

POTTER HOLES PLANTATION
CONSERVATION MANAGEMENT PLAN

2009-2013

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1. THE SITE

1.1 General Information

This management plan focuses on improving the nature conservation management of Potter Holes Plantation Local Nature Reserve (LNR) and the adjoining Wharnccliffe Silkstone Colliery reclamation site (to be hereafter wholly referred to as 'PHP'). This management plan should be used in conjunction with, and in reference to, other related policy documents including:

- *Barnsley Biodiversity Action Plan (Revised 2009)*
- *South Yorkshire Forest Woodland Management Report 2008*
- *Local Nature Reserve Proposal Document*
- *Natural Heritage Site (NHS) Candidate Citation*

PHP lies within the Tankersley Parish of Barnsley and is located close to the both the M1 motorway and the A61 carriageway. PHP has adjoining woodland to the southern edge of the boundary and is close to both industrial and urban areas.

The LNR part of PHP is a mature hardwood plantation found upon a former mining site. It includes a Local Nature Reserve containing Local Biodiversity Action Plan (LBAP) habitats such as Upland Oak Woodland and Ponds and a number of historical landscape features such as bell pits and mounds.

1.2 History of the Site

The site has a number of visible features which indicate the historical uses of the site. Previous to 1775, it is recorded as being a collection of 6 fields and post 1775 the site was mined for ironstone using the Bell Pit method of mining. Evidence of these mining works is still visible around the site, as the spoil mounds of the bell pits still remain. After the ironstone mining ceased in 1841, the land was planted with trees and has remained as Potter Holes Plantation since.

1.3 Location

Site Name: Potter Holes Plantation and Wharnccliffe Silkstone Colliery Reclamation Site

District/Country/Region: Tankersley, Barnsley, South Yorkshire

Electoral Ward: Tankersley Parish Council, Penistone East Ward

Local Planning Authority: Barnsley Metropolitan Borough Council

Grid Reference: SK 342998

Area: LNR- 8.57ha PHP- 27.95 ha

Figure 1- Site Location

1.4 Site Status

The section of the site known as Potter Holes Plantation was designated by BMBC as a LNR in 1996. The whole of the site is subject to a Tree Preservation Order (TPO) and the site is part of the South Yorkshire Forest (SYF). The section of the site designated as a LNR is also a candidate Natural Heritage Site (NHS) for its substantive nature conservation value. NHS designation does not impose any statutory implications upon the site, however it allows BMBC to afford it some protection against development by way of recognition in the Unitary Development Plan and the Local Development Framework which will supersede it. The site would, along with other NHS's in the borough, act as an indicator to the borough's biodiversity management which BMBC is obliged to monitor.

1.5 Tenure

The site is owned by BMBC and is managed by Parks Services.

1.6 Site Definition and Boundaries

The boundaries of both the plantation and the LNR are indicated figure 2.

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1.7 Legal and Other Official Constraints

Legal Status- The LNR designation is a statutory designation and has protection from development under Green Belt status. The whole site is also afforded protection from a TPO.

Legislation and Other Constraints- The main legislation to be aware of is:

- **Wildlife and Countryside Act 1981** - It is an offence to damage or destroy the nest of any wild bird while it is in use or being built. If management of the site includes the pruning or felling of trees or hedges, work should preferably not be undertaken during March to July, however if it is necessary it should be preceded by an inspection for active nests.

It is an offence to damage, destroy or obstruct access to bat roosts, or kill, injure or disturb bats. If bats are confirmed on site, trees likely to contain bat roosts must be surveyed before any tree felling or maintenance begins unless in an emergency such as wind blown trees overhanging the path.

It is prohibited to release, without licence, non resident alien animals (and some plants).

- **National Parks and Access to the Countryside Act 1949-** The LNR designation, under Section 21 of the National Parks and Access to the Countryside Act 1949, means that BMBC are committed to manage the site appropriately, and protect it from inappropriate use or development.
- **Town and Country Planning Act 1947 and Town and Country Planning Act Regulations 1990 Part VIII (Tree Preservation Order 1976/15)** - A TPO, ordered and enforced by the local planning authority, affords the tree(s) further protection from removal, damage or destruction.
- **Green Belt Status-** Under Barnsley's Unitary Development Plan, Policy GS7, PHP is afforded the following protection;

'Without prejudice and subject to the application of policies GS8, GS8A, GS8B, GS8C, GS8D, GS8E and GS9 in this plan, development within the Green Belt will not be permitted unless it maintain the openness of, and does not conflict with the purposes of including land in the Green Belt.'

BMBC is currently preparing the Local Development Framework (LDF) which is likely to replace the UDP as the borough's development plan during the course of this management plan.

In drafts of the LDF, it is recognised that the borough's green spaces are important for biodiversity and provide a valuable resource for the users of the site in terms of recreation and health.

Under Policy CSP43 Biodiversity and Geodiversity in the draft it states that;

“We will seek to conserve, enhance, and where appropriate mitigate against the loss of, the biodiversity and geological features of the Borough by: protecting habitats, species and sites of ecological value, with particular regard to designated wildlife sites of international, national and local significance, ancient woodland and species and habitats of principal importance identified in Section 74 of the Countryside and Rights of Way Act 2000 and in the Barnsley Biodiversity Action Plan.”

1.8 Access and Pathways

There are 4 main entrances to the site and the TPT, along with a number of concessionary paths lead around the site. Figure 3 shows the TPT and the main concessionary paths.

Figure 3- Access Points and Paths

2. THE PHYSICAL AND BIOLOGICAL ENVIRONMENT

2.1 Climate

There are no local records for this area. The nearest Met Office station is based in Sheffield and provides the following data:

Year	Month	Max Temperature Degrees C	Min Temperature Degrees C	Air Frost Days	Rainfall MM	Sun Hours
2008	January	9.0	3.9	2.0	154.0	43.6
2008	February	9.1	1.4	9.0	48.7	121.2
2008	March	9.1	2.7	3.0	98.8	137.8
2008	Apr	11.4	4.4	2.0	79.2	126.8
2008	May	17.5	8.6	0.0	43.5	186.7
2008	June	18.7	10.7	0.0	56.7	198.1
2008	July	20.8	13.0	0.0	108.7	202.6
2008	August	20.1	13.4	0.0	82.6	141.1
2008	September	17.0	10.8	0.0	92.4	105.6
2008	October	12.8	7.2	0.0	93.2	120.2
2008	November	9.0	4.9	3.0	60.0	54.9
2008	December	6.1	2.2	4.0	52.8	67.2

2008 Yearly Totals	Average 13.4	Average 6.9	23	970.6	1505.8
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The UK averages for 2008 are:

Max Temperature Degrees C	Min Temperature Degrees C	Air Frost Days	Rainfall MM	Sun Hours
12.7	5.5	52.8	1295	1388.8

2.2 Hydrology

South Yorkshire Forest (2008) indicated that the plantation appeared to be free draining and has an open drain running along the western boundary of the site. Carr (1989) suggested that within the LNR section of the site are 2 'wet areas' located against the northern boundary and close to the eastern boundary whilst a ditch indicates the western boundary. The LNR also contains a shallow pond which does on occasion dry up. The water source of the pond needs further investigation to determine where it originates.

2.3 Geology

Similar to the area around Potter Holes, the site is based upon underlying coal measures which are as a result of the deposited alternating layers of sandstone and shale from the late Carboniferous age.

2.4 Topography

The site consists of a number of slopes of varying degrees, gentle natural slopes to locally steep areas occur whilst a number of mounds from the bell pits are present. A ditch also runs along the western boundary.

2.5 Pedology

There has been no information obtained regarding the pedology of the site although the soil appears to be clay based.

2.6 Habitats Present

PHP comprises of 3 habitats:

HABITAT	DESCRIPTION	DISTRICT IMPORTANCE	BARNSELEY BIODIVERSITY ACTION PLAN (LBAP)
Woodland	A mature predominantly sycamore plantation but including oak, ash and beech with bramble, bracken and ivy dominating the understorey	Average	HAP2- Lowland Mixed Deciduous Woodland
Standing Water	A pond is located within the plantation.	Low	HAP15- Ponds (natural and man-made water bodies less than 1ha in size)
Grassland	An area of grassland is located within PHP. The grassland is likely to be of limited biodiversity value due to soil improvement and seeding plus past and current grazing management.	Low	None

2.7 Species Present

There is a variety of flora and fauna species present at Potter Holes (as previously indicated by Carr (1989) and the Potter Holes Plantation LNR Proposal Document (1996) including;

Trees

Goat Willow	<i>Salix caprea</i>
Grey Willow	<i>Salix cinerea</i>
Silver Birch	<i>Betula pendula</i>
Alder	<i>Alnus glutinosa</i>
Beech	<i>Fagus sylvatica</i>
Sessile Oak	<i>Quercus petraea</i>
Wych Elm	<i>Ulmus glabra</i>
English Elm	<i>Ulmus procera</i>
Sycamore	<i>Acer pseudoplatanus</i>
Holly	<i>Ilex aquifolium</i>
Ash	<i>Fraxinus excelsior</i>
Hawthorn	<i>Crataegus monogyna</i>
Blackthorn	<i>Prunus spinosa</i>
Elder	<i>Sambucus nigra</i>

Flowers

Japanese Knotweed	<i>Reynoutria japonica</i>
Pink Purslane	<i>Montia sibirica</i>
Red Campion	<i>Silene Dioica</i>
Creeping Buttercup	<i>Ranunculus repens</i>
Bramble	<i>Rubus fruticosus</i>
Raspberry	<i>Rubus idaeus</i>
Herb Bennet	<i>Geum urbanum</i>
Meadow Vetchling	<i>Lathyrus pratensis</i>
Wood Sorrel	<i>Oxalis acetosella</i>
Dogs Mercury	<i>Mercurialis perennis</i>
Violet spp.	<i>Viola</i>
Rosebay Willowherb	<i>Epilobium angustifolium</i>
Great Willowherb	<i>Epilobium birsutum</i>
Broad Leaved Willowherb	<i>Epilobium montanum</i>
Ivy	<i>Hedera helix</i>
Ground Elder	<i>Aegopodium podagraria</i>
Common Hemp Nettle	<i>Galeopsis tetrahit</i>
Hedge Woundwort	<i>Stachys sylvatica</i>
Bittersweet	<i>Solanum dulcamara</i>
Coltsfoot	<i>Tussilago farfara</i>
Bluebell	<i>Endymion non-scriptus</i>
Lords and Ladies	<i>Arum maculatum</i>
Broad Leaved Helleborine	<i>Epipactis helleborine</i>
Ramson	<i>Allium ursinum</i>
Nettle	<i>Urtica dioica</i>

Grasses, Sedges, Rushes and Ferns

Hairy Brome	<i>Bromus ramosus</i>
Creeping Soft Grass	<i>Holcus mollis</i>
Wood Millet	<i>Milium effusum</i>
Remote Sedge	<i>Carex remota</i>
Soft Rush	<i>Juncus effusus</i>
Male Fern	<i>Dryopteris felix-mas</i>
Bracken	<i>Pteridium aquilinum</i>

Mammals

Badgers	<i>Meles meles</i>
Bats	<i>Various</i>
Grey Squirrel	<i>Sciurus carolinensis</i>
Rabbit	<i>Oryctolagus cuniculus</i>
Mole	<i>Talpa europaea</i>
Roe Deer	<i>Capriolus capriolus</i>

Breeding Birds

Blackbird
Blackcap

Carrion Crow
Chaffinch
Chiffchaff
Dunnock
Great Spotted Woodpecker
Jay
Kestrel
Magpie
Nuthatch
Robin
Song Thrush
Tawny Owl
Willow Tit
Blue Tit
Great Tit
Coal Tit
Treecreeper
Garden Warbler
Willow Warbler
Woodpigeon
Wren

Amphibians

Amphibians are likely to be present at the LNR however in previous surveys they have not been recorded.

Reptiles

Reptiles are likely to be present at the LNR however in previous surveys they have not been recorded.

Invertebrates

A variety of invertebrates are likely to be present at the LNR however in previous surveys they have not been recorded.

Species of District Importance

There are 4 species/ families recorded at PHP that are found within Barnsley LBAP;

Species	LBAP
Bats	SAP2
Bluebell	SAP20
Hedgehog	SAP1
Kestrel	SAP7

3. CULTURAL

3.1 Commercial Use

Potter Holes is not currently used for any commercial purposes, however South Yorkshire Forest (2008) suggested that during the course of selective thinning of the woodland, the felled timber could be sold as sawlogs or used in BMBC's biomass boilers.

3.2 Recreational Use

The recreational uses of the site currently include:

Nature Interest	The main wildlife interest within PHP is the variety of birds that are found within the site. Some bird and plant species that are of interest can be seen on the interpretation boards
Historical Interest	PHP offers the opportunity to experience the visible history of the site with the numerous bell pits which are still present. The sites history is mentioned on the interpretation boards and the bell pits presence is indicated on the map

Walking

There are a number of paths that can be accessed around PHP which offers the opportunity to experience a number of different walks around the site which include a TPT Walkers Only route. The TPT route is suitable for use by most mobility scooters. Although the A61 runs adjacent to the site, the noise from the traffic does not unduly detract from the enjoyment of the site.

3.3 Interpretation

There are 2 interpretation boards placed at the entrances of the LNR section of the site as shown on figure 4.

Figure 4- Location of Interpretation Boards

Figure 5- PHP Interpretation Board

3.4 Education and Public Engagement

PHP is used frequently and is a popular site for walking or for people interested in nature. Tankersley and Pilley Environmental Group (TPEG) are a local group which have been involved in a number of activities in the past including coppicing training and litter picks.

PHP is used infrequently by local schools for educational purposes, although has been used in the past by local schools and colleges.

There is currently no leaflet or advertising information available for the site and no organised guided walks around the site. There are concerns that the flora and fauna of the site may be disturbed by 'advertising' certain aspects of the site.

The introduction of an educational programme or leaflets may be beneficial for the site but should only be done in consultation with TPEG and other interested parties.

4. SITE EVALUATION

4.1 Size

PHP is a small site which represents a small proportion of the borough's woodland.

4.2 Diversity

There is some habitat diversity on site, comprised of standing water, and as indicated by Carr (1989) includes a number of damp areas. The site also contains woodland and an area of grassland. Both the woodland and ground cover are of moderate species diversity and this can limit the nature conservation value of the woodland. The woodland is of a similar age throughout, which limits the nature conservation value of PHP.

4.3 Naturalness

The woodland area was planted following the mining works ending around 1841, and prior to this the site comprised of a number of fields. There has been planting more recently on the site and there are a number of self set samplings around the site. It is not known exactly when or how the pond was formed.

4.4 Rarity

PHP is an attractive woodland which contains a mixed experience of nature and history and additionally its urban location makes it a popular site amongst local residents. The site is important in supporting a number of breeding birds and mammals including badger (*Meles meles*) and Roe deer (*Capriolus capriolus*). The site also contains some plant species of interest including Broad-leaved helleborine (*Epipactis helleborine*) which is a locally rare orchid and the Bluebell (*Hyacinthoides non-scriptus*) which is a LBAP species.

4.5 Fragility

PHP is owned by BMBC, therefore should benefit from sympathetic management. The sites status as LNR and its TPO will afford it further protection from any development pressures.

4.6 Typicalness

The structure and composition of PHP are typical of a planted woodland however does contain none typical species such as bluebell which are more typical of a primary woodland.

4.7 Location in Ecological/ Geographical Units

PHP is adjacent to Twelve Lands Plantation to the south, intersected by Westwood New Road and is close to other woodlands to the south including Tankersley Plantation, Newbiggin Plantation and West Wood. To the north and the east sides PHP is surrounded by agricultural fields which are intersected with housing estates and industrial parks.

4.8 Resources

South Yorkshire Forest (2008) indicates that the LNR is fully stocked, but volumes are below average (160 cubic metres per hectare). The tree form and timber quality are indicated as good to average, although the large mature beech trees on site are prone to rot. The plan suggests that the LNR is well spaced, however the report does not include the Wharnccliffe Silkstone Colliery site which is dense with self set saplings and is in need of thinning, especially of sycamore and beech saplings.

4.9 Main Factors Influencing the Management of the Site

Natural Factors

- Currently a limited structure and composition of trees and ground flora which can limit biodiversity of the site
- Lack of ecological information of the site which can hinder informed site management decisions
- Invasive species, namely Japanese Knotweed is a recurring problem. Its presence may reduce the diversity of ground flora woodland. Also bramble and bracken can dominate the ground cover if not managed appropriately.

Other Factors

- Restriction of funds, limiting potential development of the site to benefit conservation
- Is vulnerable to littering from the surrounding urban areas
- Management must be sympathetic with the Barnsley LBAP
- The legislation, and in particular compliance with Health and Safety, (which is primarily to protect the public) must take precedence. Actions need to be balanced with recreational needs

5. AIMS, OBJECTIVES AND MANAGEMENT PRESCRIPTIONS

5.1 Aims and Objectives of the Site Management Plan

AIM	<i>To conserve and enhance the current habitats and species that are present on the site with special consideration given to LBAP species and habitats whilst accounting for recreational and historical interests in the site.</i>
OBJECTIVES	1. A work plan will ensure routine and consistent maintenance work is completed 2. Regular monitoring of the site will allow any responsive work that is needed to be identified and dealt with in a timely manor 3. All planned work should be relevant to the LBAP 4. Undertake a range of surveys to improve ecological understanding of the site and its nature conservation features
AIM	<i>Balance the sometimes conflicting needs of user groups to nature conservation of the site.</i>
OBJECTIVES	1. Consultation with appropriate parties during the assembly of the management plan 2. Improve education by designing and producing leaflets (in consultation with interested parties), updating the interpretation boards with increased ecological and historical information, and possibly introduce guided walks. One or more of the bell pits could be chosen and highlighted on the interpretation board and the area could be coppiced, creating a path to the bell pit. There is an opportunity to add an additional interpretation board on the Wharnccliffe Silkstone Colliery section of the site, as the current interpretation boards are only located around, and provides information on, the LNR section of the site 3. Recognise that management of the trees running adjacent to house boundaries may need some additional management

5.2 Management Prescriptions

Figure 6- Management Zones

ZONE 1- Woodland

Sutherland et al (2007) indicate preferential woodland management to retain the current native species that are found in the woodland at the start of the management plan, although the quantity of each tree species can change without having a detrimental effect on established faunal species. SYF (2008) estimated the species composition of the woodland to be-

Sycamore	65%
Beech	17%
Ash	13%
Oak	5%

The report also indicates that a small amount of elm (occurring through natural regeneration) and hawthorn is present on the site.

Sutherland et al (2007) concurs with the SYF (2008) advice on management of this woodland which should aim to encourage a mixed age woodland, maintaining large mature trees that are present whilst ensuring new growth within the woodland. This can be achieved through the following management;

- Selective felling and thinning of trees, specifically the removal of areas of Sycamore and Beech (including saplings and more mature trees) whilst maintaining the larger and more mature trees intact. This will create a more varied structure and allow additional planting of native saplings or allow areas to naturally regenerate.
- Thinning or felling of areas some areas of the woodland will allow the ground flora to naturally regenerate, possibly creating a more diverse ground cover. Ground flora species including the areas of Japanese Knotweed, Bramble and Bracken should be controlled sufficiently, especially close to paths and areas regenerating, so as not to dominate the ground cover and should contain a mixture of glades, scrubbed areas and dead wood to provide bird nesting sites, mammal cover and invertebrate habitats. Control of ground flora will also benefit young saplings in establishing themselves and areas with young trees should have vegetation removed regularly for the first 3 years.
- Overall, trees should be maintained as necessary, through coppicing and selective thinning or trimming, for health and safety and to maintain access and paths.

- Cut wood can be used for brash to create habitat piles unless sufficient dead wood exists, in which case where thinning has been undertaken for biodiversity, consideration may be given to using cut wood in BMBC's biomass boilers, or look at opportunities to sell the wood for timber or use in charcoal burners and subsequently this creates the opportunity to sell it on to the public.
- Any felling work should be undertaken outside of the bird breeding season and should ideally be done in winter. Due to the sightings of bats in PHP, any felling or significant trees should be subject to a pre-felling inspection by a licensed bat worker.
- Areas and intensity where thinning of sycamore and beech will be allocated each year by the Parks Officer, decided upon in terms of site needs and resources. However, it is worth noting that if thinning works are spread throughout the five years, it is less likely to reduce a marketable volume of timber, thus reducing the chances of the thinning being economically viable. It will also extend the period over which the paths and the forest floor, used by machinery, will be damaged.

ZONE 2- Standing Water

A survey of the pond area should be scheduled as early as possible to establish suitable management actions to benefit the species recorded.

Management actions to consider on completion of the survey work include;

- Should the canopy overhanging the pond area be kept or coppiced to allow the pond to receive additional light and reduce leaf litter?
- By ascertaining the source of the pond should this then be improved to maintain a year round pond or is it more beneficial to allow the pond to naturally dry out periodically?

ZONE 3- Grassland

The grassland area within PHP was created as part of the colliery reclamation scheme using soil improvers and grass seeding not aimed at biodiversity. It is currently grazed by sheep and will continue to be managed in this way for the foreseeable future. The grassland has been grazed for a number of years with no specific conservation management actions and it is presumed that this area will be of low diversity interest.

ZONE 4- Recently Planted Area

- No further planting is planned, however the planted saplings need to be supported by removing encroaching bramble and removing the rabbit guards when appropriate.

ZONE 5- Paths

It is not currently necessary to create additional paths so emphasis is to maintain the current path ways by;

- Trim back trees and branches where necessary and identified by the BMBC officers routine boundary walks and/or by notification from the public. Priority will be given to maintaining the TPT walkers' route.
- Clearance of ground flora, especially bramble, to maintain clear paths. This is especially necessary on the path to the pond as used less often than other paths and may become overgrown quickly.
- Dead wood can be used to define or re-define pathways.

Other Management Prescriptions

- It is BMBC's intention to refer this management plan to the Local Planning Authority for recognition that it is the basis of sustainable woodland management for the benefit of biodiversity, so as to preclude further need to apply for works on trees in the TPO designation.

6. SURVEY AND MONITORING

6.1 Recommended Surveys to be Undertaken

- Appropriate species surveys should be undertaken during the 5 year management plan. This will allow the management plan to be updated with more comprehensive information and allow more specific and targeted future action.

Surveys of the pond should be prioritised as this area has not been surveyed previously and could contain significant ecological features that may or may not need management.

Other surveys that may be undertaken are a full floral survey possibly with the help of Barnsley Naturalist and Scientific Society and a breeding bird survey that could be done involving any local interest parties.

- Phase 1 habitat and National Vegetation Classification (NVC) surveys could be undertaken for the wider area to include the whole site not just the LNR, although this is not a priority. The phase 1 survey will allow recording of all habitats and vegetation on the site, along with appropriate coded maps, whilst the NVC will provide detailed information encompassing vascular plants, bryophytes and macro-lichen species within a certain vegetation type noted within the phase 1 survey and can provide a further tool for monitoring any changes to the site. It is likely that the site is moving towards a W10 *Quercus robur* – *Pteridium aquilinum* – *Rubus fruticosus* woodland community (Pedunculate oak- Bracken-Bramble).

6.2 Monitoring of the Site

- Fixed point photography should be used to monitor the areas where management is being implemented. Done in year 2 and year 5 of the management plan, it will allow easily accessible visual assessment of the effectiveness of any management undertaken.
- The site should be subject to a boundary walk and a site walk (preferably 6 times a year if resources allow, but not less than twice a

year) by an officer from BMBC. This will allow the officer to check the progress of any work and the condition of the site. Regular monitoring will allow any issues arising, for example path maintenance and boundary issues, to be recognised and dealt with in a timely manner.

7. FUNDING

7.1 Funding Options

The production of this management plan will support applications for the funding of work at PHP.

There are a number of grants that this site may be eligible for primarily the Forestry Commission's English Woodland Grant Scheme (EWGS). Access to other funds may be possible according to the needs of the project and availability.

7.2 Priorities and Resources

BMBC currently have one officer and the equivalent of one estate worker dedicated to their nature reserves portfolio. Smaller works can be undertaken with this resource, but further/larger works will only be commissioned if more resources become available and/or assisted by other organisations. This could include TPEG and similar voluntary groups, but could also include the Wildlife Trusts, RSPB the Environment Agency and others.

GLOSSARY OF ABBREVIATIONS

BMBC	Barnsley Metropolitan Borough Council
EWGS	English Woodland Grant Scheme
HAP	Habitat Action Plan
LBAP	Local Biodiversity Action Plan
LDF	Local Development Framework
LNR	Local Nature Reserve
LPA	Local Planning Authority
NHS	Natural Heritage Site
NVC	National Vegetation Classification
PROW	Public Rights of Way
RSPB	Royal Society for the Protection of Birds
SYF	South Yorkshire Forest
TPEG	Tankersley and Pilley Environmental Group
TPO	Tree Preservation Order
UDP	Unitary Development Plan

APPENDIX 1- CONSULTEES

The plan has been written by officers in Parks Services with input from the external organisations listed below:

Barnsley Biodiversity Trust

South Yorkshire Forest

Tankersley and Pilley Environmental Group (including members of Tankersley Parish Council)

APPENDIX 2- PHASE 1 HABITAT MAP AND CITATION

Site Name: Potter Holes Plantation

Parish: Tankersley

Grid Reference: SK 999343

Area:

SITE DESCRIPTION

Potter Holes Plantation is located south of Junction 36 of the M1 and adjacent to the dual carriage way of the A61. The site is at an altitude of 140 to 160 m AOD.

The site is a plantation woodland which has notable historical industrial archaeological interest in the numerous earthworks and spoil mounds which were created during lead mining operations on the site between 1775 and 1841.

The canopy structure is even-aged and is dominated by the plantation trees, namely sessile oak (*Quercus petraea*), beech (*Fagus sylvatica*) and sycamore (*Acer pseudoplatanus*). The understorey is somewhat sparse and comprises predominantly elder (*Sambucus nigra*), blackthorn (*Prunus spinosa*) and hawthorn (*Crataegus monogyna*) with some wych elm (*Ulmus glabra*), occasional holly (*Ilex aquifolium*), and scattered birch (*Betula pendula*), ash (*Fraxinus excelsior*) and alder (*Alnus glutinosa*).

The herb layer is generally of limited diversity comprising locally dominant bramble (*Rubus fruticosus*) and ivy (*Hedera helix*) and scattered raspberry (*Rubus idaeus*). There are some more diverse elements to the ground flora particularly along the western edge of the woodland, near the southern tip of the site. Here a number of plants indicative of a historic wooded site are found including bluebell (*Hyacinthoides non-scripta*), ramsons (*Allium ursinum*), wood sorrel (*Oxalis acetosella*), dog's mercury (*Mercurialis perennis*), broad-leaved helleborine (*Epipactis helleborine*), and also lords and ladies (*Arum maculatum*). Notable monocots include wood millet (*Milium effusum*) and remote sedge (*Carex remota*) species which are also associated with ancient woodland.

There are scattered populations of the invasive alien plant, Japanese knotweed (*Fallopia japonica*), located on the north-western boundary next to the site of a former pond and also within the main body of the wood near Rose Cottage.

The site supports a number of breeding birds including tawny owl, great spotted woodpecker, sparrowhawk, blackcap, willow warbler, chiff chaff, garden warbler.

SITE EVALUATION

Criteria

Size: This is a small site on the edge of urban development.

Diversity: The site includes a single habitat type, woodland, but within some variation in topography and including several damp areas.

Naturalness: The woodland habitat is of secondary or planted original although the ground flora of some areas suggests permanently wooded conditions. The topography of parts of the site originates from former extractive industries (ironstone mining).

Rarity: The site supports a number of breeding birds and contains some woodland plant species which are of limited extent in the Barnsley District. *Epipactus helleborine* is considered to be rare in Barnsley.

Fragility: The woodland would be vulnerable to unsympathetic management or development pressures.

Typicalness: The site contains a range of woodland plant species typical of a secondary woodland site. It does, however support and range of breeding birds and contains some elements of ground flora which are more typical of primary woodland.

Evaluation of important features

<u>Site Feature</u>		<u>Importance</u>		
1.	<u>Habitat type</u> Woodland	<u>District</u> Average*		
2.	<u>Species</u> Breeding birds <i>Epipactus helleborine</i>	<u>National</u>	<u>County</u>	<u>District</u> Average* High*

* Requires re-evaluation in light of further survey in order to verify the botanical diversity of these habitats.

Existing site designations: Local Nature Reserve. South Yorkshire Forest.

Site justifications: Potter Holes Plantation is a small woodland site with limited diversity of woody species and only localised areas of diverse ground-flora. The site does, however, support a number of breeding birds, and has supported protected mammal species in the past. On the basis of current evidence the site falls short of the criteria for inclusion on the Barnsley NHS Register. It would be beneficial to undertake a further botanical field survey at an optimum time of year. It is then suggested that NHS might be reconsidered. The site may hold invertebrate interest and this would warrant further investigation. The site does, however, have significant cultural and recreational value.

Barnsley Biodiversity Action Plan

FLS 5 Bluebell (Now changed to SAP20)

SITE MANAGEMENT

Management objective:

To develop a more mixed age woodland with greater structural diversity to the canopy and understorey. To encourage breeding birds and increase botanical diversity of the ground layer.

Initial Management:

Control bramble, elder and Japanese knotweed.

Ongoing management:

Continue the programme of selective felling and thinning to create a varied canopy structure and to allow light to penetrate to the woodland floor in selected areas.

Constraints:

Opportunities:

Site is under BMBC Control.

SITE CONSTRAINTS AND OPPORTUNITIES

Constraints:

An urban fringe site vulnerable to uncontrolled access and littering from the A61.

Opportunities:

The site is under the control of BMBC and is being maintained and developed as a Local Nature Reserve.

YEAR 2 2010

COMPARTMENT	DETAILS OF WORK	J	F	M	A	M	J	J	A	S	O	N	D
Habitats													
Woodland	Spraying of Japanese Knotweed												
	Removal of Bracken, Bramble and non-native saplings												
	Thin mature sycamores and beech leaving deadwood as habitat or produce charcoal for public sale												
	Removal of last rabbit guards at Wharnccliffe Silkstone reclamation												
	Wharnccliffe Silkstone plantation – thin out and reduce non-native species to benefit biodiversity – volunteers												
Pond	Work to be planned dependant upon pond survey results												
Paths	Cut back vegetation on TPT walkers' route												
Survey/ Monitor	Boundary walk undertaken by BMBC officer												
	Fixed point photography of areas being actively managed												
	Pond Survey												
Education	Consider creating leaflets and/ or trail guides as indicated in section 5.1.												
	Look for opportunities to involve schools												
Other	Refer management plan to LPA												

YEAR 3 2011

COMPARTMENT	DETAILS OF WORK	J	F	M	A	M	J	J	A	S	O	N	D
Habitats													
Woodland	Spraying of Japanese Knotweed												
	Removal of Bracken, Bramble and non-native saplings												
	Thin mature sycamore and beech (possibly use wood for biomass or timber/charcoal sales if market conditions allow)												
	Wharnccliffe Silkstone plantation – thin out and reduce non-native species to benefit biodiversity – volunteers												
Pond	Work to be planned dependant upon pond survey results												
Paths	Cut back vegetation on TPT walkers' route												
Survey/ Monitor	Boundary walk undertaken by BMBC officer												
	Undertake Breeding Bird Survey												
Education	Consider updating interpretation boards												
	Look for opportunities to involve schools												
Other	Consider emphasising one or more of the bell pits (as indicated in section 5.1)												

YEAR 4 2012

COMPARTMENT	DETAILS OF WORK	J	F	M	A	M	J	J	A	S	O	N	D
Habitats													
Woodland	Spraying of Japanese Knotweed												
	Removal of Bracken, Bramble and non-native saplings												
	Thin mature sycamore and beech (possibly use wood for biomass or timber/charcoal sales if market conditions allow)												
	Wharnccliffe Silkstone plantation – thin out and reduce non-native species to benefit biodiversity – volunteers												
Pond	Work to be planned dependant upon pond survey results												
Paths	Cut back vegetation on TPT walkers' route												
Survey/ Monitor	Boundary walk undertaken by BMBC officer												
Education	None planned but look for opportunities to involve schools												
Other	None planned												

YEAR 5 2013

COMPARTMENT	DETAILS OF WORK	J	F	M	A	M	J	J	A	S	O	N	D
Habitats													
Woodland	Spraying of Japanese Knotweed												
	Removal of Bracken, Bramble and non-native saplings												
	Thin mature sycamore and beech (possibly use wood for biomass or timber/charcoal sales if market conditions allow)												
	Wharnccliffe Silkstone plantation – thin out and reduce non-native species to benefit biodiversity – volunteers												
Pond	Work to be planned dependant upon pond survey results												
Paths	Cut back vegetation on TPT walkers' route												
Survey/ Monitor	Boundary walk undertaken by BMBC officer												
	Fixed point photography of areas being actively managed												
Education	None planned but look for opportunities to involve schools												
Other	None planned												

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