

Pullingshill Wood & Marlow Common

Management Plan

2015-2020

MANAGEMENT PLAN - CONTENTS PAGE

ITEM Page No.

Introduction

Plan review and updating

Woodland Management Approach

Summary

- 1.0 Site details
- 2.0 Site description
 - 2.1 Summary Description
 - 2.2 Extended Description
- 3.0 Public access information
 - 3.1 Getting there
 - 3.2 Access / Walks
- 4.0 Long term policy
- 5.0 Key Features
 - 5.1 Ancient Semi Natural Woodland
 - 5.2 Informal Public Access
- 6.0 Work Programme

Appendix 1: Compartment descriptions

Glossary

MAPS

Access

Conservation Features

Management

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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.
- 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.
- 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: Pullingshill Wood & Marlow Common

Location: Marlow

Grid reference: SU822865, OS 1:50,000 Sheet No. 175

Area: 27.30 hectares (67.46 acres)

Designations: Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty,

Green Belt, Registered Common Land, Site of Special Scientific Interest, Special Area of Conservation, Tree Preservation Order

2.0 SITE DESCRIPTION

2.1 Summary Description

Not Flanders, but here is an old WW1 training ground where troops practiced trench warfare before handling the real thing. This mostly beech woodland slopes down to fields on the western side. The rare ghost orchid has been spotted on this site.

2.2 Extended Description

Pullingshill Wood & Marlow Common are situated approximately two miles to the west of Marlow, in the Chiltern Hills. The wood was acquired by the Woodland Trust in 1991 through a private sale. It is part of a complex of ancient and long-established woods, to the north, south and east.

The site is dominated by mature beech and oak on the flat plateau, with some birch (especially over the trenches - see below). As the ground slopes down on the west and south sides, the wood contains greater concentrations of other species such as ash, field maple and cherry. It has for many years been managed as 'high forest' and many mature trees were blown over during the storm of 1990, especially on the slopes.

Pullingshill Wood is separated from Marlow Common by a very prominent woodbank which runs North-South through the wood. The woodbank is also part of a parish boundary. Pullingshill is to the west of the woodbank and this is the greater proportion of the site (over 70%). It is part of the legally designated Hollowhill & Pullingshill SSSI (Site of Special Scientific Interest) by virtue of its rich and diverse ground flora. The nationally rare ghost orchid has been recorded in this area of the site. The SSSI area (including Pullingshill Wood) is further designated as part of the Chiltern Beechwoods SAC (Special Area of Conservation) due to supporting internationally important species and habitats listed in the European habitats directive.

The Marlow Common portion of the site is registered common land and is part of the wider 'Marlow Common' which is a stretch of wooded common that continues north from the Woodland Trust site.

There is a large amount of woodland archaeology present at the site, including pits and woodbanks. The most impressive feature however is a series of training trenches in Pullingshill Wood that were created in World War One (WW1). The dug trenches stretch for over 1400m and are known to be the best and most complete set of WW1 training trenches in the UK. The trench network was surveyed and accurately recorded in 2005 and visitor information about them is present on the site.

The wood is popular with local visitors and there is good variety of paths to use. Parking is available next to the site through a number of informal roadside lay-bys.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Getting there: Marlow is the closest town and is situated about two miles away to the east, where there is a railway station. There is no direct bus service to the site from the town. Hence, a combination of road walking and public rights of way will enable you to reach the wood from Marlow, and the best route is via Bovingdon Green which avoids busy A roads.

Parking is available at several lay-bys alongside the minor road that runs north to south through the site. Access into the wood is possible from the minor roads around the perimeter of the wood, as well as from four entry points off public footpaths. There are several permissive paths and no paths have been surfaced. The central and eastern portions of the wood are reasonably level and open whilst the western edge drops away down a steep slope into a dry valley.

There are several public conveniences in Marlow maintained by Wycombe District Council at: Central Marlow, Gossmore and Pound Lane (www.wycombe.gov.uk or phone 01494 421 415).

Further information about public transport is available from Traveline - www.traveline.org.uk or phone 0871 200 22 33 .

All distances are approximate.

3.2 Access / Walks

4.0 LONG TERM POLICY

Pullingshill Wood and Marlow Common will be managed with the minimum of silvicultural intervention. This form of management perpetuates the approach of the last 50+ years, which has led to a steady accumulation of large deadwood and some over-mature trees (beech and oak). The rationale for this is further supported by the presence of the nationally rare ghost orchid, which requires relatively undisturbed canopy woodland. Through this approach it is hoped that this important plant remains at the site. To confirm this, a botanical survey will be carried out every plan period (5 years) to determine its presence and location. This approach of minimum intervention will also lead to a continued accumulation of deadwood (standing and fallen) at the site and the development of veteran trees (especially beech).

Some canopy gaps will however occur through natural means, such as windblow and tree disease, and this will introduce more structural diversity into the woodland. A proportion of the mature oaks (we estimate 10%) will be lost through 'acute oak decline' (AOD) and this will lead to some canopy gaps for young trees to develop. Silver birch is likely to be the main species regenerating in any gaps produced. Further down the slopes the young ash dominated woodland is likely to be affected by 'ash dieback' disease within the next 10 years. We can expect to see large canopy gaps appearing in this area of woodland as ash trees succumb to the disease, and these gaps are likely to be filled with natural regeneration of cherry, sycamore, beech and field maple.

The birch-dominated woodland overtopping the trench network is likely to progress to an oak and beech mixture. Hence, we will see a steady collapse of the birch as it is replaced by the oak and beech. A regular survey of trees over the trenches will be carried out to minimise any deterioration of the trench structures, especially through birch trees falling and the rootplates lifting. This survey will identify any unstable trees which will subsequently be felled before they cause any damage.

Over the long term the wood is likely to remain an oak-beech dominated woodland, but with increased proportions of birch and sycamore present.

Given that Pullingshill Wood is part of the Hollowhill & Pullingshill SSSI (Site of Special Scientific Interest) Natural England will always be consulted, as a statutory consultee, on the management plans for this site.

The Woodland Trust has given Pullingshill Wood & Marlow Common a Category B for public access (a moderate usage site. Regular usage, 5 - 15 people using one entrance per day). On and off-site interpretative material will be available to the public, especially about the training trenches. Main entrances will be clearly signed and welcoming and there will be a well-managed path network. The managed path network will however avoid hotspots where the ghost orchid has been found. The wood will be made as safe as practical for visitors through regular safety inspections.

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 Ancient Semi Natural Woodland

Description

The site consists of Pullingshill Wood (19.5ha) which is mostly ancient woodland, and also Marlow Common (8ha) on the east side which is semi-natural woodland but not classified as ancient. Pullingshill Wood is separated from Marlow Common by a very historic and prominent woodbank, which also marks the boundary of 2 parishes (Medmenham & Great Marlow).

The top plateau of the site (the eastern half) is mostly a mixture of mature oak and beech. Other minor species are present here including holly and birch. An area of birch dominated woodland is present in Pullingshill Wood overtopping the network of WW1 training trenches. The trees here are clearly younger than those on the rest of the plateau. This is an indication that, during the construction of the trenches, the woodland covering the ground was cleared and what we see now is natural regeneration following this event.

On the west side of the site the ground slopes down towards a dry valley, and here the soil becomes more alkaline and the composition of the woodland changes. The woodland on the slopes is dominated by ash, with minor components of cherry, field maple, hazel and beech. The majority of the trees in this part of the wood are semi-mature, and they derive from the regeneration of the wood following the severe storms of 1990.

The site is designated a SSSI (Site of Special Scientific Interest), mainly because of the presence of the ghost orchid which is a national rarity. Other uncommon plants are also present including goldilocks buttercup and broadleaved helleborine. More common woodland plants include bluebell, dogs mercury and woodruff.

There is much woodland archaeology at this site including 1400m of WW1 training trenches, old woodbanks and a number of large old quarry pits (especially in the Marlow Common part of the site). The training trenches are known to be one of the best preserved and finest examples in the country. They were extensively surveyed and recorded in 2005, and a detailed map of the network was produced.

Significance

Pullingshill Wood is part of the Hollowhill & Pullingshill Wood SSSI which is especially important for its population of the rare ghost orchid. Sites of Special Scientific Interest are given protection under the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way (CROW) Act 2000 and the Natural Environment and Rural Communities (NERC) Act 2006. It is the responsibility of The Woodland Trust to manage the site in accordance with the provisions of the Wildlife and Countryside Act 1981 (as amended). Appropriate management is very important to conserve the special wildlife and geological features of SSSIs. As a SSSI the site is legally protected. There are a number of operations which cannot be undertaken without the prior written consent of Natural England. A list of these Potentially Damaging Operations has been provided by Natural England, which is kept in the site files and referenced at the end of this plan.

The woods are within the Chiltern Hills AONB, one of the most heavily wooded landscapes in the country. Locally this site directly joins a number of other semi-natural and ancient woodlands, forming part of a network in the landscape. Ancient woods are an irreplaceable resource, often harbouring species which are uncommon elsewhere in the landscape. This site is a very good example of this scenario.

Opportunities & Constraints

Constraints: the presence of a rare plant (the ghost orchid), requiring stable and relatively undisturbed canopy woodland, limits the scale of silvicultural intervention at this site. The presence of some steep slopes and archaeological features further limits the extent of forestry activities.

Factors Causing Change

Acute oak decline (AOD) is likely to lead to the loss of a proportion of the mature oak (10% is estimated over the next 10 years). Ash dieback is likely to arrive at the site within the next 10 years. As most of the ash trees at the site are under 30 years this is likely to lead to a devastating loss of the majority of ash at this site, and this will greatly alter the woodland currently present on the slopes.

At present deer are not having a major impact on this wood, probably due to the level of public use. Sycamore is present in the wood and is likely to become more common in the future, as it exploits any gaps created in the tree canopy.

Long term Objective (50 years+)

Pullingshill Wood and Marlow Common will be managed with the minimum of silvicultural intervention. Through this approach it is hoped that the rare ghost orchid will remain and thrive at the site, because the plant requires relatively stable woodland conditions. A botanical survey will be carried out at least every plan period (5 years) to determine the presence and location of the ghost orchid (as well as other flora); this will help to verify that the correct management is in place. Other environmental factors however could influence whether the orchid is found in a particular year or not, and consideration of this will be taken into account when the results from the survey are analysed.

An approach of minimum intervention approach will also lead to a steady accumulation of deadwood (standing and fallen) at the site and the likely development of veteran trees (especially beech). Tree diseases are likely to affect the structure of the woodland during the next 10 to 20 years. Ash dieback is likely to arrive at the wood in the next 10 years and this will almost certainly lead to the loss of the majority of ash from the site. Significant gaps in the tree canopy on the slopes will be created, and natural regeneration of beech, field maple, cherry and sycamore would be predicted in these gaps. Smaller gaps are likely to be created on the plateau as a result of oak loss from AOD. But we predict only 10% of mature oaks will be lost in the next 10 years. Any gaps created are likely to be filled by natural regeneration of birch. AOD is however likely to affect the overall longevity of oaks, and it is unlikely that many will grow on to become veterans. Regular woodland condition assessments will be carried to monitor the presence of tree diseases, especially ash dieback, and how the composition of the woodland may change (monitoring the increase in sycamore for instance).

The birch-dominated woodland overtopping the trench network is likely to progress to an oak and beech mixture. Hence, we will see a steady collapse of the birch as it is replaced by the oak and beech. A regular survey of trees over the trenches will be carried out to identify any that are unstable, and these will be felled before they cause any damage.

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

During this plan period the short term objective is to maintain stable woodland conditions to conserve the sensitive features of the wood. This will be achieved by the following specific actions:

- Carrying out no silvicultural intervention during this plan period.
- Conducting a botanical survey in 2016 with the special purpose of confirming the presence and location of ghost orchid.
- Undertaking an interim woodland condition observation in 2017 to observe the presence and effects of any tree diseases, as well as any other threats to the wood.
- Undertaking a full woodland condition assessment in 2019 to look at the overall health of the woodland. This will inform the next management plan review
- Conducting a survey of the trees on top of the trenches (especially birch) every 3 years to identify any that pose a risk to the structures because of their instability or poor health. Hence surveys will be conducted in 2017 and 2020.

5.2 Informal Public Access

Description

The wood is popular with local people for recreational walking and benefits from being only a mile from Marlow. It also has the advantage of being close to other accessible woodland, in particular the larger area of Marlow Common to the north which is managed by The Chiltern Society. There are two public footpaths through the site, and one of these form part of the 'Chiltern Way' long distance footpath. Visitors can also use a variety of other permissive paths through the wood, allowing for circular walks. Only pedestrian access is permitted at this wood. The wood has a good range of natural and historic features to interest the visitor including the WW1 training trenches, old pits and woodbanks, clusters of large impressive beech trees, undulating terrain and views over the surrounding countryside. Car parking is possible but limited to a number of laybys off the road running north-south through the wood. There are 2 information boards present on the site to help visitors appreciate and understand the WW1 training trenches.

Significance

The woods provide an important natural setting for informal recreation close to Marlow, and are part of a network of accessible woodland.

Opportunities & Constraints

Opportunities: The training trenches are a special feature at this site and have a wide interest. There is an opportunity to make use of them as part of local WW1 events happening near Marlow, to commemorate the centenary of the war.

Constraints: There is a history of illegal access by 4WD vehicles. The opportunity for this has been reduced by installing roadside ditches and bollards, but the open and flat nature of the wood close to the road always makes this a possible threat. Heavy public use and trampling could be a threat to the ghost orchid and other sensitive flora, and formal managed paths will need to be avoided in the most sensitive areas.

Factors Causing Change

An increase in visitors could cause a rise in anti-social activity such as littering, fires & cycling.

Long term Objective (50 years+)

Public access for informal and quiet recreation will be maintained in perpetuity. The woods will be kept as safe as possible for visitors, and there will be a well maintained network of paths. The main entrances will be welcoming and clearly signed. Information will continue to be provided on and off site to interpret the WW1 training trenches, and to link them with historical events happening in the local area. The wood will be monitored for the impact of any anti-social problems, and measures will be taken to limit the threat from these.

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

During this plan period the short term objective is to ensure the wood remains safe and accessible for use. The wood will also be used to help interpret the First World War to local people. This will be achieved by the following specific actions:

- Conducting an annual tree safety survey along the high risk zones, such as roads and property boundaries. Tree safety alongside public paths in the wood will be assessed every 3 years.
- Annual mowing & trimming back of the main paths and entrances to keep them open for use. Approximately 2 km of paths and 10 entrances will be maintained.
- Holding a WW1 commemoration event at the wood in 2015, at which the history of the training trenches will be interpreted.
- Installing new welcome signage in 2015 at the 2 most popular entrances/parking places off the road.
- Carrying out a review of the access provision at the site in 2018 to ensure that facilities are of a good standard, in line with the Category B. Any threats posed by anti-social activities will also be assessed and action taken to minimise these.

6.0 WORK PROGRAMME

Year Type of Work Description Due By

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No		Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	19.50	Beech	1940	Min-intervention	Archaeological features, Sensitive habitats/species on or adjacent to site	Informal Public Access	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, Site of Special Scientific Interest, Tree Preservation Order

The area known as Pullingshill Wood. Mature oak-beech woodland dominates the higher ground to the east. The western side (on the slope) is more mixed and contains semi-mature ash, field maple, beech and hazel with occasional mature beech. This part of the site contains the WW1 training trenches.

4.			40.40				
1b	8.00	Beech	1940	Min-intervention	Archaeological	Informal Public	Area of
					features,	Access	Outstanding
					Sensitive		Natural Beauty,
					habitats/species		Registered
					on or adjacent to		Common Land,
					site		Tree
							Preservation
							Order

The area known as Marlow Common. Dominated by mature oak-beech woodland but also containing a proportion of sycamore, cherry, holly and birch.

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.