent surveys and structured educational events.

Further ecological potential could be realised through appropriate management to improve structural and floral diversity, which in turn should increase faunal diversity.

2.1.10 Intrinsic appeal

The site has great intrinsic appeal as a recreational resource and is a destination site for its geological interest, the Hemlock Stone. The woodland provides a valuable recreational green space that local people can enjoy without the need for transport provision or financial expenditure. The floral, structural and topographical diversity provides recreational and wildlife interest and ensures that exploring is a worthwhile activity.

A significant bird population (see Appendix 3 for details of breeding bird survey), encouraged by good provision of standing dead wood habitat adds to the intrinsic value and enjoyment of the wood.

2.2 Objectives

- Ensure that Stapleford Hill Woodland is a safe environment for recreational purposes
- Protect and enhance LBAP Priority Habitats
- Protect and enhance floral diversity
- Protect and enhance structural diversity
- Protect and enhance deadwood, moss, fern and lichen habitats
- Maintain a managed restriction on off-road biking use in the wood
- Promote and enhance the recreational potential of the wood
- Promote and enhance the educational potential of the wood
- Promote and enhance community involvement in the wood

2.3 Factors Influencing Management

- Safety the entire site is accessible at all times, therefore in the interest of public safety, all possible measures should be taken to ensure public safety whilst work is being carried out, including closing paths
- Community involvement local community and interest groups should be involved in and consulted upon the practical and strategic management of the woodland at every possible opportunity.
- Practical management much of the practical work is carried out by the BTCV, the number of workdays that can be accommodated during appropriate seasons is limited.
- Legal obligations work likely to cause disturbance to breeding birds i.e. felling and scrub clearance cannot be undertaken during the bird breeding season (March to September). Therefore all felling and scrub clearance must be undertaken during the autumn and winter as it is an offence to disturb any wild bird (with the exception of pest species) while it is tending a nest containing eggs or chicks, until the chicks have successfully fledged. To do so would be a criminal offence under The Wildlife & Countryside Act 1981.
- Protected species mature trees identified for felling, likely to provide roosting opportunities for bats should be surveyed by a licensed bat worker prior to felling. All species of British bat plus their roosting sites are protected by The Wildlife & Countryside Act 1981, the CROW Act 2000 and the Conservation (Natural Habitats, &c.) Regulations 1994.
- Accommodate and where possible enhance the amenity/recreational value of the site.
- Management of the site must compliment the overall Bramcote Hills Park Management Plan
- Annual or bi-annual meetings regarding the management of the site are required to identify work programme and schedule of works. Meetings should involve Broxtowe Borough Council Technical & Works Services, Notts Wildlife Trust, BTCV, contractors and anyone else likely to carry out work on site.
- Ongoing funding for the management identified cannot be guaranteed for the full term of the plan. It may therefore be necessary for some tasks to be rolled over into subsequent years, to be completed when funding becomes available.

2.4 Current Woodland Conditions

The composition of Stapleford Hill woodland is characteristic of woodlands growing on sandstone geology, and as the woodland is situated around a

summit and contains all aspects ie. north facing , south facing etc, this is reflected in its flora. Therefore, the site provides a diverse range of habitats with acid grassland to the east, low-lying damp / wet woodland with good moss and fern communities to the north and lighter and warmer grassy sloped woodland to the south.

The woodland has only a small area dominated by sycamore to the north of the wood, which is spreading into adjoining compartments. It is proposed through this management plan to halt this encroachment to allow the wood to remain characteristic of Sherwood oak / birch woodland long into the future.

The woodland has varied topography being 74 metres above sea level at its lowest point, rising to 101 metres above sea level at its summit. The slopes to the south of the wood are gently rising whilst slopes to the north are abrupt and hazardous in places.

It is proposed to prevent access into some of the most hazardous areas, in order to reduce the risk of accidents through falling and slipping. These fenced off areas will become areas of non-intervention, which will provide areas of least disturbance for species less able to cope with disturbance, therefore enhancing the woodland as a whole for wildlife.

The following section details each compartment found within the woodland and the management required. A map giving each compartment location can be found in Appendix 4.

Compartment 1

Compartment 1 is situated to the east of the woodland and consists of an area of amenity mown acid grassland on an east facing slope, leading up to the Hemlock Stone. The compartment is bounded on the east by a recently planted hedgerow, post and rail fencing and the A6002, Coventry Lane and to the north and south by woodland and scrub. A consolidated path bisects the grassland area.

<u>Features</u> – This compartment is highly visible from the A6002, the walled garden at Bramcote Hills Park and is the main entrance to the Stapleford Hill Wood. The dominating feature of this compartment is the Hemlock Stone itself and also a significant area of species rich acid grassland, which is an additional habitat in what is predominantly a woodland setting, and is therefore likely to prove to be a significant resource for invertebrates. Lowland acid grassland is a Nottinghamshire Biodiversity Action Plan priority habitat. This habitat has become rare and threatened through a lack of traditional management such as light grazing and cutting, resulting in the increasing dominance of coarse grasses, bracken, scrub and trees at the expense of acid grassland flora and fauna.

<u>Management Requirements</u> – Unfortunately some twisted willows (*Salix contorta*) have been planted as standard trees in the establishing hedgerow along the boundary with the A6002, these should be removed as they are non

native and out of character in this woodland setting and will quickly become a dominant feature in the most highly visible area of the site.

The consolidated path that leads to the grassland area, off the main footpath from the entrance, is lined on either side by trees and tall shrubs creating a closed—in feeling. If the trees and shrubs are eventually intended to form a tunnel to the grassland area then they should be retained. However, if a tunnel is not the desired effect then the shrubs on either side of the path should be coppiced to allow more light onto the path and to provide a more open aspect. If a green tunnel leading to the grassland and Hemlock Stone is the desired effect, the erection of a fence and gate, to allow access for machinery, should be considered along the path at the entrance to the wood to prevent access to the grassed area from the main path as the frequent use in this area has resulted in heavy wear to the grass and soils.

Some young self-set oak trees are encroaching into the grassland area to the south of the compartment, along the woodland edge. These, along with any other tree and shrub species should be removed to halt encroachment onto the grassland, which is undesirable as the grassland, a valuable ecological resource will quickly reduce in size and quality. Additional tree growth in this area will also obscure the view of the Hemlock Stone, a major visitor attraction.

Compartment 2

<u>Canopy</u> – Pedunculate Oak (*Quercus robur*) and Silver Birch (*Betula pendula*) with occasional Field Maple (*Acer campestre*) and Sweet Chestnut (*Castanea sativa*)

<u>Shrub Layer</u> – Sparse but Holly (*Ilex aquifolium*) and Elder (*Sambucus nigra*) dominant

<u>Ground Layer</u> – Bare earth dominant with areas of Bracken (*Pteridium aquilinum*) and Bramble (*Rubus fruticosus agg.*)

<u>Features</u> – The area between the Hemlock Stone and the summit of the wood is currently subject to heavy wear and soil erosion from use by off-road cycles. This is large areas of steep bare earth which is slippery under foot and will not revegetate until this heavy wear ceases. Some good standing deadwood exists to the north of the compartment, which should be retained as should the naturally regenerating yew.

<u>Management Requirements</u> – Post and rail fencing should be strategically placed along desire-line footpaths bisecting steep slopes in the area between the Hemlock Stone and the summit of the woodland. These footpaths are currently often ridden across by off-road cyclists at great speed causing a hazard to walkers and their dependents and causing considerable soil erosion and loss of vegetation in this region.

There are some large Sycamores (*Acer pseudoplatanus*) in this compartment, which would cause significant gaps in the canopy if they were felled. It is therefore recommended that all sycamore saplings and seedlings are removed and seedlings weeded out on a regular basis to promote regeneration of native species. When enough regeneration of native species has occurred, the large sycamores should be removed to allow the native species to grow on, this however will probably not be possible for many decades.

Compartment 3

<u>Canopy</u> – Beech (*Fagus sylvatica*) and Sweet Chestnut (*Castanea sativa*) dominant canopy

Shrub Layer - Self-set beech understorey

Ground Layer - Bare earth and leaf litter dominant ground layer

<u>Features</u> – Compartment 3 is situated on a north facing slope which is boundered to the north by Bramcote Crematorium. The compartment is particularly shaded because of the beech dominated canopy and this is reflected in the lack of shrub and ground layer vegetation.

<u>Management Requirements</u> – Monitor beech and sweet chestnut regeneration and limit if necessary. Retain as much standing deadwood as is practicable when taking into consideration health and safety issues.

Compartment 4 – Horseshoe gully

Note: Off road cycling allowed on this area and Compartment 6.

<u>Canopy</u> – Oak and silver birch dominant canopy with occasional Norway Maple (Acer platanoides)

<u>Shrub Layer</u> – good holly shrub layer with occasional ash, sycamore and sweet chestnut self-set saplings

<u>Ground Layer</u> – leaf litter dominant with occasional bracken, bramble and good moss communities in some areas

<u>Features</u> – Compartment 4 consists of a series of slopes and sandstone outcrops, which ultimately lead to low lying woodland which is permanently damp, hence the occasional but significant moss communities at ground level. Favourable amounts of lying deadwood exist at the bottom of the valley.

<u>Management Requirements</u> – Signs should be placed at strategic positions along desire line footpaths at the top of steep slopes to warn walkers of potential implications of traversing slopes, as the paths become slippery after rain. This compartment is also available for cycling as compartment 6 and other users will be warned that this activity is taking place through signage at the site entrances.

Sycamore and sweet chestnut could be a problem in future on the slopes and in the valleys of this compartment. Any work on the steeper slopes will be difficult and will require the use of ropes to ensure personnel safety but, if possible, the regeneration of sycamore and sweet chestnut on the slopes and in the valley should be halted to allow ash, oak and silver birch to dominate.

Due to the ground and light conditions many of the trees in the valleys are tall and spindly and readily topple in high winds and heavy snow. This has produced an abundance of damp lying deadwood, which is a highly valuable habitat and should therefore be retained at all costs.

Compartment 5 – Quarry and Summit Area

<u>Canopy</u> – Birch / oak dominant canopy with frequent sycamore regeneration

Shrub Layer - Holly dominant

<u>Ground Layer</u> – bare earth and leaf litter dominant with good fern communities in the lower areas of the compartment.

<u>Features</u> – This compartment is dominated by a large sandstone quarry face to the east which leads to a steep sided valley culminating in damp / wet woodland. This compartment also contains the trig point and stone outcrop at the summit of the woodland.

<u>Management Requirements</u> – Ultimately all of the sycamore in the compartment needs to be removed. Care will need to be taken when removing sycamore from the steep sided valley and should be undertaken by contractors experienced in climbing and rope work.

The area at the base of the quarry alongside the desire line footpath should be fenced to prevent access to the valley by the general public whilst allowing access to the quarry and beyond via the desire line footpaths that are present. The area either side of the quarry that gives access over the top of the quarry should also be fenced to prevent access into this area. This action is thought necessary as the steepness of the slopes into the valley in addition to the permanently wet nature of the footpaths means that there is a serious risk of walkers falling or slipping down slopes into the valley. Fencing off the steep slopes will also create areas of non intervention in the valleys, limiting disturbance and therefore accommodating species intolerant of disturbance. However, the regeneration of sycamore will need to be regularly monitored and halted to prevent spread into other areas of the woodland.

Remove graffiti from the trig point at the summit as an ongoing requirement.

Install post and rail fence with kissing gates or a series of anchored felled trees towards the summit to prevent access by cyclists who have, in the past, presented considerable danger to walkers when emerging from the summit at great speed along desire line footpaths.

Maintain open views to vistas by regular pruning of trees as required.

Install interpretation panels detailing views, distances and possibly some history.

Consider installing metal benches, concreted into the ground to allow people reaching the summit to rest and enjoy the views.

Compartment 6

Note: Off road cycling allowed on this area and Compartment 4. Canopy – Sycamore dominant canopy

Shrub Layer – sparse elder dominant shrub layer

<u>Ground Layer</u> – bare earth dominant and frequently excavated by off-road cyclists to make mounds and hollows. Bracken and bramble on slopes not subject to cycling activities

<u>Features</u> – This compartment is situated at one of the lowest points of the woodland and is dominated by an area regularly used by off-road cyclists. A large area has been formed, through excavating hollows and enhancing mounds into a substantial off-roading area. It is proposed to retain this area for the use by cyclists but some fencing will be installed, after consultation with the relevant bodies and interest groups, towards the valley areas detailed in compartment 5 which is to become an area of non-intervention.

The canopy in this compartment is heavily dominated by sycamore, it is therefore proposed, to remove all of the sycamore in this area to prevent spread into other areas of the woodland, which at present have little or no sycamore invasion.

To the NW of the compartment there is a footpath which leads, via farmland to Trowell Open Space.

<u>Management Requirements</u> – Fell all sycamore in this compartment in the early years of the management plan to prevent spread into nearby compartments. The compartment will appear denuded for some time, however use of the area by the general public will not be encouraged as cycling activities will be restricted to this area and compartment 4. Also, as a result of the high levels of disturbance in the area it will not be favoured by wildlife. It is therefore felt that the negative impact is outweighed by benefit to the remainder of the woodland in stopping the spread of sycamore.

A proportion of the large sycamore in the bottom of the valley should be ringbarked during the dormant season, to provide a substantial resource of standing deadwood in an area that is not used by the general public.

Regeneration of sycamore should be monitored annually and any seedlings removed by hand.

Compartment 7

<u>Canopy</u> – Oak and sycamore dominant canopy

Shrub Layer – Very little shrub layer

Ground Layer - Bramble, bracken and leaf litter dominant ground layer

<u>Features</u> – This compartment is situated at the most north westerly point of the woodland. It has an open aspect with views over the surrounding countryside.

<u>Management Requirements</u> – Fell all sycamore in the compartment to halt the spread into adjoining, sycamore free compartments and to allow native indigenous species to dominate.

NB – This area contains several overgrown hollows which are craters formed when the local Home Guard used this area for hand grenade and mortar practice during World War II. Care should be taken when working in this area to avoid sudden loss of footing. Care should also be taken to retain the craters for their local history interest.

Compartment 8

Canopy - Oak dominant canopy

Shrub Layer – Holly dominant shrub layer with occasional yew

<u>Ground Layer</u> – grass dominant ground flora which is a reflection of its south facing aspect, with occasional ground ivy in shadier areas.

Features – south facing slope with some small areas of dry acid grassland.

<u>Management Requirements</u> – The area to the east of the compartment is subject to considerable disturbance through use by cyclists who descend the summit and slopes at great speed. It is recommended in the notes under compartment 2, to install post and rail fencing or strategically felled and secured tree trunks along sloped areas to prevent rapid decent by cyclists and therefore prevent clashes between cyclists and pedestrians. It is also hoped that this will halt or at least decrease soil erosion.

2.5 Management Proposals

General Note

Engagement of cyclists to control activities on the site is not defined as a prescription in this section, however, it is accepted that it is a crucial action, which Broxtowe Borough Council will seek to address through local publicity and the Bramcote and Stapleford Hills Public Open Space Forum.

2.5.1 Fell all sycamore and Norway maple in the early stages of the management plan to prevent encroachment into areas presently unaffected. This will affect mainly compartments 4, 5, 6 and 7, though the only sycamore dominant compartment is compartment 6. This felling should be undertaken on a commercial basis if possible, to allow the revenue collected from the timber to contribute to the management cost.

A selection of mature trees identified for removal could be ring-barked during the dormant season to provide additional standing deadwood habitat for use by invertebrates, fungi and birds. These trees should be located well away from footpaths.

Brash from felled trees will be chipped and used on site to 'make good' worn or desire line paths.

Total eradication of sycamore at this site should be the ultimate goal as, at present, the sycamore has not had the opportunity to encroach throughout.

- 2.5.2 Remove all sycamore saplings and seedlings by hand. This process can be carried out by volunteer groups and will be ongoing throughout the life of the management plan. Any re-growth from stumps will need spraying with Glyphosate.
- 2.5.3 Remove the twisted willow (*Salix contorta*) from the hedgerow boundary between the grassland in front of the Hemlock Stone and the A6002.
- 2.5.4 Maintain checks on tree condition to ensure that there are no trees or limbs likely to pose health and safety threats. Any trees fallen in areas not likely to cause health and safety issues should be left in situ to enhance the deadwood habitats. Standing dead trees should also be left in situ unless they are close to public areas or footpaths.
- 2.5.5 Fence off areas adjacent to desire line and consolidated footpaths that are adjacent to steep slopes and therefore form a health and safety hazard. Areas for fencing off should be identified in consultation with relevant members of the forum group, cyclists, Broxtowe Borough Council and NWT.

- 2.5.6 Fence off an area around the summit of the woodland and install kissing gates or strategically place and secure felled trunks traversing slopes to prevent cyclists descending the summit at great speed bisecting footpaths on their descent and causing a safety hazard to walkers and their dependents.
- 2.5.7 Maintain openings in the canopy around the summit to maintain viewing points from the summit of the wood.
- 2.5.8 Install interpretation at the viewing points at the summit detailing what can be seen from each point.
- 2.5.9 Remove graffiti from trig point at summit and check condition of existing waymarkers throughout the woodland
- 2.5.10 Install a metal bench to encourage visitors to sit and enjoy the view after walking to the summit.

PART 3: MANAGEMENT DETAILS

3.1 Management Projects and Prescriptions

Reference Number	Project Title	Prescription
3.1.1	Fell sycamore and Norway maple	 All felling should take place outside of the bird breeding season (March to September) unless the work is for Health & Safety reasons. If felling needs to be undertaken during the period March to September, the tree subject to felling plus all other trees and shrubs likely to be affected by the felling should be checked for nests by a suitably qualified person prior to work commencing. Selected large specimens situated away from footpaths should be ring-barked during the dormant season to provide standing deadwood habitat All regrowth should be sprayed with Glyphosate in the summer following felling Felling should be undertaken on a commercial basis if possible, to allow income generated to contribute to the management budget. If commercial felling is not possible, trunks felled should be logged into large logs and piled on site, away from slopes and footpaths, to form additional habitat. Brash should be chipped and used on site to 'make good' paths All timber not required for making log piles or forming barriers should be removed off site Visitors should be excluded from felling areas using tape and warning signs. For the duration of the work, erect signs informing visitors about work being carried out and reasons for it.
3.1.2	Remove sycamore saplings and seedlings	 Sapling and seedling removal, unless proposed for heavily shrubbed areas, can be carried out at any time of year. Sycamore saplings should be removed by cutting as close to the ground as possible using loppers or bow saws. The resultant small diameter timber should be removed from site or chipped, as it may be used to start fires. All regrowth should be sprayed with Glyphosate in subsequent years. All sycamore seedlings should be removed by hand by pulling on an ongoing basis throughout the term of the management plan.
3.1.3	Remove the twisted willow from the hedgerow boundary between the A6002 and the Hemlock Stone	 Removal to be carried out by hand with forks and spades Removal to be undertaken outside of the bird-breeding season, March to September inclusive Re-plant large gaps created by the removal, small gaps should fill from shrubs either side.
3.1.4	Maintain annual health & safety check on trees	 Trees close to footpaths and close to areas that visitors are encouraged to use should be checked annually, outside of the bird breeding season for signs of instability or dead limbs. Trees identified for health & safety work should be scheduled into work programmes outside of the bird breeding season (March to September)

		 If felling is essential during the period March to September, the tree subject to felling, plus all other trees and shrubs likely to be affected by the felling, should be checked for nests by a suitably qualified person prior to work commencing. If active nests are found, these areas should be taped off and avoided until chicks have successfully fledged. If trees in the close vicinity of footpaths are naturally retrenching (dying back) they should be de-limbed rather than felled. Felled branches should be retained on site and placed at the base of the trees if possible.
3.1.5	Fence off steep slopes adjacent to footpaths	 Install chestnut pale or post and rail fencing along the tops of steep slopes adjacent to footpaths, which form a health and safety hazard. Areas to be fenced to be identified on site and in consultation with Broxtowe Borough Council, Forum members, cyclists and NWT.
3.1.6	Fence around summit or strategically place felled tree trunks traversing slopes	• Install post and rail fencing with kissing gates along footpaths around summit to prevent access by off-road cyclists who descend the summit at great speed bisecting footpaths. Alternatively, strategically place felled tree trunks traversing slopes close to footpaths in areas used by cyclists to descend the slopes rapidly.
3.1.7	Maintain viewing points from summit	 Favourable vistas (to be identified by BBC, NWT, contractor) will be maintained by pruning the tops of individual trees outside of the bird breeding season (March to September), to reveal views of the distant countryside/city. This work will need to be carried out by an arboriculturalist with a recognised climbing license.
3.1.8	Install interpretation at summit	• Install interpretation panel/s at summit to explain views, distances, history etc
3.1.9	Remove graffiti from trig point and check condition of waymarkers	 Check and remove graffiti from trig point on a regular and ongoing basis. Check condition and visibility of waymarkers and rectify any problems encountered
3.1.10	Install bench at summit	 Install a bench at the summit to encourage visitors to stop and enjoy the view. The bench should be indestructible (metal), dark in colour to discourage graffiti and should be concreted into the ground.

3.2 Five Year Work Plan

Reference	Prescription	Years				
Number	Prescription	1	2	3	4	5
		2008/9	2009/10	2010/11	2011/12	2012/13
3.1.1	Fell sycamore and Norway maple	1	1	1		
3.1.2	Remove sycamore saplings and seedlings	1	1	1	1	1
3.1.3	Remove twisted willow from hedgerow along boundary with the A6002	2				
3.1.4	Check trees annually for health and safety hazards	1	1	1	1	1
3.1.5	Fence off areas, identified through consultation, at the top of steep slopes adjacent to footpaths	1	1	1		
3.1.6	Fence off summit and install kissing gates or position felled tree trunks				2	
3.1.7	Maintain viewing points from summit		2			2
3.1.8	Install interpretation at summit				2	
3.1.9	Remove graffiti from trig point and check waymarkers	2	2	2	2	2
3.1.10	Install bench at summit				3	

Priority - 1 is high, 3 is low

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3.3 Annual Work Plan

Year 1 - 2008/9

Reference Number	Priority (1-3)	Compartment / Prescription Detail	Season (Sp/Su/ Au/Wi)	Who (contractor, Broxtowe BC, volunteer group)
		Remove all sycamore from compartments 6 and 7 on a commercial basis, if possible	Au/Wi	Contractor
3.1.1	1	and treat stumps Fell or ring-bark sycamore and Norway maple from compartments 4 and 5	Au/Wi	втсу
		•Spray off regrowth, if any, with Glyphosate	Sp/Su/ Au/Wi	Broxtowe BC
3.1.2	1	 Ongoing removal of sycamore saplings and seedlings throughout wood 	Au/Wi	BTCV/Volunteer group
3.1.3	2	 Removal to be carried out by hand with forks and spades Re-plant large gaps created by the removal, small gaps should fill from shrubs either side. 	Au/Wi	BTCV/Volunteer group
3.1.4	1	 Maintain annual health and safety checks on tree condition in region of footpaths, summit and Hemlock Stone 	SP/Su/ Au/Wi	Broxtowe BC
3.1.5	1	 Install chestnut pale or post and rail fencing to tops of steep slopes adjacent to footpaths particularly in compartment 5. Additional fencing requirements to be identified by BBC, NWT and the Forum 	SP/Su/ Au/Wi	BTCV/Contractor
3.1.9	2	 Remove graffiti from trig point at summit on an ongoing basis and check condition and visibility of waymarkers 	Sp/Su/ Au/Wi	Broxtowe BC

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Year 2 - 2009/10

Reference Number	Priority (1-3)	Compartment / Prescription Detail	Season (Sp/Su/ Au/Wi)	Who (contractor, Broxtowe BC, volunteer group)
3.1.1	1	 Fell any remaining trees in region of quarry (comp 5) to expose quarry 	Au/Wi	BTCV
3.1.2	1	 Ongoing removal of sycamore saplings and seedlings in all compartments 	Au/Wi	BTCV/Volunteer group
3.1.4	1	 Maintain annual health and safety checks on tree condition in region of footpaths, summit and Hemlock Stone 	SP/Su/ Au/Wi	Broxtowe BC
3.1.5	1	 Install chestnut pale or post and rail fencing to tops of any steep slopes adjacent to footpaths that were not completed in year 1 (2007) 	Sp/Su/ Au/Wi	BTCV/Contractor
3.1.7	2	Maintain viewing points at summit by pruning tree canopy.	Au/Wi	Contractor/Broxtowe BC
3.1.9	2	 Remove graffiti from trig point at summit on an ongoing basis and check condition and visibility of waymarkers 	Sp/Su/ Au/Wi	Broxtowe BC

Year 3 - 2010/11

Reference Number	Priority (1-3)	Compartment / Prescription Detail	Season (Sp/Su/ Au/Wi)	Who (contractor, Broxtowe BC, volunteer group)
3.1.1	1	 Fell any remaining sycamore or Norway maple throughout woodland 	Au/Wi	BTCV
3.1.2	1	 Ongoing removal of sycamore saplings and seedlings in all compartments 	Au/Wi	BTCV/Volunteer group
3.1.4	1	 Maintain annual health and safety checks on tree condition in region of footpaths, summit and Hemlock Stone 	SP/Su/ Au/Wi	Broxtowe BC
3.1.5	1	 Install chestnut pale or post and rail fencing to tops of any steep slopes adjacent to footpaths that were not completed in years 1&2 	Sp/Su/ Au/Wi	BTCV/Contractor
3.1.9	2	 Remove graffiti from trig point at summit on an ongoing basis and check condition and visibility of waymarkers 	Sp/Su/ Au/Wi	Broxtowe BC

Year 4 - 2011/12

Reference Number	Priority (1-3)	Compartment / Prescription Detail	Season (Sp/Su/ Au/Wi)	Who (contractor, Broxtowe BC, volunteer group)
3.1.2	1	 Ongoing removal of sycamore saplings and seedlings in all compartments 	Au/Wi	BTCV/Volunteer group
3.1.3	1	 Maintain annual health and safety checks on tree condition in region of footpaths, summit and Hemlock Stone 	Sp/Su/ Au/Wi	Broxtowe BC
3.1.6	2	• Fence off summit with post and rail fencing and install kissing gates along footpaths. Alternatively, strategically place felled trees traversing slope close to footpaths to prevent rapid descent of slopes, across footpaths, by off-road cyclists.	Sp/Su/ Au/Wi	BTCV/Broxtowe BC
3.1.8	2	 Install interpretation panel at summit 	Sp/Su/ Au/Wi	Broxtowe BC
3.1.9	2	 Remove graffiti from trig point at summit on an ongoing basis and check condition and visibility of waymarkers 	Sp/Su/ Au/Wi	Broxtowe BC
3.1.10	3	 Install a metal bench, fixed in concrete, at summit 	Sp/Su/ Au/Wi	Broxtowe BC

Year 5 - 2012/13

Reference Number	Priority (1-3)	Compartment / Prescription Detail	Season (Sp/Su/ Au/Wi)	Who (contractor, Broxtowe BC, volunteer group)
3.1.2	1	 Ongoing removal of sycamore saplings and seedlings in all compartments 	Au/Wi	BTCV/Volunteer group
3.1.4	1	 Maintain annual health and safety checks on tree condition in region of footpaths, summit and Hemlock Stone 	Sp/Su/ Au/Wi	Broxtowe BC
3.1.7	2	Maintain viewing points at summit by pruning tree canopy if required.	Au/Wi	Contractor/Broxtowe BC
3.1.9	2	 Remove graffiti from trig point at summit on an ongoing basis and check condition and visibility of waymarkers 	Sp/Su/ Au/Wi	Broxtowe BC

This plan may need to be altered in response to site monitoring and should be reviewed after a 3 year period.

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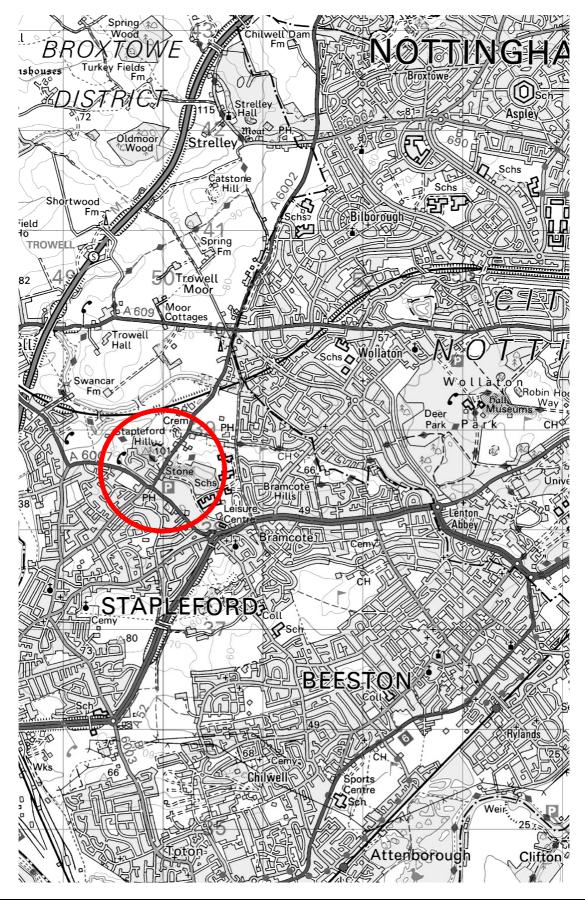
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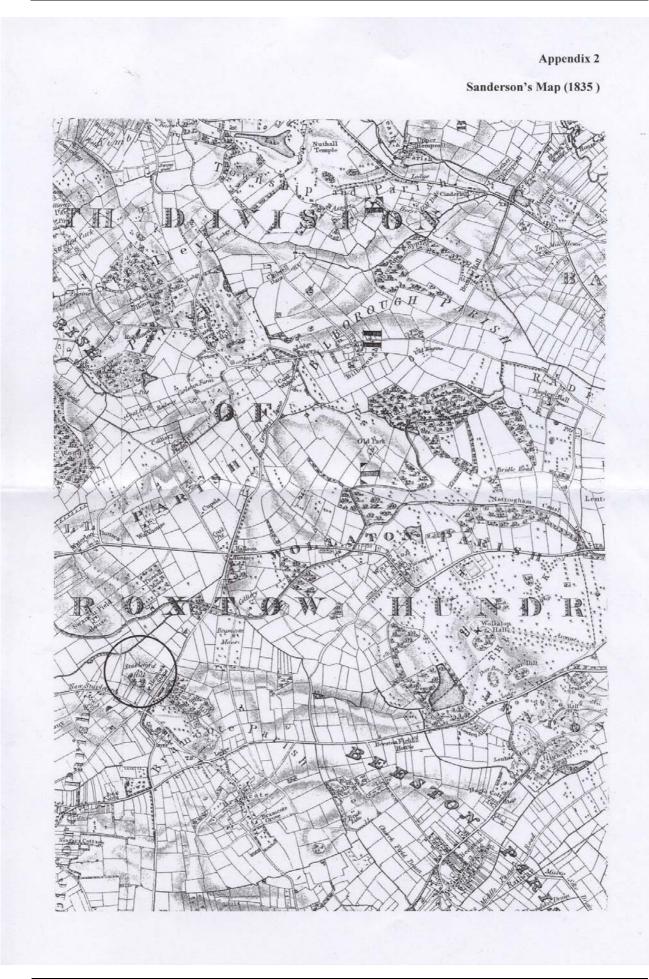
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PART 4:

APPENDICES

Appendix 1 Location Plan





Appendix 3

Bramcote Hill Wood and Stapleford Hill Wood

Breeding Bird Survey

A Report to:

Broxtowe Borough Council

By:

Nottinghamshire Wildlife Trust

The Old Ragged School Brook Street Nottingham NG1 1EA

Tel: 0115 9588242

July 2005

1. Introduction

Nottinghamshire Wildlife Trust has produced this report for Broxtowe Borough Council. The report details the results of a breeding bird survey of Bramcote Hills Wood and Stapleford Hills Wood.

2. Survey Methodology

Survey Area

The survey areas are shown on Figure 1 in Appendix 1.

Breeding Bird Survey Methodology

Four survey visits were made to each site between 8th May and 29th May at weekly intervals using standardised methods (Bibby *et al* 1992). All visits began at 6.30am and each site was surveyed for approximately one hour in order to record bird species during the key period of activity and to avoid excessive human disturbance at these popular amenity sites. The route taken passed within 50-100m of every point in the survey area. Starting and finishing points were alternated over the four visits so that particular areas were not surveyed at the same time on each occasion i.e. to control time of day bias. A slow pace was adopted and the activities of birds were recorded on a 1:2500 map using standard BTO codes (Bibby *et al* 1992). Registrations included the location of singing/non-singing birds, territorial disputes, birds carrying food and/or nesting material and the discovery of active nest sites. Particular effort was made to record simultaneous observations of different individuals, especially singing males.

Extremely wet and /or windy days were avoided, as such conditions are likely to have a detrimental effect on the results. The weather conditions during the survey visits were fine and considered conducive for the surveying process. The surveyor has identification skills developed over a period of 30 years and previous experience of bird research and monitoring. Careful assessment of territories was undertaken, based on the records derived from the four visits, with a minimum of two registrations required in a similar location to indicate a territory, and therefore likely breeding. The centre of territories was then plotted on another 1:2500 map (see appendix 4).

2.1 Survey Limitations

Commencement of the surveys began in early May. This is considered late, as the breeding season for resident species is normally well under way. It is possible that some birds may have attempted breeding and failed or already successfully fledged young. There is also a possibility that species may have been missed, for example Lesser Spotted Woodpecker *Dendrocopos minor*, which is far more likely to be detected in March when the species is particularly vocal and tree foliage is sparse. Contact with the Nottinghamshire Birdwatchers' recorder did not reveal any further data for the sites.

The standard survey methodology adopted by the BTO requires 10 visits from mid-March to late June. The 4 survey visits conducted for this report is the minimum number recommended by the BTO to provide an accurate assessment of breeding birds. However, it was felt that there was no significant negative impact on the resulting data as many resident species were still in song.

3. Results and Evaluation for Bramcote Hill Wood

3.1 Breeding Birds

A total of 24 species were recorded during the survey visits. Only 12 of these species were considered to have definitely bred within the recording area (see Table 1). The complete list of breeding species and their codes are listed in Appendix 2. Breeding territories are shown in Appendix 4. None of these are the subject of national Biodiversity Action Plans or Local Biodiversity Action Plans. None of the breeding birds are included on the RSPB Red and Amber Lists (RSPB2002). One species, Nuthatch *Sitta europaea* is included in Nottinghamshire's Birds of Conservation Concern list due to its decline within the county. Breeding for Chiffchaff *Phylloscopus collybita* and Nuthatch was established at this site alone and not at Stapleford Hill Wood, although the former was noted on the first survey visit.

3.2 Bird Species for which breeding was unconfirmed

A total of 12 bird species were recorded during the survey visits where breeding could not be proven (see Table1). All of these species were suspected to be breeding as they were observed in typical nesting habitat, but multiple sightings or nesting activity was not recorded and therefore breeding could not be confirmed. Of these 12 species, Song Thrush *Turdus philomelos* and Bullfinch *Pyrrhula pyrrhula* are the subject of UK Biodiversity Action Plans and are also included on the red list of Birds of Conservation Concern. A further four species Green Woodpecker *Picus viridis*, Stock Dove *Columba oenas*, Mistle Thrush *Turdus viscivorus* and Dunnock *Prunella modularis* are amber listed and are included on Nottinghamshire's Birds of Conservation Concern list. There were eight species that were recorded in this area and not in the nearby area of Stapleford Hill Wood; Bullfinch, Collared Dove *Streptopelia decaocto*, Jackdaw *Corvus monedula*, Stock Dove *Columba oenas*, Nuthatch, Song Thrush, Sparrowhawk *Accipiter nisus* and Greenfinch *Carduelis chloris*.

Table 1. A List of Breeding Species and those species where breeding was unconfirmed at Bramcote Hill Wood and their Current Conservation Status.

Species	List	UK BAP	NBOCC
Sparrowhawk Stock Dove Wood Pigeon	Amber		
Collared Dove Gr.Woodpecker G.S.Woodpecker Wren	Amber		\checkmark
Dunnock Robin Blackbird	Amber		$\sqrt{}$
Song Thrush Mistle Thrush Amber Blackcap Chiffchaff Coal Tit Blue Tit	Red r	√	$\sqrt[4]{}$
Great Tit Nuthatch Treecreeper Jackdaw Carrion Crow Chaffinch Greenfinch			\checkmark
Bullfinch	Red	$\sqrt{}$	$\sqrt{}$

Key to Table 1

Where breeding was confirmed species are in bold.

Red- Listed Species are categorised as of the highest conservation priority (->50% in numbers or range over last 25 years), with Amber being the next most critical (25-49% decline in breeding population or range over last 25 years). The UK Government's Biodiversity Action Plan (UK BAP) includes targeted action plans for those species of the highest conservation concern.

NBOCC - The list of Nottinghamshire's Birds of Conservation Concern is the result of a review by the Nottinghamshire Biodiversity Action Group (BAG)

4 Results and Evaluation for Stapleford Hill Wood

4.1 Breeding Birds

A total of 21 species were recorded during the survey visits (see Table 2). Only 11 of these species were considered to have definitely bred within the recording area. The complete list of breeding species and their codes are listed in Appendix 3. Breeding territories are shown in Appendix 4. None of these are the subject of national Biodiversity Action Plans or Local Biodiversity Action Plans. None of the breeding birds are included on the RSPB Red and Amber Lists (BTO 2004)). Two of these breeding species, Jay *Garrulus glandarius* and Magpie *Pica pica*, were recorded at this site alone and not at Bramcote Hill Wood.

4.2 Bird Species for which breeding was unconfirmed

A total of 10 bird species were recorded during the survey visits where breeding could not be established (see Table 2). All of these species were suspected to be breeding, as they were observed in typical nesting habitat, but multiple sightings or nesting activity was not recorded and therefore breeding could not be confirmed. Of these 10 species, four are amber listed, Green Woodpecker, Dunnock, Mistle Thrush and Goldcrest *Regulus regulus* and they are included in Nottinghamshire's Birds of Conservation Concern list. One species, Marsh Tit *Parus palustris* is red-listed. Three species, Goldcrest, Marsh Tit and Long-tailed Tit *Aegithalos caudatus*, were recorded at this site but not at Bramcote Hill Wood, but breeding could not be established.

Table 2. A List of Breeding Species and those Species where Breeding was unconfirmed at Stapleford Hill Wood and their Current Conservation Status.

Species	List	UK BAP	NBOCC	
Wood Pigeon				
Gr.Woodpecker	Amber		$\sqrt{}$	
G.S.Woodpecker				
Wren				
Dunnock	Amber		$\sqrt{}$	
Robin				
Blackbird		1		
Mistle Thrush Ambe	er	$\sqrt{}$		
Blackcap				
Chiffchaff	ب م مامد ۸		$\sqrt{}$	
Goldcrest Long-tailed Tit	Amber		V	
Marsh Tit	Red		$\sqrt{}$	
Coal Tit	neu		٧	
Blue Tit				
Great Tit				
Treecreeper				
Jay				
Magpie				
Carrion Crow				
Chaffinch				

Key to Table 2

Where breeding was confirmed species are in bold.

Red- Listed Species are categorised as of the highest conservation priority (->50% in numbers or range over last 25 years), with Amber being the next most critical (25-49% decline in breeding population or range over last 25 years). The UK Government's Biodiversity Action Plan (UK BAP) includes targeted action plans for those species of the highest conservation concern.

NBOCC - The list of Nottinghamshire's Birds of Conservation Concern is the result of a review by the Nottinghamshire Biodiversity Action Group (BAG)

Appendix 2

The Breeding Birds of Bramcote Hill Wood and their Codes

- Common Woodpigeon Columba palumbus	2 Pairs
- Great Spotted Woodpecker <i>Dendrocopos major</i>	1 Pair
- Winter Wren <i>Troglodytes troglodytes</i>	15 Pairs
- European Robin <i>Erithacus rubecula</i>	13 Pairs
- Common Blackbird <i>Turdus merula</i>	4 Pairs
- Blackcap Sylvia atricapilla	4 Pairs
- Common Chiffchaff Phylloscopus collybita	1 Pair
- Blue Tit <i>Parus caeruleus</i>	5 Pairs
- Great Tit <i>Parus major</i>	2 Pairs
- Nuthatch Sitta europaea	1 Pair
- Carrion Crow Corvus corone corone	1 Pair
- Chaffinch <i>Fringilla coelebs</i>	2 Pairs
	 Great Spotted Woodpecker Dendrocopos major Winter Wren Troglodytes troglodytes European Robin Erithacus rubecula Common Blackbird Turdus merula Blackcap Sylvia atricapilla Common Chiffchaff Phylloscopus collybita Blue Tit Parus caeruleus Great Tit Parus major Nuthatch Sitta europaea Carrion Crow Corvus corone corone

Appendix 3

The Breeding Birds of Stapleford Hill Wood and their Codes

WP	- Common Woodpigeon Columba palumbus	1 Pair
GS	- Great Spotted Woodpecker Dendrocopos major	2 Pair
WR	- Winter Wren Troglodytes troglodytes	4 Pairs
R	- European Robin <i>Erithacus rubecula</i>	8 Pairs
В	- Common Blackbird <i>Turdus merula</i>	2 Pairs
BC	- Blackcap Sylvia atricapilla	1 Pair
BT	- Blue Tit Parus caeruleus	4 Pairs
GT	- Great Tit <i>Parus major</i>	3 Pairs
J	- Jay Garrulus glandarius	1 Pair
MG	- Magpie <i>Pica pica</i>	2 Pairs
CH	- Chaffinch Fringilla coelebs	4 Pairs

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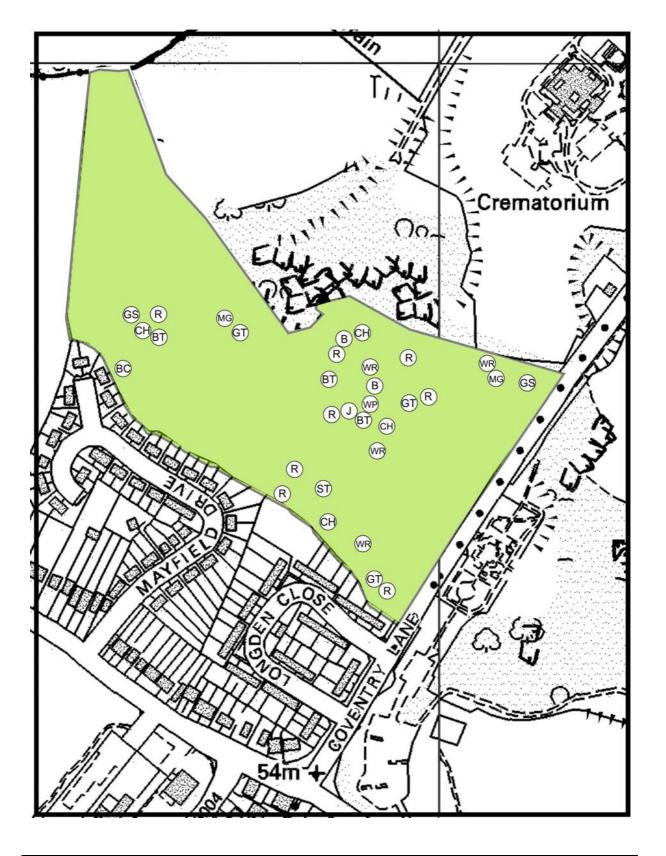
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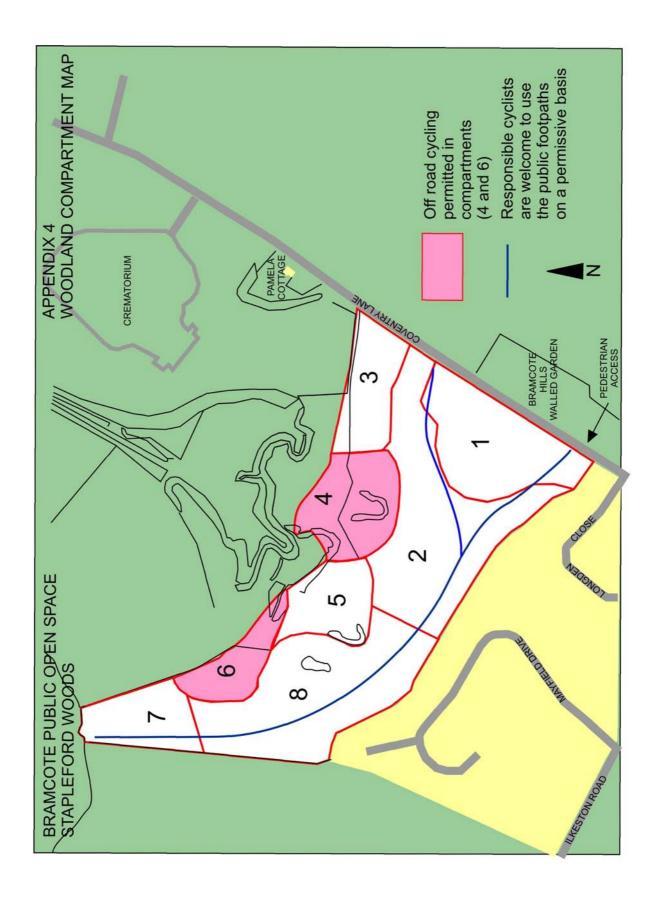
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Summary

During May 2005 a breeding bird survey using standardised methods was undertaken at Bramcote Hill Wood and Stapleford Hill Wood. Twenty-four species were recorded at Bramcote Hill Wood but breeding was established for only twelve of these. Twenty-one species were recorded at Stapleford Hill Wood but breeding was established for only eleven of these. A total of 29 species were recorded at both sites. No species of conservation concern were confirmed as breeding. However, of the species where breeding could not be established, Song Thrush, Bullfinch and Marsh Tit are included on the RSPB's Red List and List of Birds of Conservation Concern and Song Thrush and Bullfinch are also the subjects of UK Biodiversity Action Plans (UK BAP) due to their decline. A further five species, Stock Dove, Green Woodpecker, Dunnock, Mistle Thrush and Goldcrest, are included on the RSPB's Amber List of Birds of Conservation Concern.

Appendix 3b Bird Survey Map





Stapleford Hills Wood Vegetative Species List

Trees and Shrubs

Apple sp (Malus sp)

Beech (Fagus sylvatica)

Crab apple (Malus sylvestris)

Elder (Sambucus nigra)

Field maple (*Acer campestre*)

Goat willow (Salix caprea)

Gorse (*Ulex europaeus*)

Hawthorn (Crataegus monogyna)

Hazel (Corylus avellana)

Holly (*Ilex aquifolium*)

Hornbeam (Carpinus betulus)

Norway maple (*Acer platanoides*)

Pedunculate oak (Quercus robur)

Rowan (Sorbus aucuparia)

Scots pine (Pinus sylvestris)

Sessile oak (Quercus petraea)

Silver birch (Betula pendula)

Sweet chestnut (Castanea sativa)

Sycamore (*Acer pseudoplatanus*)

Twisted willow (Salix contorta)

Wild cherry (*Prunus avium*)

Wild privet (*Ligustrum vulgare*)

Yew (Taxus baccata)

Ferns

Bracken (*Pteridium aquilinum*)
Male fern (*Dryopteris filix-mas*)
Scaly Male Fern (*Dryopteris affinis*)

<u>Herbs</u>

Bluebell (*Hyacinthoides non-scriptus*)

Bramble (Rubus fruticosa)

Broad-leaved willowherb (Chamaenerion

montanum)

Common ivy (*Hedera helix*)

Common nettle (Urtica dioica)

Common sorrel (Rumex acetosa)

Dandelion (Taraxacum officinale)

Foxglove (*Digitalis purpurea*)

Garlic mustard (*Alliaria petiolata*)

Greater plantain (*Plantago major*)

Honeysuckle (Lonicera periclymenum)

Prickly lettuce (Lactuca serriola)

Red campion (Silene dioica)

Rosebay willowherb (Chamaenerion

angustifolium)

Wood avens (Geum urbanum)

Grasses, Sedges & Rushes

Common bent (Agrostis capillaris)

False oat grass (*Arrhenatherum elatius*)

Yorkshire fog (Holcus lanatus)

Wavy hair-grass (*Deschampsia flexuosa*)

Wood millet (*Milium effusum*)

This is not to be considered a comprehensive list of the vegetative species at this site. The grassland area in compartment 1 was not surveyed during the preparation of this management plan but should be surveyed at a later date when the grasses have been allowed to grow to the flowering stage.