WOODLAND TRUST

Crowhill Valley

Management Plan 2015-2020

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MAPS

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Crowhill Valley
Location:	Grampound
Grid reference:	SW933512, OS 1:50,000 Sheet No. 204
Area:	10.70 hectares (26.44 acres)
Designations:	Area of Landscape Value, Conservation Area, Great Landscape Value, Site of Special Scientific Interest

2.0 SITE DESCRIPTION

2.1 Summary Description

This remote wood lies in a wooded valley and is one of the most significant areas of Sump Alder in the south west. The waterlogged valley bottom consists of ditches and pools that contain nationally rare plant species that thrive in the wet conditions.

2.2 Extended Description

Crowhill Valley lies in a narrow, steeply sided wooded valley near the upper reaches of the River Fal. It is one of the most significant areas of Sump Alder woodland remaining in the South West and as with the surrounding woodland and valley slopes been designated as a Site of Special Scientific Interest. It is bounded by the River Fal on the eastern side and a mill race to the west. Numerous ditches and pools are to be found in the valley bottom which remains waterlogged throughout the year and this and general ground conditions indicate a tin streaming history. The wood is dominated by stunted common alder and grey willow throughout most of the areas with Sessile oak and birch on drier humps. Lichens and marsh loving plants including nationally rare species thrive in the woodland. An area of fen meadow that lies at the southern end of the wood is colonising to alder woodland, but also contains a small reservoir of fen meadow species. The stunted growth of the trees and abundant ground flora and lichens give this secluded wood an air of tranquillity and timelessness.

Access is from the hamlet of Trenowth, along a privately owned green lane then over the river Fal into the site across a concrete bridge. Because of the wet ground conditions access is only possible along a path that follows the higher drier bank of the river. The path itself is narrow, sometimes grassy but often has a bare earth surface, and undulates along the bank and throughout small wetter areas. In times of flood and high river levels the bank and consequently sometimes parts of the path can become eroded making the route more difficult to walk than the level ground present would indicate. Parking at, and public transport links to, the wood are very limited and as the wood is set in open country with only a scattered local community it is only used by a small but regular number of locals.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Crowhill Valley is situated in an isolated rural area approximately 1.5 miles east of Grampound Road and 2miles north of Grampound which lies on the A390 between St Austell and Truro. Access can be gained via narrow lanes running from the village of Grampound past the hamlet of Trenowth, along a privately owned green lane, under the viaduct carrying the railway line from St Austell to Truro and then over a bridge across the River Fal that rises nearby. The gate to the wood remains locked to prevent vehicular access into the wet woodland and occupies the full width of the bridge. Therefore it requires some dexterity and agility to negotiate the entry point. Access within the wood is restricted to a narrow path, sometimes grassy but often with just a muddy bare earth surface that undulates along the river bank and through small boggy areas. Off the track the wood is very wet, with boggy and swamp conditions that cannot be walked through. At the northern end of the wood the path exits onto private land over a small stile. Access beyond the wood has occurred for some time and is enjoyed by locals, but there appears to be no authorised permissive agreement to do so and therefore the stile remains informal. The path sometimes becomes eroded by floods and high river levels making the route more difficult to walk until usage has redefined the path. As a result of the limited access combined with the informal access points and difficulty in parking and reaching the wood it is not really suitable for less-abled people or those travelling from afar. The only parking is in suitable places located along adjacent lanes however even here widths are restricted and careless parking might cause obstructions.

No public transport routes exist off the A390 other than to service Grampound and Grampound Road and therefore visitors using this means of travel will need to be able to walk the 2miles to the wood and cope with the woodland terrain as well.

Public transport information obtained from www.travelinesw.com.uk or via 0870 608 2 608. Information collected February 2015

3.2 Access / Walks

4.0 LONG TERM POLICY

The wood will be managed as Sump Alder woodland according to the agreed management statement with Natural England and this will help the Trust achieve its aims of protecting native woods and trees and their wildlife for the future. It will be managed to maintain and enhance the diversity and structure of the woodland; maintain the extensive sump alder woodland with minimal intervention; maintain and where possible enhance other associated habitats and particularly the fen meadow, river, streams, bogs, ponds, hedges and glades; maintain and enhance the populations of rare and important plant and lichen species and enhance the semi-natural woodland by control of non-native species and in particular rhododendron and laurel. While the fen meadow area has been managed in agreement with Natural England to prevent succession to alder woodland the island of fen is very small and isolated and may in the future be deemed too small or requiring too much management or chemical input to make it sustainable and may be allowed to succeed to woodland. This will only be done following agreement to change the management statement with NE. As the riverside path within the wood forms the only management access in the site it will be maintained for this purpose. As public access is limited to a small number of regular local visitors and facilitated at an appropriate level by the ‘management path’, public access will not form a key feature in its own right. Because of the beauty and tranquillity of the wood the access allowed will inspire those who visit to enjoy and value the woods.

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 Wet Woodland

Description

Alder sump woodland dominated by alder and grey willow and supporting a rich ground flora, designated a SSSI in 1987. With Oak and Birch on drier areas it supports bilberry, great woodrush, wood millet, wood sorrel, wood sage, wood anemone, and bluebell. The sump area lacks an understory with only alder and willow regeneration and coppice from fallen and collapsed old trees. Here the ground flora is very rich with hemlock water-dropwort, opposite leaved golden saxifrage, meadow sweet, marsh speedwell, water figwort, common valerian, yellow pimpernel, yellow flag and marsh violet, with the nationally important Cornish moneywort and dense stands of water loving ferns and particularly the Royal Fern. The small pools support species such as Sphagnum species, marsh cinquefoil and broadleaved pondweed. In addition the woodland supports important lichens including seven ancient woodland indicators and the nationally rare Parmelia endochlora and offers habitats and feeding areas for many bird and mammals as well as several bat species which appear to roost in local mine adits. An area of wet fen meadow at the southern end of the wood has a lush sward with soft rush; hemlock water-dropwort and meadow sweet would succeed to alder woodland but is prevented from doing that by management to retain the fen characteristics. Rhododendron was prolific in surrounding woodland areas but was mostly cleared as part of a plant health operation to remove a primary host for Phytophthora ramorum. Some remains in isolated clumps especially to the east, but the threat of spread to Crowhill Valley is reduced. However the threat still remains for rhododendron, to seed in and for Japanese knotweed, Himalayan balsam and other species to spread downstream during flood conditions

Significance

Crowhill Valley forms one of the largest and hence most important areas of wet woodland habitat in the SW of England. It helps fulfil the national, regional and local HAP targets for this woodland type and as such helps the Trust achieve its aims of protecting native woods and trees and their wildlife for the future and because of the beauty and tranquillity of the wood the access allowed will inspire those who visit to enjoy and value the woods

Opportunities & Constraints

Link renewal of NE management agreements and consents for Short term objectives with the 5 review period of the management plan and obtain similar long-term licences from EA for potential use of chemicals near water courses (to control of non-native invasive species) to streamline management.

Factors Causing Change

Invasive non-native species, Natural Succession To Alder within the fen meadow area, Raising or Lowering of water table levels due to adjacent land drainage, river changes, siltation or blockage of river.

Long term Objective (50 years+)

A healthy and functioning semi-natural sump alder wet woodland habitat with many associated habitats (riparian zones, fen areas, deadwood, standing water and ephemeral ponds, hedges, ancient and veteran trees) that will allow healthy populations of its rare plant and lichen species to develop while continuing to offer limited public access along management routes.

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

A healthy native species wet woodland with wide range of age, appropriate species, and structure diversity that meets favourable condition requirements for the SSSI, helps enhance the broadleaf woodland habitat in the area and the wet woodland habitat in the region and offers limited access to the local community.
Manage the sump woodland with minimal intervention.
Monitor the site for and control non-native invasive species. Cut and stump treat established rhododendron and/or laurel, but pull seedlings to reduce use of chemicals. Treat Japanese Knotweed, Himalayan Balsam and variegated archangel etc encroaching onto site as required.
Maintain lower canopy height in the alder around the edges of the fen meadow area to retain adequate light levels for the ground flora, possibly on 7-10 year cycle as appropriate.
Monitor the effects of the alder coppice and the encroaching alder during the period of this plan to ascertain whether the fen is sustainable for the future or whether it should be left to colonise to alder woodland
A healthy native species wet woodland with wide range of age, appropriate species, and structure diversity that meets favourable condition requirements for the SSSI, helps enhance the broadleaf woodland habitat in the area and the wet woodland habitat in the region and offers limited access to the local community.
Manage the sump woodland with minimal intervention.
Monitor the site for and control non-native invasive species. Cut and stump treat established rhododendron and/or laurel, but pull seedlings to reduce use of chemicals. Treat Japanese Knotweed, Himalayan Balsam and variegated archangel etc encroaching onto site as required.
Management of fen area by annual cutting of sward after flowering season to maintain species richness and collection of arisings to reduce soil enrichment
Maintain lower canopy height in the alder around the edges of the fen meadow area to retain adequate light levels for the ground flora, possibly on 7-10 year cycle as appropriate.
Monitor the effects of the alder coppice and the encroaching alder during the period of this plan to ascertain whether the fen is sustainable for the future or whether it should be left to colonise to alder woodland
Annually maintain the riverside path at appropriate levels to allow management access and low level local public access requirements by removing fallen trees, redefining eroded path sections etc.
Manage sides and surface of management access track (usually biennially) from highway to bridge sufficiently to allow our access, as not normally done by owner.
Monitor trees that fall into the river. Consider removal where they may cause blockages or bank erosion, but retain fallen trees where they may provide a system for slowing down flood water movement and act to maintain the values of the wood as a ‘flood plain’ and to maintain appropriate water table levels across the area.
Allow and or undertake surveys of the wood as applicable.

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	10.80	Alder species	1940	Min-intervention	Gullies/Deep Valleys/Uneven/ Rocky ground, Mostly wet ground/exposed site, No/poor vehicular access to the site, No/poor vehicular access within the site, Site structure, location, natural features & vegetation	Wet Woodland	Area of Landscape Value, Conservation Area, Great Landscape Value, Site of Special Scientific Interest

Crowhill Valley is one of the largest areas of Alder Sump woodland in Southwest England and as such is designated SSSI. It supports a woodland complex of ancient broadleaved species dominated by Sessile Oak and birch on drier areas and Alder and willow species on the wet alluvial soils across most of the valley bottom. On drier land and banks hazel, rowan and holly form the understory with the ground flora being dominated by bilberry, great woodrush, wood millet, wood sorrel, wood sage, wood anemone, and bluebell. The sump area lacks an understory with only alder and willow regeneration and coppice from fallen and collapsed old trees. However the ground flora is very rich with hemlock water-dropwort, opposite leaved golden saxifrage, meadow sweet, marsh speedwell, water figwort, common valerian, yellow pimpernel, yellow flag and marsh violet, with the nationally important Cornish moneywort and dense stands of water loving ferns and particularly the Royal Fern. The small pools support species such as Sphagnum species, marsh cinquefoil and broadleaved pondweed. In addition the woodland supports important lichens including seven ancient woodland indicators and the nationally rare Parmelia endochlora and offers habitats and feeding areas for many bird and mammals as well as several bat spp. An area of wet fen meadow at the southern end of the wood, with soft rush, hemlock water-dropwort, meadow sweet is succeeding to alder woodland. Limited access is via a narrow track from the nearby road and over a concrete bridge, which crosses the river Fal.

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.