



Nut Hill

Management Plan 2010-2015

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THE WOODLAND TRUST

INTRODUCTION

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations. Please either consult The Woodland Trust website www.woodlandtrust.org.uk or contact the Woodland Trust (wopsmail@woodlandtrust.org.uk) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland. Our strategic aims are to:

- Protect native woods, trees and their wildlife for the future
- Work with others to create more native woodlands and places rich in trees
- Inspire everyone to enjoy and value woods and trees

All our sites have a management plan which is freely accessible via our website

www.woodlandtrust.org.uk. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
4. The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
- 10 Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

SUMMARY

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site - their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

1.0 SITE DETAILS

Site name:	Nut Hill
Location:	Upton St Leonards
Grid reference:	SO873150, OS 1:50,000 Sheet No. 162
Area:	5.64 hectares (13.94 acres)
Designations:	Area of Outstanding Natural Beauty

2.0 SITE DESCRIPTION

2.1 Summary Description

Nut Hill is one of The Woodland Trust's 'Woods on Your Doorstep' woodlands, created to commemorate the Millennium. It lies close to the commuter village of Upton St Leonards and is only three miles from the centre of Gloucester. Along with mixed, native broadleaf trees, varieties of nut tree have also been planted, reinforcing the woodland's name.

2.2 Extended Description

Nut Hill is a 5.62ha site acquired in 1999 as part of the Woodland Trust's Woods On Your Doorstep initiative. This initiative created 200 new woods to mark the Millennium. It lies close to the commuter village of Upton St Leonards and is only 3 miles SE of the centre of Gloucester. As the name suggests, the site occupies a prominent hill and consists mainly of pasture land with two young woodland plantings and an area of mature woodland on the southern side.

Some veteran trees occupy the northern hillside, these are thought to be remnant of wood pasture. From the top of Nut hill superb views are to be had over the Cotswold Hills to the east. The site lies within the Cotswold AONB and is also locally designated as being of Great Landscape Value. The grassland itself is reasonably herb-rich.

Two structures occupy the very top of Nut Hill, remnants from the second world war. A five sided 'pill box' gun emplacement lies above-ground and is in quite good condition. An underground bunker lies adjacent with access shaft, flu and ventilation shaft. This is sealed for visitor safety reasons. A topography plate is mounted on a Cornish granite plinth at the highest point. Views over Gloucester, the Malverns, Forest of Dean and Cotswold escarpment are indicated by the topography. It was unveiled by the local Probus club on June 21st 2000 - the longest day in the Millennium year. It is the sites Millennium Feature.

Additional trees have been planted within the wood pasture area, enhancing this habitat type without spoiling the views, grassland or veteran tree impact. Nut varieties of trees have also been planted on the opposite side of the hill (south) in keeping with; and reinforcing the woodland name.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Nut Wood lies about 3 miles SE of the centre of Gloucester near the village of Upton St Leonards. It is accessible directly from the highway or via a permissive path through the grounds of Bawdon Hall Hotel.

In addition to immature / semi-mature woodlands, visitors to the 5.26ha site will find superb views from the top of Nut Hill over the Cotswold escarpment and more. A Topograph at the summit interprets the views to be had.

Additionally, visitors can enjoy veteran trees which with other impressive exotic trees form part of an ancient wood-pasture, more reminiscent of a parkland setting today. Planted trees in parkland guards can be seen, growing on as replacements. On the other side of the hill (south), various species of nut tree have been planted in groves, depicting the woodland name.

Nuthill itself is well served by internal permissive footpaths but there are no links to the external Public Right of way network in the surrounding landscape. This is despite the fact that the landscape is actually well served with pedestrian public rights of way. Nuthill is linked to the nearby village of Upton St Leonards by a permissive route through the grounds of the nearby Bowden Hall Hotel. The hotel kindly allow visitors to Nuthill to park in the grounds and walk through the Hotel's woodland property to gain access to the site. This approach route can be wet and slippery and is moderately steep. Once within the site slopes are more gradual, they are not surfaced and for the most part covered in grass rather than being bare soil. The views from the top of the site are excellent and facilitated by a topographic stone. Only pedestrian access is permitted.

The only parking facilities are kindly provided by the Bowden Hall Hotel within their grounds.

Currently (2007) Upton St Leonards is linked to Gloucester city centre via a service that stops at the village Post Office, Churchfield Rd, Upton St Leonards

It has not been possible to locate Public Convenience information for the Upton St. Leonards area.

3.2 Access / Walks

4.0 LONG TERM POLICY

Nut Hill will be maintained for perpetuity as a woodland feature offering an ongoing amenity to the local population, and ensuring the continuity of woodland habitat as an integral part of the areas greater ecological landscape. Where practicable grazing will be continued to perpetuate the area of wood pasture. In the wooded parts of Nut Hill the development of stand structure, species mixture and the rise and decline of mature trees will be allowed to develop naturally where it is safe to do so. This natural rate of change will enable the widest possible range of habitats and species to survive and evolve.

Guided by the parameters set out in the Woodland Trusts woodland management principles and access policy, management will continue to seek a balance between the Trusts conservation values and public enjoyment. Public safety and amenity will be the key drivers for woodland operations, and the Trust will capitalise on opportunities triggered by these drivers for the recruitment of regeneration and structural change. Edge habitat will be managed within a cyclical coppice regime to ensure that a graduated woodland edge promotes stand stability.

5.0 KEY FEATURES

The Key Features of the site are identified and described below. They encapsulate what is important about the site. The short and long-term objectives are stated and any management necessary to maintain and improve the Key Feature.

5.1 Informal Public Access

Description

The whole of Nut Hill is accessible to the public. Access is either from the public highway in the southern corner of the site, or via a permissive path running from Bowden Hall Hotel to the west. Visitors can enjoy areas of semi mature woodland but most will be attracted to the summit of Nut Hill from where superb views are to be had, particularly to the east and north. Mature trees occupy part of the top and the northern bank, and this includes five veteran trees. These, together with other exotic trees, make Nut Hill a worthwhile site to visit.

Significance

Visitors to the countryside often seek areas from where good views are available. Nut Hill is a classic example of access being provided where it didn't previously exist.

Opportunities & Constraints

The wood pasture 'parkland' extends to the north. There is an opportunity to extend the area available to visitors over this area.

Factors Causing Change

Long term Objective (50 years+)

To retain informal public access to the whole of the 5.26ha site. To provide facilities appropriate to the informal demand, whilst retaining the 'naturalness' of the site.

Short term management Objectives for the plan period (5 years)

To maintain gates, signs and other facilities in a functional, safe manner.

5.2 Secondary Woodland

Description

Three existing young woodland stands exist and the trust has added additional 'Nut Groves'. These abut adjacent similar woodlands improving the core area of local tree cover and habitat, and adding value to the landscape.

Significance

The woodland is important for both wildlife and landscape purposes.as a continuation of other similar woodland running along the southern and western rim of Nut Hill.

Opportunities & Constraints

Planting is constrained by the herb-rich nature of the higher parts of Nut Hill and the desire to retain the Wood Pasture there. There is an opportunity to extend the 'Nut Grove' planting between Cpts 1 and 2a, where grazing and management is currently difficult and the grassland value is limited.

Factors Causing Change

Long term Objective (50 years+)

The Site will be managed as a woodland habitat in perpetuity. The Woodland Trust takes a holistic and long-term view to habitat survival and evolution, and to a greater extent where it is safe and practicable to do so will allow natural processes to dictate the development of this wood. Over the long-term the wood will continue to develop a range of naturally paced vegetation cycles that will include periods of regeneration and decline. This will allow the progression of the widest possible species abundance and diversity in terms of the complex and dynamic cycles between the larger flora and fauna and the micro world of invertebrates, fungi and other lower plants

Short term management Objectives for the plan period (5 years)

The short term objective is ensure that the wood remains a safe and inviting place to visit, but otherwise it will be managed as a low intervention site. The policy of low intervention with restructuring through a combination of tree safety works and natural processes makes it difficult to predict short term operations. Tree safety assessments will be completed on a regular programmed schedule or in response to reports from the public.

5.3 Wood Pasture

Description

Comprising of five notable veteran trees (2 ash and three oak) together with other ash and oak and several mature exotic trees including cedar and sequoia. The woodland is very open and fourteen additional trees have been planted, complimenting the existing ones. The grass is herb rich and diverse in places. Invertebrates associated with this particular habitat type have been found here.

Significance

Wood pasture is nationally rare as a habitat type. Veteran trees are also of particular importance to biodiversity and these, together with the rich grassland and spectacular hill top location make this site very special indeed.

Opportunities & Constraints

The wood pasture extends to the north of the site and forms a natural extension to the Nut Hill. There is an opportunity to include this through purchase or agreement. Vandal damage has had an impact on new planting, but replacement planting in metal tree guards is having some success.

Factors Causing Change

Inadequate or over-grazing

Long term Objective (50 years+)

To develop a broad age structure of the trees within the wood pasture. This will be achieved by a continued programme of planting trees. The veteran trees will be retained for the duration of their lives (and beyond), where safety allows.

The grassland will continue to be managed by grazing to encourage the diversity of plant species present to expand.

Short term management Objectives for the plan period (5 years)

To increase grazing levels to get grass sward shorter prior to the winter. Grazing should be extensive during the flowering season. Replacement of the wooden guards lost on the grazing guards around the young plantings.

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
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APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	0.40	Mixed broadleaves		High forest		Informal Public Access, Secondary Woodland, Wood Pasture	Area of Outstanding Natural Beauty
<p>Area of semi-mature woodland largely comprising of sycamore with ash, occasional coppiced lime; and some larch at the western end. Holly, elm and blackthorn form an under-storey in parts. The southern boundary is the public highway and the northern boundary is a wire fence and open ground within the site. Similar woodland is adjacent to the west and the entrance to Nut Hill is to the east. The compartment has a steep south facing.</p> <p>The woodland has a fully closed canopy limiting direct light penetration to the woodland floor. This reduces the amount of under-storey present. Sycamore is widespread and represents about 90% of the canopy.</p>							
2a	0.36	Mixed broadleaves	1980	Wood establishment		Informal Public Access, Secondary Woodland, Wood Pasture	Area of Outstanding Natural Beauty
<p>Mixed woodland planted c1980. Comprises silver birch, turkey oak and ash with blocks of Lombardy poplar, larch (dense at SE end) and elder under-storey. Many of the trees were planted as part of a community tree planting scheme and local school children were involved.</p>							
2b	0.12	Mixed broadleaves	1993	Wood establishment		Informal Public Access, Secondary Woodland, Wood Pasture	Area of Outstanding Natural Beauty
<p>Young broadleaf plantation planted c1993. Still at 1.5m centres, the trees are therefore competing strongly and have become drawn. Species present include cherry, rowan, beech, ash, oak and hazel. The area is enclosed by post and wire fencing in quite good condition.</p>							
2c	0.10	Mixed broadleaves		Wood establishment		Informal Public Access, Secondary Woodland, Wood Pasture	

50 nut trees were planted as part of a community tree planting day plus any additional nut trees brought along by local people. Planted trees are mainly hazel but with walnut and sweet / horse chestnut additionally. These trees have established well but some are now suffering from squirrel damage.

3a	4.28	NULL		Wood pasture	Sensitive habitats/species on or adjacent to site	Informal Public Access, Secondary Woodland, Wood Pasture	
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Forming the major part of the site, this Cpt comprises of the grassy hill-top and eastern side, the wood pasture on the northern side and strip of land between the existing woodlands of Cpt 2. All can be grazed by livestock, although the nut plantations of Cpt 2c would require protection. Grazing has therefore been restricted to the hilltop in the last couple of years, this being separated by a management gate between Cpts 2a and 2b.

The wood pasture area comprises of five notable veteran trees, two ash and three oaks. There are other smaller ash and 'parkland' trees including sequoia, cedar, fir and pine. This is replicated in the fields below, further to the north. Fourteen new replacement woodland pasture trees were planted in 2000, these being oak (grown from acorns collected on-site below veteran trees) as well as some non-native species such as Wellingtonia, cedar, silver fir and lime. These compliment the existing trees on site. Planted trees are protected by individual wooden parkland guards.

The grassland is semi-natural and takes both calcareous, and acidic characteristics around the site. This adds to the diversity, with typical wildflowers including birds-foot trefoil, self-heal, tormentil, lady's bedstraw, yarrow, burnet-saxifrage and harebell. On the steeper, more poached slopes, brome is evident. This is coarse and smothering but should be contained by sympathetic management. Scarce invertebrates are associated with ancient trees and some are known to occur at Nut Hill.

Water troughs are present for stock watering.

GLOSSARY

Ancient Woodland

Ancient woods are defined as those where there has been continuous woodland cover since at least 1600 AD. In Scotland ancient woods are defined strictly as sites shown as semi-natural woodland on the 'Roy' maps (a military survey carried out in 1750 AD, which is the best source of historical map evidence) and as woodland all subsequent maps. However, they have been combined with long-established woods of semi-natural origin (originating from between 1750 and 1860) into a single category of Ancient Semi-Natural Woodland to take account of uncertainties in their identification. Ancient woods include Ancient Semi-Natural Woodland and plantations on Ancient Woodland Sites (see below). May support many species that are only found in ancient woodland.

Ancient Semi - Natural Woodland

Stands in ancient woods defined as those consisting predominantly of native trees and shrubs that have not obviously been planted, which have arisen from natural regeneration or coppice regrowth.

Ancient Woodland Site

Stands in ancient woods that have been converted to plantations, of coniferous, broadleaved or mixed species, usually for timber production, including plantations of native species planted so closely together that any semi-natural elements of the understorey have been suppressed.

Beating Up

Replacing any newly planted trees that have died in the first few years after planting.

Broadleaf

A tree having broad leaves (such as oak) rather than needles found on conifers (such as Scots pine).

Canopy

The uppermost layer of vegetation in a woodland, or the upper foliage and branches of an individual tree.

Clearfell

Felling of all trees within a defined area.

Compartment

Permanent management division of a woodland, usually defined on site by permanent features such as roads. See Sub-compartments.

Conifer

A tree having needles, rather than broadleaves, and typically bearing cones.

Continuous Cover forestry

A term used for managing woods to ensure that there are groups or individual trees of different ages scattered over the whole wood and that some mature tree cover is always maintained. Management is by repeated thinning and no large areas are ever completely felled all at once.

Coppice

Trees which are cut back to ground levels at regular intervals (3-25 years).

Exotic (non-native) Species

Species originating from other countries (or other parts of the UK) that have been introduced by humans, deliberately or accidentally.

Field Layer

Layer of small, non-woody herbaceous plants such as bluebells.

Group Fell

The felling of a small group of trees, often to promote natural regeneration or allow planting.

Long Term Retention

Discrete groups of trees (or in some cases single trees) that are retained significantly past their economic felling age. Operations may still be carried out within them and thinning is often necessary to maintain stability.

Minimum Intervention

Areas where no operations (such as thinning) will take place other than to protect public safety or possibly to control invasive exotic species.

Mixed Woodland

Woodland made up of broadleaved and coniferous trees.

National vegetation classification (NVC)

A classification scheme that allows an area of vegetation to be assigned to the standardised type that best matches the combination of plant species that it contains. All woodlands in the UK can be described as being one of 18 main woodland types (W1 - W18), which principally reflect soil and climatic conditions. For example, Upland Oakwoods are type W11, and normally occur on well drained infertile soils in the cooler and wetter north and west of Britain. Each main type can be subdivided into numerous subtypes. Most real woods contain more than one type or sub-type and inevitably some woods are intermediate in character and can't be properly described by any sub type.

Native Species

Species that arrived in Britain without human assistance.

Natural Regeneration

Naturally grown trees from seeds falling from mature trees. Also regeneration from coppicing and suckering.

Origin & Provenance

The provenance of a tree or seed is the place where seed was collected to grow the tree or plant. The origin is the geographical location within the natural range of a species from where seeds/tree originally derives. Thus an acorn collected from a Turkey oak in Edinburgh would have an Edinburgh provenance and a southern European origin.

Re-Stocking

Re-planting an area of woodland, after it has been felled.

Shrub Layer

Formed by woody plants 1-10m tall.

Silviculture

The growing and care of trees in woodlands.

Stand

Trees of one type or species, grouped together within a woodland.

Sub-Compartment

Temporary management division of a compartment, which may change between management plan periods.

Thinning

The felling of a proportion of individual trees within a given area. The remaining trees grow to fill in the space created.

Tubex or Grow or Tuley Tubes

Tubes placed over newly planted trees or natural regeneration that promote growth and provide protection from animals such as rabbits and deer.

Weeding

The control of vegetation immediately around newly planted trees or natural regeneration to promote tree growth until they become established. Either by hand cutting or with carefully selected weed killers such as glyphosate.

Windblow/Windthrow

Trees or groups of trees blown over (usually uprooted) by strong winds and gales.