

# United Kingdom Woodland Assurance Standard

## Fifth Edition

(Version 5.0)

### Second Revision Draft

#### Changes in Initial Revision Draft:

Original deletions are shown thus: ~~Word~~

Original additions are shown thus: **Word**

#### Changes made by Working Group in Second Revision Draft following stakeholder consultation:

**Yellow highlight** indicates further additions and deletions following the initial stakeholder consultation.

**Blue highlight** indicates provisional text pending working group approval.

**Green highlight** denotes a link to a term in the glossary *[N.B. the final text will be checked to ensure links are included]*

Second Revision Draft Master Copy

**Document history:**

Version 5.0 approved by the Steering Group: xx.xx.xx

Effective date: 1 April 2023

© Copyright UKWAS 2023



The mark of responsible forestry

The formal basis for Forest Stewardship Council® (FSC®) forest management certification in the UK is the national forest stewardship standard FSC-STD-GBR-03-2017, available from the FSC UK website. Certificate holders are free to use this user-friendly UKWAS version in their day-to-day work and in discussions with auditors. *[N.B. Text to be updated and is contingent on FSC approval of UKWAS 5]*



This standard has been endorsed by PEFC International for forest management certification in the UK and should be read in conjunction with the PEFC UK Scheme Document, which can be found on the PEFC UK website. *[N.B. Text to be updated and is contingent on PEFC endorsement of UKWAS 5]*

Second Revision Draft Master Copy

**Contents**

**Introduction**

- 1. Background and purpose x
- 2. Procedures for use of the certification standard x
- 3. Interpretation of the certification standard x

**Certification Standard**

- Using the certification standard x
- Key to icons and formatting x

**1. Legal compliance and UKWAS conformance**

- 1.1 Compliance and conformance x
- 1.2 Protection from illegal activities x
- 1.3 Genetically modified organisms x

**2. Management planning**

- 2.1 ~~Long-term policy~~ Policy and objectives x

Second Revision Draft Master Copy

2.2 Documentation	x
2.3 Consultation and co-operation	x
2.4 Productive potential of the woodland management unit (WMU)	x
2.5 Assessment of environmental impacts in existing woodland	x
2.6 Woodland creation	x
2.7 Woodland restructuring	x
2.8 Tree species selection	x
2.9 Introduction of <del>Non non</del> -native species	x
2.10 Silvicultural systems	x
2.11 Conservation	x
2.12 Protection	x
2.13 Conversion	x
2.14 Implementation, amendment and revision of the plan	x
2.15 Monitoring	x

### 3. Woodland operations

3.1 General	x
3.2 <del>Harvest operations</del> -Harvesting and restocking	x
3.3 Forest <del>roads and associated</del> infrastructure	x
3.4 <del>Pesticides, biological control agents and fertilisers</del> -Integrated pest management	x
3.5 Fertilisers	

3.5 3.6 Fencing	x
3.6 3.7 Waste	x
3.7 3.8 Pollution	x

**4. Natural, historical and cultural environment**

4.1 Statutory <del>designated sites and protected species</del> nature conservation sites	x
4.2 Conservation of ancient semi-natural woodlands (ASNW)	x
4.3 Management of plantations on ancient woodland sites (PAWS)	x
4.4 Protection of conservation values in other woodlands and semi-natural habitats	x
4.5 Watershed management and erosion control	x
4.6 Maintenance of biodiversity and ecological functions	x
4.7 Maintenance of local native seed sources	x
4.8 <del>Cultural and historical features/sites</del> Protection of cultural and historic environment sites	x
4.9 Game-rearing, shooting and fisheries management	x

**5. People, communities and workers**

5.1 <del>Woodland access and recreation including traditional and permissive use rights</del> Public access rights, permissive uses, traditional rights, and the health and wellbeing of local people, visitors and communities	x
--	---

5.2 Minimising adverse impacts	x
5.3 Rural Local economy	x
5.4 Health and safety	x
5.5 Training and continuing development	x
5.6 Workers' rights	x
5.7 Insurance	x

**Glossary of terms**

x

**References**

Main legislation, regulations, guidelines and codes of practice referred to in the UKWAS	x
Other main reference documents	x
Further information sources	x

Second Revision Draft Master Copy

**UKWAS 5 formats & amendments** *[N.B. Formats as anticipated but subject to final confirmation]*

**Website:** the online version provides the user with easy navigation and includes search functionality and glossary term highlighting.

**Document:** the PDF formatted version is designed for use as a portable paper document that can be downloaded and printed by the user.

**MS Word:** users requiring a plain text document in MS Word format for their use in preparing bespoke certification documentation can request a copy from the UKWAS Support Unit.

**Amendments:** any further corrections or revisions necessarily made to the certification standard prior to its next full revision will be incorporated into the electronic versions available on the UKWAS website. A list of all the changes made since publication of this edition will be maintained on the UKWAS website and users are recommended to check this on a regular basis.

[ukwas.org.uk](http://ukwas.org.uk)

Second Revision Draft Master Copy

# Introduction

Second Revision Draft Master Copy

## Introduction

### 1. Background and purpose

Primarily, the certification standard is designed to reflect the requirements set out in the governmental UK Forestry Standard and thereby the General Guidelines adopted by European Forestry Ministers at Helsinki in 1993, the Pan-European Operational Level Guidelines (PEOLG) subsequently adopted at Lisbon in 1998 and other relevant international agreements. It also reflects best practice drawn from a range of sources and adapted, where appropriate, to UK circumstances.

In response to the demand from the UK forestry and forest products sector, the certification standard is also designed to reflect the requirements of the two leading global forest certification schemes – the Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC). Products certified through these schemes are in much demand in the UK and global timber markets as they provide a widely recognised way to inform customers that timber products come from responsibly managed sources.

The UK arms of FSC and PEFC take responsibility for submitting the UKWAS standard to their international parent bodies for assessment and provided the UKWAS standard is judged to be conformant with each scheme's requirements it will provide a certification standard for certification through each of these schemes. A list of certification schemes that currently use the UK Woodland Assurance Standard as the basis for certification in the UK can be found on [ukwas.org.uk](http://ukwas.org.uk).

The standard is subject to periodic review and, if considered necessary, revision. The review and revision, including stakeholder consultation, is undertaken by an independent working group appointed by the UKWAS steering group to reflect a balance of economic, environmental and social interests.

In the most recent revision, the requirements have been adapted to reflect the global challenges of climate change, biodiversity loss and the need to embed forest resilience, enhance the natural capital value of woodlands and safeguard the provision of valuable ecosystem services. For example, there is greater focus on practices that enhance carbon storage in trees and soils and reduce greenhouse gas emissions from woodland operations.

### 2. Procedures for use of the certification standard

The woodland management unit

The unit of certification is a **woodland management unit** (WMU). A WMU is a clearly defined woodland area, or areas, with mapped boundaries, managed to a set of explicit long-term objectives. The WMU is covered by the **management planning documentation** set out in section 2.2 of the certification standard. Elements of management planning documentation may apply to a specific WMU, or may be set at a higher level (such as group schemes, or state forest services) and apply to multiple WMUs.

For example, a WMU might be a single ownership incorporating several areas of woodland that are managed within a **woodland management plan**; several separate ownerships managed within a woodland management plan; a community-managed **forest**; a management subdivision of a national forest service such as a forest district covered by a woodland management plan.

In large and/or widely geographically dispersed WMUs, the **spirit** of the certification standard and any best practice should be conformed to throughout the WMU.

Note: The terms 'woodland management unit' and 'forest management unit' are synonymous.

### **Flexibility in meeting requirements**

Not all requirements will be applicable to every WMU, for example requirements relating to **plantations on ancient woodland sites** can only apply if such sites are present.

While all applicable requirements must be met, there may be flexibility in exactly how requirements are fulfilled. Any different approach taken must be an equally or more effective way of achieving the objectives intended by the requirement. The impacts of the approach taken shall be carefully monitored and recorded.

The **certification body** carrying out the audit shall make a professional judgement as to the acceptability of the flexibility (see Interpretation of the certification standard).

See also 'Using the certification standard' regarding flexibility in verifiers (see definition of example verifiers in that section).

### **Research**

The owner/manager should consider contributing to and/or supporting relevant research activities which benefit the **long-term future management of woodlands**. The establishment of research trials or plots may be undertaken only in the context of a research policy and should conform to the **spirit** of the certification standard.

### **Third-party rights - leases, burdens in title, ownership rights and legal restrictions on management**

In certain situations, pre-existing leases, burdens in title and third-party ownership rights may restrict management actions in such a way that the **owner/manager** may not be able to fully meet all the requirements of the certification standard. For example:

- Forestry-only or long-term sporting leases where sporting or **access** rights may be restricted
- Timber leases under which the **restocking** obligation reverts to the landowner
- Wayleaves, and servitude rights
- Mineral extraction rights held by third parties
- **Traditional rights** (e.g. peat cutting).

In these circumstances **conformance** to the certification standard may still be achieved provided the owner/manager is able to demonstrate that:

- The holder of the third-party rights has been made aware of those requirements of the standard which are relevant to the rights they hold and how they can assist with conformance. It is not however necessary for the third party to agree to conform to the requirements of the standard
- All reasonable measures have been taken to mitigate negative impacts caused by the holders of third-party rights
- The third-party rights have not been created intentionally to avoid conformance.

**Certification schemes** may have their own requirements which apply when the owner/manager does not have full management control of a **woodland management unit**.

### **Timing for full implementation of the requirements relating to woodland structure and layout**

A special feature of woodland management is its long-term nature. Decisions made in the past have a strong influence on the woodlands of today.

Therefore, when assessing **conformance** with the certification standard, **certification bodies** will not evaluate woodlands solely on the present structure and layout but will consider the plans for management in the short, medium and long term.

Where present structure and layout fail to meet the requirements, woodland owners/managers will need to demonstrate through **management planning documentation** and ongoing activities in the woodland that they are taking active measures to achieve conformance with the requirements. They will also need to demonstrate that there is a time frame for achieving full conformance based on sound management principles. Further guidance on how non-conformities are dealt with can be obtained from certification bodies or group scheme managers.

### **Application of the certification standard to different scales of woodland management unit and intensities of operation**

**Woodland management units** vary in terms of the scale and intensity of management and the risk of negative impacts. While the principles remain the same regardless of woodland size and intensity of management, the level and complexity of management needed to meet the requirements of the certification standard, and the nature of the evidence to demonstrate **conformance**, may vary depending on the size and type of the woodland management unit.

**Certification schemes** have different sampling intensities depending on the scale and intensity of management and operations. In drafting this standard, every effort has been made to ensure that requirements are sufficiently flexible to apply to all scales and intensities of management.

In the UK context, scale has not been found to be closely correlated with intensity or risk of woodland management; for example, many large operations may be in woodlands with relatively low environmental or social **values**, while the potential impacts of operations in those small woodlands which have higher environmental and social values may be commensurately high. As such, it has not proved possible to define a threshold or specify different requirements for lower potential impact operations, although this will be subject to review in future revisions of the standard. However, it is considered appropriate to specify different requirements for higher potential impact operations, and some of the requirements of this standard apply only where the entity holding or applying for certification, and therefore responsible for demonstrating conformance, is a **large enterprise**, as defined in the glossary.

### **Use of the certification standard by certification bodies**

Individual **certification schemes** may have specific requirements regarding the official version of this standard to be used by auditors. **Certification bodies** should check with the relevant scheme.

## **3. Interpretation of the certification standard**

The UKWAS Interpretation Panel provides the UKWAS Steering Group and users of the certification standard with advice on its interpretation. Further information **on how the panel conducts its business** is available on the UKWAS website ([ukwas.org.uk](http://ukwas.org.uk)) including interpretation advice notes relevant to the current edition of the standard and how to submit a request for interpretation to the Interpretation Panel.

**[Insert infographic]**

Second Revision Draft Master Copy

**Certification Standard**  
**Fifth edition (version 5.0)**

Second Revision Draft Master Copy

## Using the certification standard

In using the certification standard, **owners/managers** and **certification bodies** shall also take full account of the introduction, glossary and appendix of references.

The certification standard is set out as follows:

### Requirements

These are the compulsory elements of the certification standard ~~and are stated as 'shall'~~. Woodland management must meet all relevant requirements and certification bodies will check that each requirement is being met.

In recent editions of UKWAS, requirements were stated as 'shall'. This edition reverts to the simpler form of wording used in the first edition of UKWAS; this does not imply any change in the status of requirements, and these remain mandatory.

When requirements are presented as separate paragraphs or in a list, their order does not indicate any ranking or priority: all relevant requirements must be met.

### Example verifiers

These are examples of objective **information or** evidence – documents, actions or discussions – that owners/managers may present to the certification body for their consideration in order to demonstrate that the requirement is being met.

Certification bodies are required to undertake audits and owners/managers should be able to present sufficient evidence to allow the auditor to report **conformance**. It will not always be necessary to use any or all of the verifiers suggested, and conformance to requirements may be demonstrated in other ways. The selected verifiers should be appropriate to the scale and intensity of management of the WMU and the risk of negative impacts.

The three most common example verifiers are:

- Discussion with the owner/manager.

The owner/manager may explain in conversation with the auditor their understanding of the standard, their knowledge of the WMU or the rationale for management decisions, or they may describe actions they have taken to conform to the standard.

- Field observation.

The auditor may look for tangible evidence in the WMU of conformance to the standard.

- **Management planning documentation.**

**Documentation might include a piece of written, printed, or electronic matter that provides information or evidence or that serves as an official record.**

The owner/manager may demonstrate through written documents, records or maps their knowledge of the WMU, the rationale for management decisions, or the actions they have taken to conform to the standard. Note that if specific management planning documentation is expected to be produced it will be described in the requirements of the standard. Documentation may include that produced by third parties, for example a **felling licence**.

When example verifiers are presented in separate paragraphs or a list, their order does not indicate any ranking or priority.

### Guidance notes

These aim to help both the woodland owner/manager and the certification body to understand how requirements should be applied in practice. More information is provided to elaborate some requirements, the meaning of certain terms or phrases is explained, and examples of appropriate action are given. Where guidance is stated as 'should' it indicates a recommendation. Where it is stated as 'may' it indicates an option or a list of options.

Note: The guidance note can include 'Advice to owners/managers' on related matters which are beyond the direct scope of a forest management certification standard e.g. owners/managers are advised to check the specific requirements of **certification schemes** in relation to chain-of-custody certification matters. Such information is clearly marked and is provided as an advisory note only: it shall not be considered by certification bodies when assessing conformance with the certification standard.

When guidance notes are presented in separate paragraphs or a list, their order does not indicate any ranking or priority.

### Key to icons and formatting

#### References



Check the appendix for references providing further guidance. *[N.B. The Appendix of References will be updated prior to the second round of consultation]*

#### Glossary terms

##### **Woodland**

Highlighted terms are explained in the glossary of terms. Generally, a glossary term is only highlighted on its first occurrence in a particular section or sub-division of the text. The following glossary terms which are used frequently throughout the text are not generally highlighted:

- Management planning documentation
- Owner/manager
- Woodland management unit (WMU).

## Abbreviations

The following abbreviations are used frequently in the text:

ASNW - Ancient semi-natural woodland

FISA - Forest Industry Safety Accord

LISS – Lower-impact silvicultural systems

NWFP - Non-wood forest products ~~NTWP – Non-timber woodland products~~

PAWS – Plantation on ancient woodland site

UKFS – UK Forestry Standard

WMU - Woodland management unit

Second Revision Draft Master Copy

Second Revision Draft Master Copy

# 1. Legal compliance and UKWAS conformance

## 1. Legal compliance and UKWAS conformance

	REQUIREMENT	EXAMPLE VERIFIERS	GUIDANCE
1.1	Compliance and conformance		
1.1.1	There <del>shall be</del> is <b>compliance</b> with the law. There <del>shall be</del> <b>are</b> no substantiated outstanding claims of non-compliance related to woodland management.	<ul style="list-style-type: none"> <li>No evidence of non-compliance from audit</li> <li>Evidence of correction of any previous non-compliance</li> <li>A system to be aware of and implement requirements of new legislation.</li> </ul>	<p>The certification standard does not go into detail in all areas covered by UK legislation. The appendix of references provides a non-exhaustive list of relevant legislation.</p> <p>Certification bodies will be checking that there is no evidence of non-compliance with relevant legal requirements including that:</p> <ul style="list-style-type: none"> <li>Management and <b>workers</b> understand and comply with all legal requirements relevant to their roles and responsibilities</li> <li>All documentation including procedures, work instructions, contracts and agreements meet legal requirements and are respected</li> <li>No issues of legal non-compliance are raised by regulatory authorities or other <b>interested parties</b>.</li> </ul> <p>In the event of a perceived conflict between the requirements of the certification standard and legal requirements, owners/managers should seek guidance from the UKWAS Interpretation Panel.</p> 
1.1.2	There <del>shall be</del> is <b>conformance</b> to the <b>spirit</b> of any relevant codes of practice or good practice guidelines.	<ul style="list-style-type: none"> <li>No evidence of non-compliance from audit</li> <li>Evidence of correction of any previous non-compliance</li> <li>A system to be aware of and conform to new codes of practice and good practice guidelines.</li> </ul>	<p>The appendix of references provides further information on good practice guidelines and codes of practice.</p> <p>Conformance to the spirit means that the owner/manager is aiming to achieve the principles set out in relevant codes of practice or good practice guidelines and that:</p> <ul style="list-style-type: none"> <li>Management and <b>workers</b> understand and conform to the spirit of codes and guidelines relevant to their roles and responsibilities</li> <li>All documentation including procedures, work instructions and contracts conform to the spirit of relevant codes and guidelines.</li> </ul>

			In the event of a perceived conflict between the requirements of the certification standard and relevant codes and guidelines, owners/managers should seek guidance from the UKWAS Interpretation Panel.
1.1.3	<p>a) The legal identity of the owner/manager <del>shall be</del> is documented.</p> <p>b) The boundaries of the owner's/manager's legal ownership or tenure <del>shall be</del> are documented.</p> <p>c) The scope of the owner's/manager's legal rights to manage the WMU and to harvest wood and non-wood products and/or supply services from within the WMU <del>shall be</del> is documented.</p> <p>d) Legal authority to carry out specific operations, where required by the relevant authorities, <del>shall be</del> is documented.</p> <p>e) Payment <del>shall be</del> is made in a timely manner of all applicable legally prescribed charges connected with forest woodland management.</p>	<ul style="list-style-type: none"> <li>• Long-term unchallenged use</li> <li>• Integrated Agriculture Control System (IACS) registration</li> <li>• A signed declaration detailing nature and location of tenure documentation</li> <li>• Solicitor's letter</li> <li>• Title deeds</li> <li>• Land registry records</li> <li>• Companies House records</li> <li>• Licences</li> <li>• Written permissions from competent authorities</li> <li>• Records of payments.</li> </ul>	<p>Long-term unchallenged use might be demonstrated by the existence of previous grant scheme documentation or long-term certification to this standard.</p> <p>Examples of circumstances which may affect the scope of the owner's/manager's legal rights to manage the WMU and to harvest products and/or supply services from within it include:</p> <ul style="list-style-type: none"> <li>• The sporting or mineral rights are held by third parties</li> <li>• The owner/manager is bound by a restrictive covenant</li> <li>• The WMU is managed under a forestry-only lease.</li> </ul> <p>See the section on third-party rights in the introduction.</p> <p>Depending on the nature of woodland operations, the competent authorities providing legal authorisation may include the relevant forestry authorities, statutory nature conservation and countryside agencies, statutory environment protection agencies, statutory historic environment agencies, or local authorities.</p> <p>Legally prescribed charges connected with forest management may include fees for licences or permissions, or grant repayments where grant conditions have not been fulfilled.</p>
1.1.4	a) Mechanisms <del>shall be</del> are employed to identify, prevent and resolve disputes over	<ul style="list-style-type: none"> <li>• Use of dispute resolution mechanism.</li> </ul>	Unresolved disputes of substantial magnitude involving a significant number of interests will normally disqualify an entity from being certified.

	<p>tenure claims and use rights through appropriate consultation with <b>interested parties</b>.</p> <p>b) Where possible, the owner/manager <b>shall</b> seeks to resolve disputes out of court and in a <b>timely manner</b>.</p>		<p>Examples of relevant tenure claims and use rights may include:</p> <ul style="list-style-type: none"> <li>• Water supplies</li> <li>• Joint access routes</li> <li>• Shooting rights</li> <li>• <b>Crofting rights</b>.</li> </ul>
1.1.5	<p>a) The owner/manager <b>shall</b>:</p> <ul style="list-style-type: none"> <li>• Commits to <b>conformance</b> to this certification standard, and</li> <li>• <b>Have Has</b> declared an intention to protect and maintain the woodland management unit and its ecological integrity in the long term.</li> </ul> <p>b) A statement of these commitments <b>shall be is</b> made <b>publicly available</b> upon request.</p>	<ul style="list-style-type: none"> <li>• Signed declaration of commitment</li> <li>• Dissemination of the requirements of this certification standard to <b>workers</b>, licensees and leaseholders</li> <li>• Public statement of policy.</li> </ul>	<p>Workers, licensees and leaseholders should be informed of the aim of the certification standard and, to the degree that is relevant, of the practical implications for them in carrying out their activities. This might be done through, for example, meetings or briefings and the provision of appropriate written material.</p> <p>If a substantial failure has led to withdrawal of a woodland certification to this standard in the past, then substantial changes in ownership, policy commitment and management regime should have been implemented or a two-year track record of conformance established.</p> <p><b>Advice to owners/managers</b> Owners/managers may be subject to additional requirements from their <b>certification scheme</b> relating to any adjustment of the area in the woodland management unit. Owners/managers are advised to seek guidance from their <b>certification body</b> or group scheme manager.</p>
1.1.6	<p>a) There <b>shall be is</b> conformance to guidance on anti-corruption legislation.</p> <p>b) <b>Large enterprises shall</b> have and implement a <b>publicly available</b> anti-corruption policy which meets or exceeds the requirements of legislation.</p>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Written procedures</li> <li>• Public statement of policy.</li> </ul>	<p>Guidance on procedures to prevent bribery is available from the Ministry of Justice.</p> 

1.1.7	<p>There shall be compliance with legislation relating to the transportation and trade of forest products, including relevant timber regulations, where relevant, the EU Timber Regulation (EUTR) and phytosanitary requirements.</p>	<ul style="list-style-type: none"> <li>Relevant procedures and records.</li> </ul>	<p>The owner/manager should comply with any relevant phytosanitary movement licences and other statutory plant health requirements.</p> <p>The owner/manager should be aware that there may be regulatory requirements relating to the handling, transportation and trade of foodstuffs where these are produced as non-wood forest products.</p> <p>UK-grown planting stock, preferably from seed of UK origin, should be sourced where it is available, commercially viable and aligned with management objectives. See also 4.7 on local native seed sources.</p> <p>Where possible, trees should be sourced from nurseries with accredited biosecurity practices, as demonstrated by adherence to recognised assurance standards.</p> <p>Where stock is imported, best practice and protocols regarding quarantine periods and treatments should be followed.</p> <p>Relevant timber regulations are the UK Timber Regulation (UKTR) in Great Britain and the European Union Timber Regulation (EUTR) in Northern Ireland.</p> <p>Plant passports may be required before moving regulated plant material. The requirements are different in Great Britain and Northern Ireland.</p> <p>In rare cases the provisions of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) may apply. The import, export and use for commercial gain of certain species requires a CITES permit. CITES species present in the UK include Snowdrops (<i>Galanthus</i> spp.) and Monkey-puzzle (<i>Araucaria araucana</i>).</p>
1.2 Protection from illegal activities			
1.2.1	<p>The owner/manager shall take all reasonable measures, including engagement with the police and statutory bodies, to prevent or stop illegal or</p>	<ul style="list-style-type: none"> <li>The owner/manager is aware of potential and actual problems</li> <li>Evidence of response to actual current problems</li> </ul>	<p>The phrase 'reasonable measures' means measures that are both within the law, within the terms of any forestry tenancy and within the jurisdiction of the owner/manager and that the measures are economically viable and environmentally and socially acceptable.</p>

	unauthorised uses of the woodland that could jeopardise fulfilment of the objectives of management.	<ul style="list-style-type: none"> <li>Evidence of a proactive approach to potential and actual problems including follow-up action</li> <li>Engagement with statutory bodies.</li> </ul>	The scope of illegal activities which the owner/manager may encounter is so diverse that it is not possible to prescribe actions in every case. In specific cases a legal opinion may be required in order to prescribe 'reasonable measures'.
1.3	Genetically modified organisms		
1.3.1	Genetically modified organisms (GMOs) shall are not be used.	<ul style="list-style-type: none"> <li>Plant supply records</li> <li>Discussion with the owner/manager.</li> </ul>	GMOs are created through gene transfer under laboratory conditions and are not the product of tree breeding, vegetative propagation, cloning or tissue culture programmes.

Second Revision Draft Master Copy

## 2. Management planning

Second Revision Draft Master Copy

## 2. Management planning

	REQUIREMENT	EXAMPLE VERIFIERS	GUIDANCE
2.1	Long-term policy Policy and objectives		
2.1.1	<p>a) The owner/manager <del>shall have</del> has a long-term policy and management objectives which are environmentally sound, socially beneficial, <del>and</del> economically viable, and take full account of the need to embed forest resilience.</p> <p>b) The policy and objectives, or summaries thereof, <del>shall be</del> are proactively communicated to workers consistent with their roles and responsibilities.</p>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager and workers</li> <li>• Management planning documentation</li> <li>• Toolbox talks.</li> </ul>	<p>The long-term policy should articulate the overall vision for woodland management. Management objectives should set out tangible, shorter-term steps towards achieving that vision.</p> <p>The owner/manager should be aware that long-term forest resilience will underpin environmental, social and economic objectives. <del>This should include consideration of the carbon balance of the trees and soil of the WMU. This should include consideration of the effects of various woodland management practices on carbon sequestration and storage in trees and soils across the WMU.</del></p> <p>Economic viability need not be based on, or solely on, the sale of products from woodland. Income from other sources, such as membership subscriptions, government funding or private investment, may be sufficient to achieve the policy and objectives of management.</p> <p>The level of detail required in the policy and objectives should be proportionate to the scale and intensity of management. While a formal, written policy and detailed objectives may be appropriate for a large organisation, it may be appropriate for the owner of a small woodland managed at a low intensity to be able to communicate their vision and some simple objectives verbally.</p> <p>Workers should be aware of the policy and objectives to the extent necessary for them to contribute to achieving the aims of management; they should understand how their actions might have positive or negative effects on meeting those aims.</p> <p>Means of communicating the policy and objectives to workers should always be proportionate to the extent of their influence on the outcomes of management; <del>this, and</del> might range from detailed notes or staff meetings to a simple verbal</p>

			briefing. Where contractors are used, the emphasis should be on ensuring that those responsible for supervising them are appropriately briefed and can instruct them accordingly.
2.1.2	Woodland management planning shall take fully into account the long-term positive and negative economic, environmental and social impacts of proposed operations, including potential impacts outside the WMU.	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Management planning documentation.</li> </ul>	<p>Management planning should be proportionate to the scale and intensity of woodland management, and to the potential economic, environmental and social impacts of management activities.</p> <p>Management planning should take into account the positive and negative impacts on the carbon sequestration and storage in trees and soils balance of the trees and soil in the WMU, including consideration of the potential for restoration of peatlands or wetlands within the WMU where this is appropriate, practicable and sustainable.</p>
2.1.3	<p>a) Woodland management planning shall demonstrate a commitment to long-term economic viability.</p> <p>b) The owner/manager shall aims to secure the necessary investment to implement the management plan in order to meet all the requirements of this standard and to ensure long-term economic viability.</p>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Management planning documentation</li> <li>• Financial records relating to the woodland resource</li> <li>• Budget forecasting, expenditure and potential sources of funding.</li> </ul>	<p>Management planning should be subject to continual improvement and proportionate to the scale and intensity of woodland management.</p> <p>Management planning should show how the stated policy and objectives of management can be achieved and sustained economically in the long term, for example from future timber production or other sources of income. Detailed projections are not required but there should be evidence that the longer-term resourcing of essential forest woodland operations has been considered. For example, management planning documentation may show how silvicultural systems, species choice and tree densities and other woodland management are designed to achieve long-term economic viability.</p> <p>Management planning should indicate that sufficient resources are available for the implementation and maintenance of the woodland management plan so that it continues to be suitable and effective in ensuring that both the management objectives and the woodland continually improved.</p>
2.2	Documentation		
2.2.1	All areas in the WMU shall be covered by management planning documentation which shall be retained for at least ten years and shall incorporate:	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Appropriate maps and records.</li> </ul>	<p>The subsequent sections of this standard provide additional guidance and information on how to meet this requirement.</p> <p>There should be a link between features and sensitivities identified in (b), (c), (d), (e) and (f) and the setting of management objectives. Equally, monitoring should be linked to potential positive and negative impacts of management on these features and sensitivities and to the delivery of management objectives.</p>

<p>a) A long-term policy for the woodland.</p> <p>b) Assessment of relevant components of the woodland resource, including potential <b>wood or non-wood</b> products and services which are consistent with the management objectives.</p> <p>c) Assessment of <b>environmental values</b>, including those outside the WMU potentially affected by management, sufficient to determine appropriate conservation measures and to provide a baseline for detecting possible <b>positive and</b> negative impacts.</p> <p>d) Identification of special characteristics and sensitivities of the woodland and appropriate treatments.</p> <p>e) Specific measures to maintain and where possible enhance those areas identified under sections 4.1-4.5 and 4.8, considering areas where either the extent of these areas or their sensitivity to operations may be unknown.</p>		<p><b>When considering management for different wood products in (b), their potential for carbon storage and cascading uses should be taken into account.</b></p> <p>The documentation and level of detail associated with the planning process should be appropriate to scale, intensity and risk.</p> <p>The documentation might include:</p> <ul style="list-style-type: none"> <li>• For <b>low-intensity managed woodlands</b>: a brief statement of intent and an annotated map</li> <li>• For other woodlands: a plan covering a 20-year period and incorporating an assessment at the <b>landscape level</b></li> <li>• For a WMU consisting of multiple areas: an overarching plan.</li> </ul> <p>The management planning documentation should cover all elements of the requirement but may refer to other documents as appropriate; these may include:</p> <ul style="list-style-type: none"> <li>• A fire plan</li> <li>• A deer management plan</li> <li>• An integrated pest management strategy</li> <li>• A research policy</li> <li>• Project plans</li> <li>• Necessary permissions from applicable regulatory and licensing authorities</li> <li>• <b>Veteran tree management strategy</b></li> <li>• <b>Deadwood conservation plan</b></li> <li>• <b>Historic environment site management plan.</b></li> </ul> 
---	--	--

	<p>f) Identification of community and social needs and sensitivities.</p> <p>g) Prioritised objectives, with verifiable targets to measure progress.</p> <p>h) Rationale for management prescriptions.</p> <p>i) Outline planned felling and regeneration over the next 20 years.</p> <p>j) Where applicable, annual allowable harvest of <del>non-wood forest products (NWFPs)</del> non-timber woodland products (NTWPs).</p> <p>k) Rationale for the operational techniques to be used.</p> <p>l) Plans for implementation, first five years in detail.</p> <p>m) Appropriate maps.</p> <p>n) Plans to monitor at least those elements identified under section 2.15.1 against the objectives.</p>		
2.2.2	While respecting the confidentiality of information, the owner/manager shall,	<ul style="list-style-type: none"> <li>Evidence of fulfilling requests for management planning</li> </ul>	This requirement deliberately gives the owner/manager discretion as to how they make management planning documentation available to allow for situations where they are happy to provide documentation in full and where producing a summary may be an unnecessary administrative burden. This may often be the

	<p>upon request, makes publicly available either:</p> <ul style="list-style-type: none"> <li>• Management planning documentation, or</li> <li>• A summary of the management planning documentation.</li> </ul>	<p>documentation or summaries</p> <ul style="list-style-type: none"> <li>• A public contact point</li> <li>• Summary management planning documentation.</li> </ul>	<p>case for owners/managers of smaller woodlands or woodlands managed at a low intensity. However, owners/managers of woodlands with lengthy, complex management planning documentation should note that a summary may be more useful for non-specialist stakeholders.</p> <p>Owners/managers may demonstrate that they are receptive for requests to make documentation available by providing details of a public contact point, for example in the form of a dedicated e-mail address.</p> <p>Examples of confidential information include data and content:</p> <ul style="list-style-type: none"> <li>• Related to investment decisions</li> <li>• About intellectual property rights</li> <li>• Which is client-confidential</li> <li>• Which is, by law, confidential including personal information covered by the UK General Data Protection Regulation (UK GDPR)</li> <li>• Whose dissemination could put at risk the protection of wildlife species and habitats</li> <li>• About sites which are of special cultural and historical importance to local people, where they have requested confidentiality.</li> </ul>
2.2.3	<p>The management planning documentation shall be reviewed periodically (at least every ten years), taking into account:</p> <p>a) Management planning documentation is kept current taking into account changes required as a result of:</p> <ul style="list-style-type: none"> <li>• Monitoring programme results</li> <li>• Results of certification audits</li> <li>• Results of stakeholder engagement</li> <li>• New research and technical information, and</li> </ul>	<ul style="list-style-type: none"> <li>• Management planning documentation.</li> </ul>	<p>Examples of changed circumstances include:</p> <ul style="list-style-type: none"> <li>• Major windthrow</li> <li>• Pest or disease outbreaks including invasive non-native species</li> <li>• Changes in markets.</li> </ul> <p>Monitoring programme requirements and post-review revision of management planning documentation are set out in 2.15.1 and 2.15.2.</p>

	<ul style="list-style-type: none"> <li>• Changed environmental, social, or economic circumstances.</li> </ul> <p>b) All management planning documentation is reviewed at least every ten years.</p>		
2.3	Consultation and co-operation		
2.3.1	<p>a) Local people, relevant organisations and interested parties shall be identified and made aware that:</p> <ul style="list-style-type: none"> <li>• The woodland is being evaluated for initial certification</li> <li>• New or revised management planning documentation, as specified under section 2.2.1, is being produced</li> <li>• High impact operations are planned</li> <li>• The woodland is being evaluated for certification.</li> </ul> <p>b) The owner/manager shall ensure that there is full co-operation with the relevant forestry authority's consultation processes.</p> <p>c) The owner/manager shall consult appropriately with local people, relevant organisations and other</p>	<ul style="list-style-type: none"> <li>• Consultation with the relevant forestry authority</li> <li>• Evidence that users of the WMU are informed about high impact operations (e.g. signs, letters or other appropriate means)</li> <li>• Evidence that consultation feedback has been assessed and considered</li> <li>• A list of interested parties</li> <li>• Established means of proactive communication</li> <li>• A public contact point.</li> </ul>	<p>The owner should be able to justify the frequency and level of consultation and the certification body will look for corroborating evidence. Examples of methods for identifying and making local people and relevant organisations aware include:</p> <ul style="list-style-type: none"> <li>• Statutory consultations by the relevant forestry authority or voluntary consultation with statutory bodies</li> <li>• Letters to individuals or groups</li> <li>• Temporary or permanent signs in or near the affected woodland</li> <li>• Information in local newspapers or other publications</li> <li>• Meetings and dialogue</li> <li>• Internet</li> <li>• Consultation with the relevant archaeology service.</li> </ul> <p>Consultation and engagement with local people should be sufficient to identify:</p> <ul style="list-style-type: none"> <li>• their permissive or traditional uses of the woodland</li> <li>• sites or features of special cultural or historical significance.</li> </ul> <p>For social and economic issues, include those who derive their income from the forest woodland or are dependent on the supply of forest products such as forest workers, hauliers and timber processors.</p> <p>For timber transport issues, owners/managers should seek to identify and consult local timber transport groups, local authority roads or highways authorities, and appropriate community groups.</p> <p>For access issues, owners/managers should seek to identify and consult local representative groups or bodies which can represent users, including the statutory Local Access Forum where relevant.</p>

<p>interested parties, and provides opportunities for their engagement in planning and monitoring processes.</p> <p>d) Methods of consultation and engagement shall be are designed to ensure that local people, relevant organisations and other interested parties have reasonable opportunities to participate equitably and without discrimination.</p> <p>e) At least 30 days are allowed for people to respond to notices, letters or meetings.</p> <p>e)f) The owner/manager shall responds to issues raised or requests for ongoing dialogue and engagement and shall demonstrates how the results of the consultation including community and social impacts have been taken into account in management planning and operations.</p> <p>f) At least 30 days shall be are allowed for people to respond to notices, letters or meetings before certification.</p>		<p>For biodiversity issues, owners/managers should seek to identify and consult local representative groups or relevant bodies which can represent biodiversity interests, including the Local Biodiversity Partnership (or equivalent) where relevant, local experts and nature groups.</p> <p>For historic environment issues, owners/managers should seek to identify and consult local representative groups or bodies which can represent users, including the local authority historic environment service, and, for statutorily designated sites and features, the local office of the statutory historic environment agencies.</p> <p>For water supply issues, owners/managers should seek to identify and consult with statutory environment protection agencies, water supply organisations and the owners of private (household or community) water supplies.</p> <p>Consultation and engagement should be appropriate to the scale and intensity of woodland management and to the risk of potential impacts on the interests of stakeholders. For smaller woodlands, engagement may be informal and largely verbal. For larger woodlands with many potentially affected local people, it may be more appropriate to engage with representatives of local communities rather than with individuals.</p> <p>Whether an operation is high-impact depends very much on circumstances and must be assessed on a case-by-case basis. A proportionate, risk-based assessment of social impacts might be carried out in a similar way to the assessment of environmental impacts required in section 2.5. The owner/manager should be able to demonstrate that they have considered how many interests will be affected, to what degree and over what timescale.</p> <p>In planning and undertaking consultation, the owner/manager should ensure that sufficient time is allowed to assess and consider the feedback and where appropriate to amend management objectives or proposed operations accordingly.</p>
---	--	---

			<p>See also section 4.8.1 which covers sites and features of special cultural or historical significance and section 5.1.1 which covers permissive or traditional uses.</p> 
2.3.2	<p>The owner/manager seeks to engage engages with neighbouring woodland owners and seeks to ensure that the management of each complements and does not unreasonably compromise, the management of adjoining woodlands.</p> <p>a) Where appropriate, contact shall be made with the owners of adjoining woodlands to try to ensure that restructuring of one woodland complements and does not unreasonably compromise the management of adjoining ones.</p> <p>b) Management of invasive plants and of wild mammals shall be undertaken where relevant in co-operation with statutory bodies and where possible and practicable in co-ordination with neighbours (see also section 2.12.1 in relation to deer).</p>	<ul style="list-style-type: none"> <li>• Awareness of potential problems and verbal description of appropriate action</li> <li>• Record of communication and discussions with neighbouring landowners</li> <li>• Felling plan.</li> <li>• Membership of a wildlife management group</li> <li>• Where there is a significant problem caused by wildlife, a documented plan (which may take the form of a contract or licence) for control.</li> </ul>	<p>Potential and actual impacts, both negative and positive, may occur on either or both sides of the ownership boundary.</p> <p>Where potential or actual impacts have been identified, the owner/manager should attempt to identify and agree appropriate measures and seek to co-operate with the neighbouring landowner(s).</p> <p>Impacts may include:</p> <ul style="list-style-type: none"> <li>• Wind stability of neighbouring stands due to restructuring</li> <li>• Changes in hydrology including drainage both into or from the adjoining woodland</li> <li>• The landscape due to restructuring.</li> </ul> <p>Where works or operations having a potential or actual impact were necessarily undertaken at short notice such as for emergency or health and safety reasons, the owner/manager should attempt to identify and inform the neighbouring landowner as soon as is reasonably practicable.</p> <p>If management cannot maintain populations of wild mammals at a level that ensures they are not causing ecological damage, then sensitive areas including regeneration sites, coppice, scrub and areas with vulnerable flora should be protected from browsing and other damage.</p> <p>An example of a wildlife management group might be a Grey Squirrel (<i>Sciurus carolinensis</i>) control group, in which landowners and managers co-ordinated their control efforts in the context of a landscape-level plan.</p> 

	<p>e) Where appropriate and possible, the owner/manager shall consider opportunities for co-operating with neighbours in landscape-scale conservation initiatives.</p>		
2.3.3	<p>The owner/manager seeks to engage engages with neighbouring landowners and considers, where possible, opportunities for co-operating in wider conservation initiatives, wild mammal control and control of invasive non-native species.</p>	<ul style="list-style-type: none"> <li>• Awareness of conservation efforts on adjoining land for priority habitats and species</li> <li>• Awareness of potential problems and verbal description of appropriate action</li> <li>• Record of communication and discussions with neighbouring landowners</li> <li>• Where there is a significant problem caused by wildlife, a documented plan (which may take the form of a contract or licence) for control.</li> <li>• Membership of a wildlife management group.</li> </ul>	<p>Potential and actual impacts, both negative and positive, may occur on either or both sides of the ownership boundary.</p> <p>Where potential or actual impacts have been identified the owner/manager should attempt to identify and agree appropriate measures and seek to co-operate with the neighbouring landowner(s).</p> <p>Impacts may be caused by:</p> <ul style="list-style-type: none"> <li>• Deer</li> <li>• Invasive species such as: <ul style="list-style-type: none"> <li>○ Japanese knotweed</li> <li>○ Himalayan balsam</li> <li>○ Feral mink</li> <li>○ North American signal crayfish</li> </ul> </li> <li>• Damage to the conservation of priority habitats and species due to: <ul style="list-style-type: none"> <li>○ Colonisation or spread of trees from the WMU which is incompatible with the management and condition of the adjoining woodland, priority habitat or designated sites</li> <li>○ Changes in hydrology including drainage both into or from the adjoining woodland and priority habitat.</li> </ul> </li> </ul> <p>Where management cannot maintain populations of wild mammals at a level that ensures they are not causing ecological damage, then sensitive areas - including regeneration sites, coppice coupes and areas with vulnerable flora - should be protected from browsing and other damage.</p> <p>An example of a wildlife management group might be a Grey Squirrel (<i>Sciurus carolinensis</i>) control group, in which landowners and managers co-ordinated their control efforts in the context of a landscape-level plan.</p> <p>An example of a habitat management programme might be concerted action to address the impact and spread of <i>Rhododendron ponticum</i>, where landowners,</p>

			managers and other stakeholders plan and manage this issue across multiple landownerships.
2.4	Productive potential of the woodland management unit (WMU)		
2.4.1	The owner/manager shall plans and implements measures to maintain and/or enhance long-term soil and hydrological functions including soil carbon.	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Field observation.</li> </ul>	Protection of basic ecosystem functions in terms of soils and hydrology is fundamental to sustainable forest woodland management. The owner/manager should refer to relevant guidelines on soils, water, and water catchments and climate change.
2.4.2	<p>a) Timber shall is normally be harvested from the WMU at or below a level which can be permanently sustained.</p> <p>b) The average annual allowable cut is quantified and actual harvesting levels are justified, unless the WMU is undergoing significant restructuring.</p> <p>c) Selective harvesting shall is not be to the long-term detriment of the quality and value of stands.</p>	<ul style="list-style-type: none"> <li>• Compartment records</li> <li>• Growth and yield estimates</li> <li>• Production records or appropriate standing sale volume assessments and reconciliation with estimates</li> <li>• A restructuring plan</li> <li>• Demonstrated control of thinning intensity</li> <li>• Discussion with the owner/manager</li> <li>• Field observation.</li> </ul>	<p>Timber harvesting in excess of increment may be justified:</p> <p>Restructuring includes:</p> <ul style="list-style-type: none"> <li>• During restructuring Harvesting and restocking of even-aged woodlands</li> <li>• During habitat Habitat management or restoration for biodiversity.</li> <li>• In response to pests, diseases or storm damage.</li> </ul> <p>Timber harvesting in excess of increment may be justified in:</p> <ul style="list-style-type: none"> <li>• During restructuring of even-aged woodlands</li> <li>• During habitat management or restoration for biodiversity</li> <li>• In response to pests, diseases or storm damage.</li> </ul> <p>Woodlands or stands which are irregular in species, age or structure may require a stratification by characteristic before applying the appropriate yield model to each stratum. This complex process should only be applied where justified by scale and intensity.</p> <p>In order to preserve the productive potential of the woodland, over-cutting should be avoided in all but the justified circumstances referenced in requirement b). However, the owner/manager should be aware that significant under-cutting might be detrimental to long-term growth, good silvicultural practice, biodiversity, and/or carbon sequestration and storage.</p> <p>Examples of growth and yield estimates include:</p> <ul style="list-style-type: none"> <li>• Average growth rates or yield class for major species on different site types</li> <li>• Predictions of thinning and felling yields for different crop types</li> <li>• Forecasts of areas to be subject to harvesting operations in future years.</li> </ul>

			<p>For woodlands or stands which are irregular in species, age or structure, records of harvest outturn and evidence from monitoring plots may be used to demonstrate that the growth of the forest is being sustained over time.</p> <p>Accuracy of growth and yield estimates should be appropriate to the scale and intensity of the operation.</p> <p>The resilience of the woodland and different species to climate change should be considered.</p> <p>In low-intensity managed woodlands, or in woodlands being restructured in areas of high windthrow risk, area rather than volume predictions are acceptable in planning and monitoring.</p> <p>In practice, actual timber harvesting levels are likely to vary significantly from year to year. Particularly in small woods, there might be long periods without any harvesting followed by a brief period of activity. The owner/manager should determine an appropriate timescale for comparing the annual allowable cut with average actual harvesting levels; this might range from five years for large holdings to twenty years or even longer for very small woods.</p> <p>In relation to requirement c), timber Timber crops should not be creamed or high graded(b). However, selective harvesting of high-quality stems may be entirely appropriate in stands which have been managed to promote regeneration from the most promising individuals, for example.</p>
2.4.3	<p>Harvesting of <del>non-timber woodland products (NTWPs)</del> non-wood forest products (NWFPs) or use of ecosystem services from the WMU shall be is at or below a level which can be permanently sustained.</p>	<ul style="list-style-type: none"> <li>Evidence from records and discussion with the owner/manager that quantities harvested are in-line with sustainable growth rates and that there are no significant adverse environmental impacts</li> <li>Evidence includes reference and conformance to recognised best practice</li> </ul>	<p><del>Non-timber woodland products include foliage, moss, fungi, berries, seed, venison and other animal products.</del></p> <p>Non-wood forest products include plants or parts of plants, bark, sap, moss, fungi, fruits, seeds and nuts, honey, venison and other animal products. Also known as non-timber forest products (NTFP).</p> <p>There is a generic definition of non-wood forest products (NWFPs), also known as non-timber forest products (NTFPs), in the glossary. However, because best Best-practice information on harvesting levels and avoiding negative impacts is available only for the NWFPs listed below, only these products and as such they are explicitly included within the scope of this standard:</p>

		<p>information and guidance.</p>	<ul style="list-style-type: none"> <li>• Venison</li> <li>• Wild boar/feral pig meat</li> <li>• Moss</li> <li>• Sap</li> <li>• Tree seeds</li> <li>• Bulbs</li> <li>• Fungi</li> <li>• Honey.</li> </ul> <p>The UKWAS appendix of references provides further information on good practice guidelines and codes of practice.</p> <p>It is recognised that objective information on sustainable harvesting levels for other NWFPs NTWPs is limited, and also that in the case of venison and wild boar/feral pig meat it may be desirable to harvest at a level that reduces the deer or wild boar/feral pig population in the long term to aid tree establishment and biodiversity.</p> <p>However, in all cases the owner/manager should give careful thought to the annual allowable sustainable harvest and should be able to justify harvest levels on the basis of their objectives and best available information practice. Where the information necessary to determine a sustainable harvesting level is not available, the owner/manager should not harvest this product.</p> <p><b>Advice to owners/managers</b></p> <p>Other NWFPs not included in the list above may be certified if best practice on harvesting levels can be shown and agreed with the relevant certification scheme.</p> <p>See also section 1.1.3c and 1.1.7 regarding appropriate legal permitting, 2.3.3 2-3.2 in relation to protection from wild mammals, and section 4.9 in relation to game management.</p>
2.4.4	<p>Where applicable, priority Priority species shall are not be harvested or controlled</p>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Monitoring records</li> </ul>	<p>Consent is recognised through:</p> <ul style="list-style-type: none"> <li>• Regulatory consent process and permission notices</li> <li>• Adherence to appropriate General Licence terms and conditions.</li> </ul>

	<p>without the consent of the relevant statutory <b>body</b> <del>nature conservation and countryside agency.</del></p>	<ul style="list-style-type: none"> <li>• Species inventories</li> <li>• <b>Regulatory consent notices</b></li> <li>• <b>Specific licence issued by the relevant statutory body</b></li> <li>• <b>General Licence's terms and conditions.</b></li> </ul>	<p>Where no regulatory consent is required and there are no priority-species-appropriate General Licences then best practice should be followed.</p>
<p>2.5 Assessment of environmental impacts <b>in existing woodland</b></p>			
<p>2.5.1</p>	<p>a) <del>The impacts of new planting and other woodland plans on <b>environmental values</b> shall be</del> <b>are assessed before operations are implemented, in a manner appropriate to the scale of the operations and the sensitivity of the site.</b></p> <p>a) <b>During woodland management planning, the positive and negative impacts of proposed operations on <b>environmental values</b> are assessed in a manner appropriate to their scale and the sensitivity of the site.</b></p> <p>b) The results of the environmental assessments <del>shall be</del> <b>are</b> incorporated into planning and implementation in order to avoid, minimise or repair adverse environmental impacts of management activities.</p>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Documented <b>environmental impact assessment</b> or <b>Appropriate Assessment</b> where such has been requested by the relevant <b>forestry authority</b></li> <li>• Documented environmental appraisals</li> <li>• Discussion with the owner/manager</li> <li>• Field observation</li> <li>• <b>Evidence of appropriate consultation with relevant organisations.</b></li> </ul>	<p><b>An assessment of potential impacts on environmental values as per requirement a) should be carried out in all circumstances.</b> The owner/manager should <b>also</b> be aware of relevant legal requirements for environmental impact assessment.</p> <p>Depending on scale and sensitivity, the assessment of environmental impacts may <del>be</del> include:</p> <ul style="list-style-type: none"> <li>• <b>Information received during the consultation process (see 2.3)</b></li> <li>• Brief <b>environmental appraisals</b> for <del>planting or felling</del> <b>management practices or operations</b> which might affect sites recognised for their cultural <b>features</b>, landscape, hydrological, or ecological <b>value</b> or for their impact on <b>priority habitats and species</b></li> <li>• Ecological assessments of <b>ancient semi-natural woodland</b> and projections of their response to management and natural processes</li> <li>• Specific assessments for unusual and/or extensive operations</li> <li>• <b>Specific assessments for non-wood forest products.</b></li> <li>• <del>Checks against relevant country-level plans for <b>priority habitats and species.</b></del></li> </ul> <p>It may be appropriate to seek specialist advice on the potential impacts of operations, for example in relation to:</p> <ul style="list-style-type: none"> <li>• <b>Statutory designated sites</b></li> <li>• Priority habitats and species</li> <li>• <b>Historic environment</b> sites and landscapes</li> <li>• Flood risk and mitigation potential in accordance with local flood risk management plans or strategies.</li> </ul> 

2.5.2	<p>The impacts of woodland plans <del>shall be</del> <b>are</b> considered at a <b>landscape level</b>, taking due account of the interaction with adjoining land and <del>other</del> nearby <b>priority habitats and species</b>.</p>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Maps</li> <li>• Discussion with the owner/manager</li> <li>• <b>Evidence of appropriate consultation with relevant organisations.</b></li> </ul>	<p>In particular, planning including layout, <del>and</del> design, <del>and</del> management of woodland should take into account the following factors and action should be taken if required:</p> <ul style="list-style-type: none"> <li>• The character of other woodland in the area</li> <li>• Needs or impacts of animals (both wild and domestic) which use both woodland and surrounding land</li> <li>• Impacts on flora in the woodland and on surrounding land</li> <li>• Scale and pattern of open land</li> <li>• Habitats which are continuous from inside to outside the woodland (e.g. <b>water courses</b>)</li> <li>• Buffering of water courses and water bodies, and connectivity of riparian habitats</li> <li>• <b>Changes in hydrology including drainage both into or from the adjoining woodland and priority habitat</b></li> <li>• Woodland margins as transitional habitats</li> <li>• Linking <b>open space</b> within the woodland with similar habitats outside</li> <li>• The spread of <b>invasive</b> species into or out of the woodland</li> <li>• Impacts on natural features (e.g. wetlands, rock exposures, drainage patterns)</li> <li>• Catchment level impacts on water flows and flood risk</li> <li>• Nature of historic landscapes and relationships between <b>historic environment</b> sites inside and outside the woodland</li> <li>• <b>Priority habitats and species</b> <b>inside and outside the woodland.</b></li> </ul> <p><b>See also 2.3.3 and 2.12.1.</b></p> 
2.5.3	<p>a) The owner/manager <del>shall</del> <b>assesses</b> the potential negative impacts of natural hazards on the WMU, including drought, floods, wind, fire, <b>invasive</b> plant and animal species, and other pests and diseases.</p>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Discussion with the owner/manager.</li> </ul>	<p>Evaluation should consider:</p> <ul style="list-style-type: none"> <li>• Robust <b>planting restructuring</b> design</li> <li>• Long-term <b>forest resilience</b></li> <li>• Diversity of species, <del>and</del> ages <del>and</del> <b>distribution</b></li> <li>• <b>Distribution</b> of open ground</li> <li>• Flood hazard maps</li> <li>• <b>Potential impact of</b> <b>windthrow.</b></li> </ul>

	<p>b) <b>Planting Management</b> and restructuring plans <b>shall be</b> <b>are</b> designed to mitigate the risk of damage from natural hazards.</p>		
2.6	Woodland creation		
2.6.1	<p>a) During woodland management planning, the impacts of proposed woodland establishment operations on <b>environmental values</b> are assessed in a manner appropriate to their scale and the sensitivity of the site.</p> <p>b) New woodlands <b>shall be</b> <b>are</b> located and designed in ways that will:</p> <ul style="list-style-type: none"> <li>• Deliver economic goods and/or <b>ecosystem services</b></li> <li>• Maintain or enhance the visual, cultural and <b>ecological values</b> <b>environmental values</b> and character of the wider landscape, <b>and</b></li> <li>• Ensure the creation of a diverse <b>and resilient</b> woodland over time, <b>and</b></li> <li>• <b>Seek to mitigate against the risk of damage from natural hazards.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Management planning documentation <b>including relevant consents</b></li> <li>• Field surveys</li> <li>• Discussion with the owner/manager</li> <li>• Maps</li> <li>• Field observation</li> <li>• <b>Evidence of appropriate consultation with relevant organisations.</b></li> </ul>	<p><b>In some cases afforestation may not be appropriate on either the whole or part of the land.</b></p> <p>Economic goods should be understood in the widest sense and may include:</p> <ul style="list-style-type: none"> <li>• Timber</li> <li>• <b>Non-timber woodlands</b> <b>Non-wood forest products</b></li> <li>• <b>CO<sub>2</sub></b>-Carbon dioxide sequestration</li> <li>• <b>Recreation</b></li> <li>• Landscape renewal projects.</li> </ul> <p>Field Surveys and relevant data sources should be used to inform woodland location and design and may include:</p> <ul style="list-style-type: none"> <li>• The character of other woodland in the landscape</li> <li>• Scale and pattern of open land within the landscape</li> <li>• Peat depth and soil surveys</li> <li>• <b>Priority habitat and species</b> assessments both within the WMU and for adjoining land</li> <li>• Historical, <b>archaeological</b> and <b>cultural features</b></li> <li>• Local public and <b>permissive</b> access networks</li> <li>• Presence of <b>water courses</b> and water bodies, and connectivity of riparian habitats within the landscape</li> <li>• Water supplies</li> <li>• <b>Water chemistry, ecology and fisheries</b></li> <li>• Breeding bird surveys.</li> </ul> <p>To mitigate the risk of damage from natural hazards, assessments may include:</p> <ul style="list-style-type: none"> <li>• Herbivore impacts</li> <li>• Flood and drought risk</li> <li>• <b>Invasive</b> species</li> <li>• Fire risk.</li> </ul>

			<p>New woodlands should contribute to the conservation of neighbouring <b>semi-natural woodland</b> and other habitats.</p> <p>Priority habitats and species <b>both within the WMU and on adjoining land</b> should be protected and, where possible, enhanced.</p> <p><b>Historic environment</b> features should be identified and protected.</p> <p>The general aim should be to create a woodland that is sufficiently diverse to ensure long-term <b>forest resilience</b>.</p> <p>A diverse woodland may be achieved through one or more of the following:</p> <ul style="list-style-type: none"> <li>• Use of a diversity of species, clones and provenances</li> <li>• Planting mixed stands</li> <li>• <b>Planting at variable spacings</b></li> <li>• Variation in site types and growth rates</li> <li>• Phased planting</li> <li>• Retention of open ground <b>to create rides or glades</b> and along water courses</li> <li>• Design and creation of wind-firm edges</li> <li>• <b>Woodland margins as transitional habitats</b></li> <li>• <b>Linking open space within the woodland to similar neighbouring habitats</b></li> <li>• Retention and buffering of existing priority habitats.</li> </ul> 
2.6.2	<p>Planning and implementation of ground preparation and drainage works <b>avoids or</b> minimises potential negative impacts including:</p> <ul style="list-style-type: none"> <li>• Soil and soil carbon losses</li> <li>• Damage to existing <b>peatland, wetland, and water courses</b> or bodies.</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Management planning documentation including grant approvals</li> <li>• Field observation.</li> </ul>	<p>The owner/manager should consider:</p> <ul style="list-style-type: none"> <li>• Soil type</li> <li>• Site topography</li> <li>• Site hydrology</li> <li>• <b>Silvicultural effectiveness.</b></li> </ul> <p>The owner/manager should be able to justify management planning choices in relation to:</p> <ul style="list-style-type: none"> <li>• Drainage plans</li> </ul>

			<ul style="list-style-type: none"> <li>Choice of appropriate ground preparation methods to minimise soil disturbance</li> <li>Choice of ground cover vegetation on bare soils</li> <li>The movement of soil and/or changes in soil levels</li> <li>The protection of the hydrology relating to existing peatland, wetland, and water courses or bodies</li> <li>Water supplies</li> <li>Protection and management of water courses or bodies.</li> </ul> <p>Owners/managers should demonstrate awareness of current good practice guidance.</p>
2.7	Woodland restructuring		
2.7.1	<p>Even-aged woodlands shall be gradually restructured to achieve an appropriately diverse mosaic appropriate diversity of in-stand structure, species, sizes, ages, spatial scales, and regeneration cycles and open space. This structural diversity shall be maintained or enhanced.</p>	<ul style="list-style-type: none"> <li>Management planning documentation</li> <li>Discussion with the owner/manager</li> <li>Maps</li> <li>Field observation.</li> </ul>	<p>Restructuring should be planned and implemented in conformance with good forest design practice, improving forest resilience and biodiversity practice.</p> <p>A greater degree of uniformity may be appropriate in very small woodlands.</p> <p>In larger even-aged plantations, the age structure structural diversity may be improved through:</p> <ul style="list-style-type: none"> <li>Phased felling</li> <li>Prescribing restocking, which will provide options for further diversification and reduction in coupe size at the end of the next rotation</li> <li>Designing future coupes with windfirm edges</li> <li>Adoption of lower-impact silvicultural systems</li> <li>Planning for future veteran trees and standing deadwood.</li> </ul> <p>Smaller coupe sizes should be favoured for economic, environmental and social reasons.</p> <p>Site factors favouring larger coupe sizes might include:</p> <ul style="list-style-type: none"> <li>Windthrow risk</li> <li>Landscape scale</li> <li>Historical plantation design</li> <li>Historic environment features</li> <li>Wildlife habitats.</li> <li>Adoption of lower-impact silvicultural systems.</li> </ul>

			<p>All WMU's have the potential to be improved so, where appropriate, woodland restructuring can provide opportunities for the creation of temporary and permanent open space and open ground habitats (See 4.4.3). These may include:</p> <ul style="list-style-type: none"> <li>• Creation, expansion and improvement of rides and glade networks</li> <li>• Creation of transitional woodland edge habitat</li> <li>• Buffering of water courses</li> <li>• Linking with open ground habitats on adjoining land</li> <li>• Creation of open spaces and views to protect, support or enhance heritage assets.</li> </ul> <p>so we ask this is taken as part of continuous improvement.</p> <p>Woodland restructuring may also provide opportunities for the correction of poor land drainage systems installed during an earlier crop rotation and which have caused water quality issues.</p> <p>Pests or disease might temporarily reduce diversity. In such cases, the owner/manager should strive to restore or enhance diversity in a reasonable timeframe.</p> 
2.8	Tree species selection		
2.8.1	<p>a) The range of species selected for new woodlands, and natural or artificial regeneration of existing woodlands shall be is suited to the site and shall takes into consideration:</p> <ul style="list-style-type: none"> <li>• Improvement of long-term forest resilience including the potential impacts of climate change</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager demonstrates that consideration has been given to a range of species, including native species</li> <li>• Evidence of Ecological Site Classification analysis</li> <li>• Management planning documentation</li> </ul>	<p>As a general principle, management should at least maintain and where possible enhance the species diversity of the woodland and increase species-diverse stands.</p> <p>Larger WMUs will generally present more opportunities for species diversification.</p> <p>The use of non-native species may be appropriate to promote greater resilience to the effects of climate change within production plantation forestry and within new woodland sites, but native species remain most appropriate for the ecological and climate change resilience of ancient and high conservation value woodlands identified in sections 4.1-4.3. In these woodlands, regeneration with</p>

<ul style="list-style-type: none"> <li>• Management objectives</li> <li>• Requirements for conservation and enhancement of biodiversity (see section 4)</li> <li>• Requirements for enhancement and restoration of habitats (see section 4)</li> <li>• Landscape character.</li> </ul> <p>b) Regeneration (natural or planted) shall restore stand composition in a timely manner to pre-harvesting or more natural conditions.</p> <p>c) Native species shall be preferred to non-native. If non-native species are used it shall be shown that they will clearly outperform native species in meeting the owner's objectives or in achieving long-term forest resilience.</p> <p>d) In woodlands identified in sections 4.1-4.3:</p> <ul style="list-style-type: none"> <li>• Native species are used for regeneration</li> <li>• Natural regeneration of non-native trees is managed to avoid</li> </ul>	<ul style="list-style-type: none"> <li>• Field observation.</li> </ul>	<p>native species is consistent with a precautionary approach to maintaining conservation values.</p> <p>In semi-natural woodlands, regeneration should restore the pre-harvesting stand composition or should create a greater range of species and structural variation appropriate to the woodland type. In ancient semi-natural woodland, regeneration should be in accordance with section 4.2.1. In other semi-natural woodland, regeneration should be in accordance with section 4.4.1.</p> <p>In plantations on ancient woodland sites, regeneration should be in accordance with section 4.3.1.</p> <p>Owners/managers should also be aware of the guidelines on species proportions and open ground in the UK Forestry Standard.</p> <p>Results of research into site suitability of different species' origins and provenances and their resilience to climate change should be used to assist species choice. Because of the uncertain effects of climate change, selecting a range of genotypes may be prudent as may the use of natural regeneration where a range of genotypes is more naturally promoted.</p> <p>Soil analyses and use of Forest Research's Ecological Site Classification (ESC) tool may be helpful when considering economic and ecological resilience to climate change. It may also be appropriate to consider obtaining specialist advice for semi-natural woodlands, especially ancient semi-natural woodlands.</p> <p>See also section 2.9.1 in relation to non-native species and section 4.7.1 in relation to natural regeneration and planting stock in semi-natural woodland and plantations on ancient woodland sites.</p> 
---	--	---

	threats to conservation values.		
2.9	Introduction of Non non-native species		
2.9.1	<p>a) Non-native tree species shall are only be introduced to the WMU an individual woodland when evidence or experience shows that any invasive impacts can be controlled effectively and all regulatory requirements are met.</p> <p>b) Non-native tree species are not introduced to woodland identified in sections 4.1-4.3.</p> <p>c) Other non-native plant and animal species shall are only be introduced if they are non-invasive, and bring environmental benefits and all regulatory requirements are met.</p> <p>d) All new introductions shall be are carefully monitored, and effective mitigation measures shall be are implemented to control negative impacts outside the area in which they are established.</p>	<ul style="list-style-type: none"> <li>• Documented impact assessment of any introductions made after the first certification</li> <li>• Discussion with the owner/manager</li> <li>• Field observation.</li> </ul>	<p>'Introductions' refers to species not currently present in an individual woodland WMU.</p> <p>The use of non-native species may be appropriate for a number of reasons not least building resilience to the effects of climate change. The relative benefits of introductions must be balanced against the risk of any unintended consequences, for example the wider colonisation of any introductions where this is not desirable.</p> <p>The requirement includes the re-introduction of once-native animals not currently present within the United Kingdom.</p> <p>Owners/managers should be aware that introduced species may exhibit differing degrees of invasiveness in different habitats or parts of the country.</p> <p>Use of non-native biological control agents such as <i>Rhizophagus grandis</i> may be desirable to control non-native pests.</p> <p>Game species may be introduced if managed in accordance with section 4.9.</p>
	MAKE CONSULTATION COMMENTS / NOTES HERE		

2.10	Silvicultural systems		
2.10.1	<p>a) Appropriate silvicultural systems shall be are adopted which are suited to species, sites, windthrow risk, tree health risks and management objectives and which stipulate soundly-based planting, establishment, thinning, felling and regeneration plans.</p> <p>b) Where species, sites, windthrow risk, tree health risk and management objectives allow, a range of silvicultural approaches, and in particular lower-impact silvicultural systems, shall be are adopted with the aim of diversifying ages, species and stand structures.</p>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Discussion with the owner/manager</li> <li>• Field observation.</li> </ul>	<p>The choice of silvicultural system should take into account:</p> <ul style="list-style-type: none"> <li>• Long-term forest resilience</li> <li>• The tree and soil carbon balance</li> <li>• Carbon sequestration and storage in trees and soils across the WMU</li> <li>• The carbon impacts of the operational requirements of differing silvicultural systems such as a reduction in scale of clear-fells or extended fallow periods</li> <li>• Silvicultural characteristics of the species</li> <li>• Management objectives</li> <li>• Site limitations including potential growth rates and wind firmness</li> <li>• Intended stem size and quality</li> <li>• Current and future markets for timber products</li> <li>• Impacts on the landscape and wildlife</li> <li>• Impacts on historic environment sites</li> <li>• Age-structure and felling plan of nearby woodlands</li> <li>• Ecological processes and natural disturbance regime for that woodland type</li> <li>• Historical management practices</li> <li>• Views of local people.</li> </ul> <p>The choice of forest management approach should be made clear in management planning as this determines subsequent thinning and operational regimes.</p> <p>Use of lower-impact silvicultural systems may not be appropriate where there is evidence that clearfelling is necessary for the conservation of priority habitats or species.</p> 
2.10.2	<p>a) In semi-natural woodland, lower-impact silvicultural systems shall be are adopted. All felling shall be is in accordance with the specific guidance for that</p>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Discussion with the owner/manager</li> <li>• Field observation.</li> </ul>	<p>For areas with priority habitats and species, consider consulting with relevant species and habitat experts in statutory nature conservation and countryside agencies or NGOs.</p> <p>There may be practical or biodiversity enhancement reasons for clearfelling in some semi-natural woodlands, but owners/managers should be aware that best</p>

	<p>type of woodland in the relevant Forestry Commission Practice Guide.</p> <p>b) In semi-natural woodlands over 10 ha, no more than 10% shall be is felled in any five-year period unless justified in terms of biodiversity enhancement or lower impact.</p>		<p>practice guidance for semi-natural woodlands managed as high forest generally advises using small coupe fellings which, depending on the type of woodland, may be up to around 2 ha in size.</p> <p>An appropriate forest management approach should be chosen for semi-natural woodlands and made clear in management planning as this determines subsequent thinning and operational regimes.</p> 
2.11	Conservation		
2.11.1	<p>a) Management planning shall identify identifies a minimum of 15% of the WMU to be managed where management for conservation and enhancement of biodiversity is as the primary objective.</p> <p>b) This shall includes conservation areas and features identified in the following sections:</p> <ul style="list-style-type: none"> <li>• Statutory designated sites (section 4.1)</li> <li>• Ancient semi-natural woodland (section 4.2)</li> <li>• Plantations on ancient woodland sites (section 4.3)</li> <li>• Other valuable semi-natural habitats (section 4.4)</li> <li>• Areas and features of critical importance for</li> </ul>	<ul style="list-style-type: none"> <li>• Management planning documentation including maps</li> <li>• Field observation.</li> </ul>	<p>Where areas and features identified in (b) comprise less than 15% of the WMU, additional areas should be identified.</p> <p>The balance of areas managed with conservation and enhancement of biodiversity as a major objective may include:</p> <ul style="list-style-type: none"> <li>• Natural reserves</li> <li>• Long-term retentions</li> <li>• Riparian zones integral to the WMU</li> <li>• Lower-impact silvicultural systems</li> <li>• Existing open habitats integral to the WMU.</li> </ul> <p>In larger and more dispersed woodland management units, this requirement may be fulfilled across the WMU as a whole rather than reserving specified areas in each and every wood.</p> <p>Aim for a balance between the dispersal of sites across the WMU and a concentration of sites in important locations with benefits for conservation and/or enhancement of biodiversity.</p> <p>The conservation areas and features identified under (b) may fall into more than one category but can only be counted once towards the 15% of the WMU managed with conservation and enhancement of biodiversity as the major objective.</p>

	<p>watershed management or erosion control (section 4.5)</p> <ul style="list-style-type: none"> <li>• <b>Natural reserves</b> (section 4.6.1)</li> <li>• <b>Long-term retentions</b> and/or areas managed under <b>lower-impact silvicultural systems</b> (LISS) (section 4.6.2).</li> </ul> <p>c) Throughout the WMU, management planning identifies opportunities where conservation and the enhancement of biodiversity may be achieved alongside other objectives.</p>		<p>The minimum values for semi-natural habitat and areas where biodiversity is the primary objective are there for guidance and should not be viewed as “ceilings” to continual biodiversity improvement or enhancement across the WMU as a whole.</p> <p>Many species including priority species use the wider forest habitat and careful forest management is often beneficial for these species. Management could be aimed at a specific species or take the form of management of habitats to benefit wider biodiversity.</p> <p>Where the primary objective is not conservation or biodiversity, management planning should demonstrate where such synergies can be achieved.</p> <p>Opportunities to link to wider landscape ecological networks should be identified and factored into management planning for the forest.</p> <p>Examples might include:</p> <ul style="list-style-type: none"> <li>• Management to favour and protect red squirrels within commercial woodlands</li> <li>• Protection and management of black grouse lekking areas within commercial woodlands</li> <li>• Management of ride edges and alongside forest roads to promote invertebrates and bird interest</li> <li>• Management of historic buildings or features that also provide roost for bats</li> <li>• Management of water courses and riparian areas to improve their biodiversity value</li> <li>• Promotion and protection of veteran trees and deadwood components.</li> </ul>
2.11.2	<p>a) Management strategies and actions shall be are developed to maintain and, where possible, enhance the status of areas and features of high conservation value</p>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Discussion with the owner/manager</li> <li>• Specialist surveys.</li> </ul>	<p>Areas and features of high conservation value may not always be well mapped. The owner/manager should therefore consider the need for specialist surveys appropriately timed to confirm the presence of areas and features of high conservation value in order to apply the precautionary approach when developing management strategies and actions.</p>

	<p>identified in the following sections:</p> <ul style="list-style-type: none"> <li>• Statutory <b>designated sites nature conservation sites</b> (section 4.1)</li> <li>• <b>Ancient semi-natural woodland</b> (section 4.2)</li> <li>• <b>Plantations on ancient woodland sites</b> (section 4.3)</li> <li>• Areas and features of critical importance for watershed management or erosion control (section 4.5).</li> </ul> <p>b) Management strategies and actions <b>shall be are</b> developed in consultation with <b>statutory bodies, interested parties</b> and experts.</p>		
2.12	Protection		
2.12.1	<p>a) Management of wild deer <b>shall be is</b> based on a strategy that identifies the management objectives, and aims to regulate the impact of deer.</p> <p>b) <b>Non-toxic ammunition is used in the management of wild deer.</b></p>	<ul style="list-style-type: none"> <li>• Awareness of potential problems <b>through use of appropriate herbivore population and risk assessment</b></li> <li>• Awareness of actual damage <b>through use of appropriate impact surveys</b></li> <li>• Description of appropriate action in the</li> </ul>	<p>For larger organisations and WMUs, the strategy should be in writing.</p> <p>This requirement may involve the setting of cull targets <b>with deer management groups and/or statutory bodies and forestry authorities</b> and should involve the membership of a Deer Management Group where appropriate.</p> <p><b>Use of non-toxic ammunition will eliminate lead contamination of venison and venison-based food products and the diffuse pollution of lead into the wider environment.</b></p> 

		<p>management planning documentation</p> <ul style="list-style-type: none"> <li>• <b>Deer management plan</b></li> <li>• Membership of a deer management group</li> <li>• Evidence of cull targets and achievements</li> <li>• Where there is a significant problem caused by deer, a documented plan for control; this may take the form of a contract or licence.</li> </ul>	
2.12.2	There shall be is an emergency response plan appropriate to the level of risk.	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Emergency response plans</li> <li>• In sites with high risk of fire, evidence of contact with the fire and rescue service and that their advice has been taken into consideration.</li> </ul>	<p>Incidents may include:</p> <ul style="list-style-type: none"> <li>• Fire</li> <li>• Extreme weather events</li> <li>• Outbreaks of pests, diseases or <b>invasive</b> species</li> <li>• Accidents</li> <li>• Chemical spills and other pollution.</li> </ul> <p>Where appropriate, plans may be as simple as a reference card, but as a minimum should include:</p> <ul style="list-style-type: none"> <li>• Responsibilities for action</li> <li>• Contact details</li> <li>• Emergency procedures.</li> </ul> <p>Plans should take into account <b>FISA</b> best practice guidance and issues such as the remoteness of some WMUs, which may affect both communication and the ability of emergency services to reach sites in a timely manner.</p>
2.12.3	The choice of tree protection methods and products is appropriate to the herbivore risk and undertaken to minimise environmental impacts.	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Herbivore population and impact surveys and risk assessment</li> <li>• Field observation</li> </ul>	<p>When choosing an appropriate tree protection method, owner/managers should consider the lifetime costs including the requirement to remove redundant materials from the woodland.</p>

		<ul style="list-style-type: none"> <li>• Policy documents</li> <li>• Evidence that recyclable products have been placed into a suitable recycling system.</li> </ul>	<p>Wildlife management and/or fencing may be a more suitable option than individual tree protection for larger areas and densely planted dense planting may also provide a more suitable option for smaller areas.</p> <p>Where tree shelters or vole guards are used there should be a preference for:</p> <ul style="list-style-type: none"> <li>• Recycled and readily recyclable materials</li> <li>• Biodegradable materials</li> <li>• Products based on sustainable natural products over oil-based plastics.</li> </ul> <p>The use of non-recyclable or non-biodegradable products should be avoided.</p> <p>Owners/managers should be aware that non-biodegradable tree shelters will degrade over time and be classed as waste which is subject to legal requirements. There should be a plan to remove them before they become waste.</p> <p>Where non-biodegradable, but recyclable, tree protection products are used there should be a plan to remove these before they begin to degrade.</p> <p>Managers should be aware that not all biodegradable plastics will degrade in the woodland environment and may require industrial composting to break down which will require their collection before they begin to break up.</p> <p>See also 2.12.1 in relation to deer, 3.5. on fencing, and 3.6 in relation to waste.</p>
2.12.4	There is a biosecurity policy appropriate to the level of risk.	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Biosecurity plan</li> <li>• Procurement policy.</li> </ul>	<p>Owners/manager should consider biosecurity measures when:</p> <ul style="list-style-type: none"> <li>• Ordering and purchasing plants and materials</li> <li>• Planning operations where a pest or disease may be present</li> <li>• Letting and managing sporting and other leases or agreements.</li> </ul> <p>Biosecurity involves preventing the spread of tree diseases such as larch dieback, ash dieback, non-native plants such as Himalayan balsam, Japanese knotweed, and species such as American signal crayfish and killer shrimp.</p> <p>Owners / managers should also be aware of the potential to import new pests and diseases to the UK. For example, <i>Xylella fastidiosa</i>.</p>

2.13	Conversion		
2.13.1	<p>a) Woodland identified in sections 4.1-4.3 shall is not be converted to plantation or non-forested land.</p> <p>b) Areas converted from ancient semi-natural and other semi-natural woodlands to plantation or non-forested land after 1994 shall do not normally qualify for certification.</p>	<ul style="list-style-type: none"> <li>No evidence of conversion</li> <li>Field observation</li> <li>Discussion with the owner/manager</li> <li>Management planning documentation.</li> </ul>	<p>Certification of converted ancient and other semi-natural woodlands may be allowed in circumstances where sufficient evidence is submitted to the certification body that the owner/manager is not responsible directly or indirectly for such conversion.</p> <p>Woodland removal to facilitate infrastructure or built development which is not integral to the management of the rest of the woodland cannot meet this requirement.</p>
2.13.2	<p>a) Conversion to non-forested land shall takes place only in certain limited circumstances as set out in this requirement.</p> <p>b) The new or restored land use shall be is more valuable than any type of practicably achievable woodland cover in terms of its biodiversity, landscape or historic environment benefits, and all of the following conditions shall be are met:</p> <ul style="list-style-type: none"> <li><del>The conversion entails no greater than 5% of the WMU</del></li> <li>The conversion does not destroy areas of</li> </ul>	<ul style="list-style-type: none"> <li>Transition plan</li> <li>Management planning documentation for the converted area after felling</li> <li>Records of planning process and discussions</li> <li>Consultation with interested parties</li> <li>Monitoring records</li> <li>Environmental impact assessment process documentation</li> <li>Soil and/or peatland maps used in planning operations, reports from specialists, and field observations following survey.</li> </ul>	<p>Conversion to non-forested land should be planned and implemented in accordance with the UKFS guidelines on biodiversity, landscape and historic environment.</p> <p>A transition plan should set out as a minimum the justification for conversion and a strategy for implementation, subsequent management and monitoring.</p> <p>Under current regulations an environmental impact assessment may be required before such conversions are implemented.</p> <p>Planning consent or an approved Environmental Statement can provide sufficient evidence that there is no unresolved substantial dispute.</p> <p>Deforestation to facilitate infrastructure or built development which is not integral to the management of the rest of the woodland cannot meet this requirement.</p> <p>To check whether an area has significantly high soil-carbon stock, a number of online and other resources are available to provide an initial indication. Where a more detailed investigation is warranted, reference should be made to higher resolution maps and/or site surveys by relevant specialists.</p>

	<p>significantly high carbon stock</p> <ul style="list-style-type: none"> <li>• The woodland is not identified as of high conservation value in sections 4.1-4.3 and 4.5, nor identified as contributing to the cultural and historical values in section 4.8</li> <li>• There is no evidence of unresolved substantial dispute</li> <li>• The conversion and subsequent site management protect and substantially enhance at least one of the following: <ul style="list-style-type: none"> <li>○ The status and condition of priority habitats and species</li> <li>○ The status and condition of statutory designated sites</li> <li>○ Important landscape features and character</li> <li>○ Important historic environment features and character</li> <li>○ Important carbon stores</li> </ul> </li> <li>• The subsequent management of the</li> </ul>		<p>Any restoration should be planned to minimise disturbance and damage to soil-carbon stock.</p> <p><i>See also section 4.4.2 in relation to restoration of small-scale habitats within a woodland matrix.</i></p> <p><b>Advice to owners/managers</b>  Only timber felled in accordance with this requirement can be certified. Owners/managers are advised to seek guidance from their certification body or group scheme manager.</p> <p>For proposed conversions exceeding 5% or 500 hectares of the WMU by area, owners/managers should contact their certification scheme(s) to check their specific requirements and request prior approval.</p> 
--	---	--	--

	<p>converted area <del>shall be</del> <b>is</b> integrated with the rest of the WMU.</p> <p>c) Conversion exceeding 5% of the WMU by area or 500 ha in total takes place only with the prior approval of the relevant certification scheme(s).</p>		
2.13.3	<p>a) Woodland areas <del>shall be</del> <b>are</b> converted to areas used solely for Christmas tree or <del>short rotation coppice</del> production only where conversion is consistent with other requirements of this certification standard, including the need to leave <del>open space</del>, and in accordance with any approved management plan from the relevant <del>forestry authority</del>, or when clearance is required for non-forestry reasons such as a wayleave agreement.</p> <p>b) Christmas trees shall be grown using <del>traditional</del>, non-intensive techniques.</p>	<ul style="list-style-type: none"> <li>Field observation</li> <li>Management records.</li> </ul>	<p>The requirement restricting conversion relates to use for growing Christmas trees of less than 4 metres in height.</p> <p>The chemicals regime for Christmas trees must meet all the requirements of section 3.4.</p> <p>Examples of Christmas trees which may be covered by a certificate are:</p> <ul style="list-style-type: none"> <li>Trees (&lt;4 m in height) grown on areas within the woodland matrix used solely for Christmas tree production</li> <li>Trees (&lt;4 m in height) grown on areas used solely for Christmas tree production which, although outwith the woodland, form part of the woodland management unit</li> <li>Thinnings from forest tree crops</li> <li>Tops from harvested forest tree crops</li> <li>Trees grown by interplanting of forest tree crops</li> <li>Mature trees (&gt;4 m height)</li> <li>Trees which have regenerated onto, and have been harvested from, adjacent open land in the interest of maintaining its <del>biodiversity</del> or landscape value, and provided that the adjacent area is managed as part of the woodland management unit.</li> </ul> <p><del>Christmas trees or short rotation coppice grown intensively as temporary crops a horticultural or nursery crop</del> are outside the scope of this certification standard.</p>
2.14	Implementation, amendment and revision of the plan		
2.14.1	<p>The implementation of the work programme <del>shall be</del> <b>is</b></p>	<ul style="list-style-type: none"> <li>Cross-correlation between the</li> </ul>	<p>Changes in planned timing of operations should be such that they do not jeopardise the ecological integrity of the woodland in the long term.</p>

	<p>in close agreement with the details included in the management planning documentation. Any deviation from prescription or planned rate of progress <del>shall be</del> <b>is</b> justified, overall objectives <del>shall be</del> <b>are</b> still <del>be</del> achieved and the ecological integrity of the woodland maintained.</p>	<p>management planning documentation, annual work programmes and operations seen on the ground</p> <ul style="list-style-type: none"> <li>• Owner's/manager's familiarity with the management planning documentation and woodland</li> <li>• Documentation or owner's/manager's explanation of any deviation.</li> </ul>	<p>Changes in planned timing may be justified on economic grounds if overall management practices continue to conform to the other requirements of this certification standard.</p> <p>Catastrophic events such as wind damage or pest and disease outbreaks may necessitate amendment of the work programme and management planning documentation.</p> <p><i>See also section 2.10.1 in relation to thinning, felling and regeneration plans.</i></p>
2.15	Monitoring		
2.15.1	<p>a) The owner/manager <del>shall</del> <b>s</b> devises and implements a monitoring programme appropriate to the scale and intensity of management.</p> <p>b) The monitoring programme <del>shall be</del> <b>is</b>:</p> <ul style="list-style-type: none"> <li>• Part of the management planning documentation</li> <li>• Consistent and replicable over time to allow comparison of results and assessment of change</li> <li>• Kept in a form that ensures that results are of use over the long term.</li> </ul>	<ul style="list-style-type: none"> <li>• A monitoring programme as part of management planning documentation</li> <li>• <b>Herbivore population and impact surveys and risk assessment</b></li> <li>• Evidence of a consistent approach to recording site visits</li> <li>• Discussion with the owner/manager</li> <li>• Monitoring records.</li> </ul>	<p>The primary purpose of monitoring is to help the owner/manager to implement and adapt the management of the WMU to meet the management objectives.</p> <p>Monitoring should be linked to potential and actual positive and negative impacts of management on the condition of features and sensitivities of the WMU identified in section 2.2.1, and to the delivery of management objectives.</p> <p>Monitoring may include:</p> <ul style="list-style-type: none"> <li>• Supervision during woodland operations</li> <li>• Regular management visits and systematic collection of information</li> <li>• Longer-term studies on changes to the woodland <b>ecosystem</b>, particularly for special environmental features.</li> </ul> <p>Examples of appropriate monitoring include:</p> <ul style="list-style-type: none"> <li>• Implementation of woodland operations <ul style="list-style-type: none"> <li>○ Health and safety</li> <li>○ <b>Compliance</b> with Forest and Water guidelines</li> <li>○ Worksite supervision</li> </ul> </li> <li>• Harvesting yields <ul style="list-style-type: none"> <li>○ Information from sales invoices or weight tickets compared to predicted yields from production forecasts or timber inventories</li> <li>○ <b>Yields of non-wood forest products</b></li> </ul> </li> </ul>

	<p>c) The owner/manager shall where applicable monitor and records:</p> <ul style="list-style-type: none"> <li>• The implementation of policies and objectives and the achievement of verifiable targets</li> <li>• Implementation of woodland operations</li> <li>• Harvesting yields</li> <li>• Social impacts</li> <li>• Environmental impacts</li> <li>• Changes in environmental condition</li> <li>• Usage of pesticides, biological control agents and fertilisers and any adverse impacts</li> <li>• Environmentally appropriate disposal of waste materials.</li> </ul> <p>d) Monitoring targets shall fully consider any special features of the WMU.</p>		<ul style="list-style-type: none"> <li>• Social impacts <ul style="list-style-type: none"> <li>○ Condition and accessibility of public access facilities</li> <li>○ Impacts of timber haulage</li> </ul> </li> <li>• Environmental impacts <ul style="list-style-type: none"> <li>○ Impacts of operations on priority habitats and species, landscape or water and soils</li> <li>○ Impacts of non-native invasive species</li> <li>○ Impacts of grazing and browsing</li> <li>○ Successional changes that negatively impact on open ground priority habitats.</li> </ul> </li> <li>• Changes in environmental condition <ul style="list-style-type: none"> <li>○ Tree health including pests and diseases</li> <li>○ Woodland composition and structure</li> <li>○ Areas and features of conservation value</li> <li>○ Ancient woodland features and remnants, including responses to management and any threats</li> <li>○ Condition of cultural heritage features.</li> </ul> </li> </ul> <p>When monitoring environmental impacts and changes in environmental condition, particular attention should be paid to the features of high conservation value identified in sections 4.1-4.3 and 4.5 and to the cultural and historical values identified in section 4.8.</p> <p>Special features might include protected habitats, cultural sites, historical sites, heritage assets and rights of way etc.</p> <p>Detail of information collected should be appropriate to the:</p> <ul style="list-style-type: none"> <li>• Size of the enterprise</li> <li>• Intensity of operations</li> <li>• Objectives of management</li> <li>• Sensitivity of the site.</li> </ul> <p>The owner/manager may consider:</p> <ul style="list-style-type: none"> <li>• Formal written records</li> <li>• A less formal site diary</li> <li>• Photographic records</li> <li>• Verbally communicated records.</li> </ul>
--	---	--	--

			<p>Note that there may be legal requirements for record-keeping in some cases, for example pesticide usage.</p> <p>Owners/managers should be aware of the potential usefulness of information gathered for other purposes, for example to fulfil statutory requirements, which may meet or supplement monitoring needs. It may also be possible to make use of freely available information from sources such as <b>statutory bodies</b> or local interest groups.</p>
2.15.2	<p>The owner/manager <del>shall</del> takes monitoring findings into account, particularly during revision of the management planning documentation, and if necessary <del>shall</del> revises management objectives, verifiable targets and/or management activities.</p>	<ul style="list-style-type: none"> <li>• Monitoring records</li> <li>• Management planning documentation</li> <li>• Discussion with the owner/manager.</li> </ul>	<p>Expert advice should be sought where necessary and taken into account.</p>
2.15.3	<p>Monitoring findings, or summaries thereof, <del>shall be</del> are made <b>publicly available</b> upon request.</p>	<ul style="list-style-type: none"> <li>• Written or verbal evidence of responses to requests.</li> </ul>	<p>The monitoring findings or summaries may exclude confidential information <b>including personal information covered by the UK General Data Protection Regulation (UK GDPR)</b>.</p> <p>The means of sharing monitoring findings should be appropriate to the nature of the records and to the needs of the <b>interested parties</b>.</p> <p>Owners/managers of smaller management units, relying more on informal monitoring methods and records, may find it more appropriate to communicate results verbally.</p> <p>Owners/managers of larger management units, relying more on formal surveys and reports, may find it more appropriate to produce a written summary.</p> <p><i>See section 2.2.2 for examples of confidential information.</i></p>

### **3. Woodland operations**

Second Revision Draft Master Copy

### 3. Woodland operations

	REQUIREMENT	EXAMPLE VERIFIERS	GUIDANCE
3.1	General		
3.1.1	Woodland All woodland operations shall conform to forestry best practice guidance.	<ul style="list-style-type: none"> <li>Field observation</li> <li>Discussion with the owner/manager and workers</li> <li>Monitoring and internal audit records.</li> </ul>	
3.1.2	<p>The planning of woodland operations shall include:</p> <ul style="list-style-type: none"> <li>Obtaining any relevant permission and giving any formal notification required</li> <li>Assessing and taking into account on and off-site impacts</li> <li>Taking measures to protect water resources, and soils, and soil carbon and prevent disturbance of and damage to priority species, habitats, ecosystems and landscape values, including adapting standard prescriptions where required. Any</li> </ul>	<ul style="list-style-type: none"> <li>Documented permissions</li> <li>Contracts</li> <li>Discussion with the owner/manager and workers</li> <li>Demonstration of awareness of impacts and measures taken</li> <li>Site-specific, documented assessment of impacts</li> <li>Operational site assessments.</li> </ul>	<p>Particular attention should be given to ensuring that:</p> <ul style="list-style-type: none"> <li>Local people potentially affected are informed at the onset of operations</li> <li>Workers are involved in the planning of operations at the implementation stage.</li> </ul> <p>Checks should be made against relevant country-level plans for priority habitats and species.</p> <p>Consideration should be given to the choice of materials and fuels used in woodland management operations. Particular attention should be given to the use of high embedded-carbon products such as:</p> <ul style="list-style-type: none"> <li>Fertilisers</li> <li>Pesticides</li> <li>Plastics.</li> </ul> <p>Consideration should be given to the adoption of low greenhouse gas emission vehicles used in forest planning, management, harvesting operations and timber haulage.</p>

	<p>disturbance or damage which does occur shall be is mitigated and/or repaired, and steps shall be are taken to avoid recurrence</p> <ul style="list-style-type: none"> <li>Measures to maintain and, where appropriate, enhance the natural capital values of identified services and resources such as watersheds and fisheries</li> <li>Measures to protect water supplies</li> <li>Adopting, where practicable, operational practices to reduce carbon dioxide and other greenhouse gas emissions.</li> </ul>		
3.1.3	<p>Operational plans shall be are clearly communicated to all workers so that they understand and implement safety precautions, environmental protection plans, biosecurity protocols, emergency procedures, and prescriptions for the management of features of high conservation value and of cultural and heritage assets historic sites.</p>	<ul style="list-style-type: none"> <li>Discussion with workers</li> <li>Records of pre-commencement meetings</li> <li>Field observation</li> <li>Biosecurity policy</li> <li>Relevant plans and procedures.</li> </ul>	<p>Contracts can be in writing or workers may be given oral instructions where this is appropriate to the scale and sensitivity of the operation.</p>
3.1.4	<p>Operations shall cease or relocate immediately where:</p>	<ul style="list-style-type: none"> <li>Discussion with the owner/manager</li> </ul>	<p>Previously unknown sites or features of conservation value or of special cultural and historical significance might include:</p>

	<ul style="list-style-type: none"> <li>• They damage sites or features of conservation value or of special cultural and historical significance identified in sections 4.1-4.5 and 4.8. Operations in the vicinity shall recommence only when action has been taken to repair damage and prevent any further damage, including establishing buffer areas where appropriate</li> <li>• They reveal previously unknown sites or features which may be of conservation value or of special cultural and historical significance. Operations in the vicinity shall recommence only when the sites or features have been investigated and appropriate management agreed, where relevant in discussion with statutory bodies, local authority historic environment or archaeology services and/or local people.</li> </ul>	<ul style="list-style-type: none"> <li>• Site diaries</li> <li>• Field observation.</li> </ul>	<ul style="list-style-type: none"> <li>• Areas or features of conservation value in statutory designated sites (section 4.1.1)</li> <li>• Priority habitats or species (section 4.1.2)</li> <li>• Ancient semi-natural woodland, or conservation values within such woodland (section 4.2.1)</li> <li>• Plantations on ancient woodland sites, or remnant and conservation features within such features (section 4.3.1)</li> <li>• Areas, species and features of conservation value in other woodlands (section 4.4.1)</li> <li>• Other valuable small-scale semi-natural habitats (section 4.4.2)</li> <li>• Areas and features of critical importance for watershed management or erosion control (section 4.5.1)</li> <li>• Veteran trees (section 4.6.3)</li> <li>• Sites and features of special cultural and historical significance (section 4.8.1).</li> </ul> <p>The owner/manager should confirm the identification of any such sites or features and engage relevant parties in determining appropriate management as required in the indicated section of this standard.</p>
--	--	--	--

3.1.5	Operational biosecurity is carried out employing techniques commensurate with the nature and level of risk.	<ul style="list-style-type: none"> <li>• Field observation</li> <li>• Discussion with the owner/manager</li> <li>• Management planning documentation.</li> </ul>	<p>General good biosecurity should be practised on all sites to avoid, as far as possible, taking mud or plant material from site to site.</p> <p>Where a specific pest, disease or invasive species is present higher-level measures should be taken.</p> <p>Forest machinery should be power-washed down or otherwise thoroughly cleaned, before leaving site if it has been operating within an area known to contain a specific pest, or disease or invasive species.</p>
3.2 <del>Harvest operations</del> Harvesting and restocking			
3.2.1	<p>a) Timber and <del>non-timber woodland products</del> (NTWPs) shall be <del>non-wood forest products</del> (NWFPs) are harvested efficiently and with minimum loss or damage to environmental values.</p> <p>b) Timber harvesting shall particularly seeks to avoid:</p> <ul style="list-style-type: none"> <li>• Damage to soil and water courses during felling, extraction and burning</li> <li>• Damage to standing trees, especially veteran trees and their root zones, during felling, extraction and burning</li> <li>• Degrade in felled timber</li> <li>• Loss of soil carbon to air or water.</li> </ul>	<ul style="list-style-type: none"> <li>• Field observation</li> <li>• Discussion with the owner/manager.</li> </ul>	<p>Thinning/cutting trees to waste may be appropriate in some circumstances.</p> <p>Particular attention should be given to damage to forest soils due to:</p> <ul style="list-style-type: none"> <li>• Inappropriate timing of forest operations</li> <li>• Inadequate soil protection measures.</li> </ul> 
3.2.2	Harvesting and sales documentation shall enables	<ul style="list-style-type: none"> <li>• Harvesting output records</li> </ul>	The purpose of this requirement is to ensure that certified products can be traced back to the point of sale from the woodland (in the case of timber, for

	<p>all timber and <b>non-timber woodland products (NTWPs)</b> <b>non-wood forest products (NWFPs)</b> that are to be supplied as certified to be traced back to the woodland of origin.</p>	<ul style="list-style-type: none"> <li>• Contract documents</li> <li>• Sales documentation.</li> </ul>	<p>example, standing, at roadside or delivered). The responsibility of the owner/manager is limited to ensuring that certified products removed from the woodland can be traced forward along the supply chain from the first point of supply.</p> <p>Where certified products from other sources are being stored in the same area, appropriate records should be maintained to demonstrate the source and quantity of produce obtained from other woodland areas.</p> <p><b>Advice to owners/managers</b>  <b>Certification schemes</b> may require owners/managers to provide additional information on sales documentation relating to:</p> <ul style="list-style-type: none"> <li>• <b>chain-of-custody certification</b>, and</li> <li>• the use of certification scheme trademarks.</li> </ul> <p>Certification schemes may also require documentation to be retained for a specific time.</p> <p>Owners/managers are advised to seek guidance from their <b>certification body</b> or group scheme manager.</p>
3.2.3	<p><b>a) Whole tree harvesting of stump removal shall be is</b> practised only where there is demonstrable management benefit, and where a full consideration of impacts shows that there are not likely to be any significant negative effects.</p> <p><b>b) There is no stump harvesting. Stump removal is practised only for:</b></p> <ul style="list-style-type: none"> <li>• <b>Phytosanitary reasons</b></li> <li>• <b>Forest infrastructure developments</b></li> </ul>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager demonstrates awareness that impacts have been considered</li> <li>• Documented appraisal.</li> </ul>	<p>Significant negative impacts to consider include:</p> <ul style="list-style-type: none"> <li>• <b>Leaching and run-off to catchments</b></li> <li>• <b>Soil leaching and run-off to water courses</b></li> <li>• Soil compaction</li> <li>• Soil erosion</li> <li>• Soil carbon loss</li> <li>• Nutrient loss</li> <li>• Damage to <b>historical historic environment</b> features, <b>heritage assets</b> and archaeological deposits.</li> </ul> <p><b>Forest infrastructure includes roads, public access routes etc.</b></p> <p><b>Stump removal may be required for:</b></p> <ul style="list-style-type: none"> <li>• <b>Phytosanitary reasons</b></li> <li>• <b>Infrastructure developments such as roads, public access routes etc.</b></li> <li>• <b>Restoration of open-ground habitats.</b></li> </ul>

	<ul style="list-style-type: none"> <li>Restoration of open-ground habitats.</li> </ul>		
3.2.4	<p>Lop and top shall be is burnt only where there is demonstrable management benefit, and where a full consideration of impacts shows that there are not likely to be any significant negative effects.</p>	<ul style="list-style-type: none"> <li>Discussion with the owner/manager demonstrates awareness that impacts have been considered</li> <li>Evidence of registration of exempt activity</li> <li>Documented appraisal.</li> </ul>	<p>If lop and top is burned:</p> <ul style="list-style-type: none"> <li>The location and density of fire sites should be carefully planned with areas important for priority habitats or species avoided</li> <li>Some lop and top should be left unburned as habitat except where it will result in pest or disease problems. The location for lop and top should be selected with care to avoid sensitive habitats and features, especially peatlands, wetlands and water courses.</li> <li>The requirements of the relevant statutory environment protection agencies should be met.</li> </ul> <p>Significant negative impacts to consider include:</p> <ul style="list-style-type: none"> <li>Release of smoke and sooty particles</li> <li>Soil leaching and run-off to catchments-water courses</li> <li>Soil erosion</li> <li>Soil carbon loss</li> <li>Release of carbon into the atmosphere</li> <li>Nutrient loss</li> <li>Damage or loss of habitat features and priority species</li> <li>Damage or loss of historical features and archaeological deposits.</li> </ul> <p>The owner/manager should be aware that it may be necessary for burning on site to be registered as an exempt activity with the statutory environment protection agencies.</p> 
3.2.5	<p>Ground preparation and subsequent restocking is carried out in a manner that is likely to minimise or reverse reduces the potential</p>	<ul style="list-style-type: none"> <li>Discussion with the owner/manager</li> <li>Management planning documentation</li> <li>Field observation</li> </ul>	<p>The owner/manager is not expected to undertake detailed carbon balance calculations but should consider in broad terms the likely carbon gains or losses associated with the soil type and chosen ground preparation technique as well as their restocking species choice, likely yield class and carbon sequestration achievable by the trees. The likely long-term post-harvest use and consequent longevity of carbon storage for different end-uses may also be considered.</p>

	<p>for soil carbon losses considering:</p> <ul style="list-style-type: none"> <li>The level of mineralisation and timescale over which any losses may be mitigated by tree growth</li> <li>Carbon storage within the trees or potential harvested timber products.</li> </ul>	<ul style="list-style-type: none"> <li>Carbon calculations or assessments.</li> </ul>	<p>The owner/manager should demonstrate that they have made an appropriate silvicultural management and species choice with regard to the carbon balance of the WMU.</p> <p>A prolonged fallow period should generally be avoided as this can exacerbate soil carbon losses unless justifiable for other reasons such as pest control.</p> <p>Cultivation and new drainage should be kept to a minimum as oxidation of wet soils can release soil carbon.</p> <p>Areas of peatland, or wetland or wet woodland which were afforested planted in the past and where restocking yield class is low should be assessed for their potential for restoration or the development of appropriate native woodland types to provide carbon and biodiversity benefits to be restored to peatland or wetland.</p> <p>Where restoration, conversion to, or maintenance of a broadleaf canopy is the long-term objective for restocking, the species chosen can have a lower yield class than the felled tree species.</p> <p>Owners and managers should be aware of and demonstrate a knowledge of current best-practice guidance.</p>
3.3	Forest roads, and associated infrastructure		
3.3.1	<p>All necessary consents shall be obtained for construction, extension and upgrades of:</p> <ul style="list-style-type: none"> <li>Forest roads</li> <li>Mineral extraction sites including quarries for roadstone</li> <li>Other Management, visitor access and other infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>Records of consents</li> <li>Environmental assessment where required.</li> </ul>	<p>Consents may relate to planning, environmental impact assessment or construction regulations.</p> <p>Visitor access infrastructure may include car parks, welfare facilities, surfaced paths, cycle tracks, constructed viewpoints etc.</p> <p>Management infrastructure may include timber stacking areas, buildings, welfare provision, permanent vehicle access points and parking areas etc.</p> <p>Other infrastructure may be associated with non-forestry activities such as access for sporting and organised events and/or access to adjoining land or infrastructure.</p>

<p>3.3.2</p>	<p>Roads and timber extraction tracks, visitor <b>access and management</b> infrastructure and associated <b>drainage</b> <del>shall be</del> <b>are</b> designed, created, used and maintained in a manner that minimises their environmental impact.</p>	<ul style="list-style-type: none"> <li>• Documented plans for the <b>layout</b>, design and creation of permanent roads, <del>and</del> tracks, <del>and</del> visitor <b>access and management infrastructure</b></li> <li>• <b>Safety inspection records</b></li> <li>• Control systems for the creation and use of temporary tracks and extraction routes</li> <li>• Field observation</li> <li>• Documented maintenance plans.</li> </ul>	<p>Where new roads are planned, a documented evaluation should be made to achieve a balance between timber extraction distances and road density, which takes into account the impact on the environment <b>and the public road infrastructure to which the forest roads will connect</b>. <del>Non-timber activities also need to be taken into account, e.g. access for sporting.</del></p> <p>Where new visitor or management infrastructure is planned, <b>including access for sporting purposes</b>, there should be a documented evaluation for its need and rationale such as for stabilising eroded ground, meeting all-ability access demand, easing local parking pressure, facilitating new access or delivering management.</p> <p>All infrastructure should be planned to achieve a balance between facilitating the desired access or management objective and protecting and maintaining the environmental and cultural values of the WMU in which they are placed or impact upon.</p> <p>Particular attention should be paid to:</p> <ul style="list-style-type: none"> <li>• Avoiding <b>direct impacts</b> on features of historic environment, <b>ecological biological</b>, geological or cultural value</li> <li>• Assessing and minimising indirect adverse impacts such as those caused by increased visitor numbers, disturbance levels or changes in drainage, especially on high conservation values and <b>priority habitats and species</b></li> <li>• <b>Use of Ensuring that design of permanent bridges, arches or culverts or temporary crossing points such as pipes or legs to cross across water courses accords with best practice</b></li> <li>• Barriers to fish movement caused by water-crossing points</li> <li>• Ensuring that verges and ditches are created and managed to promote their habitat value</li> <li>• Materials used, especially rock type, are in keeping with the ecology of the woodland</li> <li>• <b>Avoiding unnecessary damage to root zones especially of veteran trees</b></li> <li>• Avoiding erosion and adverse impacts on water systems <del>and wildlife habitats</del></li> <li>• Careful landscaping of roads <b>and infrastructure</b>, both internally and externally</li> <li>• <b>Safety inspection of bridges and other infrastructure</b></li> <li>• <b>Materials used are sourced as locally as possible</b></li> </ul>
--------------	--	---	---

			<ul style="list-style-type: none"> <li>• Use of <b>brush mats</b> for timber extraction</li> <li>• The necessity to inform all road users of design specification limitations and speed and/or weight limits.</li> </ul> <p>All infrastructure should be planned taking into account the potential “carbon” costs of the proposal, its implementation and use. Where possible, steps should be taken to reduce the carbon footprint such as through use of locally sourced materials and the careful evaluation of material quantities and specifications, and efficient working practices.</p> <p>Opportunities should also be taken to seek to contribute positively to carbon reduction such as through promotion of the use of public transport for <b>access</b> and events, or the inclusion of on-site renewable energy production to power on-site infrastructure.</p> 
3.4	<b>Pesticides, biological control agents and fertilisers Integrated pest management</b>		
3.4.1	<p>a) Integrated pest management (IPM) is used, giving priority:</p> <ul style="list-style-type: none"> <li>• Firstly, to management practices which avoid pest problems</li> <li>• Secondly, to non-chemical pest control methods including biological control agents</li> <li>• Lastly, to chemical pesticides.</li> </ul> <p>b) Integrated pest management decisions take account of the importance of safeguarding the value of sites and features with special biodiversity attributes.</p>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Pesticide policy or position statement.</li> <li>• An IPM policy or strategy document</li> <li>• Clear records of the decision-making process</li> <li>• Discussion with owner/manager and relevant workers</li> <li>• Field observations.</li> </ul>	<p>Larger organisations and WMUs should have a written integrated pest management strategy and other organisations may find value in developing a written strategy.</p> <p>Integrated pest management should conform to best practice. A stepwise approach should be followed as summarised below:</p> <ul style="list-style-type: none"> <li>• Identify the problem (actual or potential)</li> <li>• Consider the control options: <ul style="list-style-type: none"> <li>○ Take no action</li> <li>○ Avoid the problem: for example by a change in silvicultural practice or tree species</li> <li>○ Take remedial action: only if the problem cannot be tolerated or avoided</li> </ul> </li> <li>• Consider which remedial action is most suitable: <ul style="list-style-type: none"> <li>○ Non-chemical method: potentially including biological control agents (see section 3.4.6)</li> <li>○ Chemical method: using the least hazardous option.</li> </ul> </li> </ul>

<p>c) Integrated pest management decisions take account of the importance of safeguarding workers, local people and visitors to the WMU.</p> <p>d) Integrated pest management demonstrates knowledge of the latest published advice and its appropriate application.</p> <p>a) The use of pesticides and fertilisers shall be avoided where practicable.</p> <p>b) The use of pesticides, biological control agents and fertilisers shall be minimised.</p> <p>e) Damage to environmental values from pesticides, fertilisers and biological control agent use shall be avoided, mitigated and/or repaired, and steps are taken to avoid recurrence.</p>		<p>As a matter of principle, when remedial action is considered, preference should be given to non-chemical methods over chemical methods.</p> <p>This requirement only permits the use of chemical pesticides to manage pests within an IPM framework. Any application of chemical pesticides which does not directly address a pest management problem cannot be considered as part of an IPM system and so is not permitted: for example applications for tidiness or convenience.</p> <p>So, it would be extremely difficult to justify pesticide use where practicable alternative methods of control are available: for example, in place of strimming around picnic benches.</p> <p>Note that a reduction in the use of pesticides reduces the embedded-carbon budget of forestry operations.</p> <p>Sites and features with special biodiversity attributes include:</p> <ul style="list-style-type: none"> <li>• All ancient woodland sites</li> <li>• Valuable or diverse wildlife communities</li> <li>• Priority habitats and species, including breeding sites, regularly-used roost or resting sites, and feeding areas</li> <li>• Water courses, ponds and lakes</li> <li>• Wetland habitats</li> <li>• Lowland heath</li> <li>• Peatlands</li> <li>• Rides and open ground</li> <li>• Woodland margins and hedges</li> <li>• Veteran trees, wood pasture and historic parkland</li> <li>• Decaying deadwood habitat</li> <li>• Any other valuable habitats or features.</li> </ul> <p>Identification and mapping of areas and features may be carried out on an ongoing basis, provided that it has been completed for an area prior to operations taking place.</p> 
--	--	--

<p>3.4.2</p>	<p>a) Where chemical control methods are considered necessary, an environmental and social risk assessment is prepared at WMU level.</p> <p>b) This risk assessment process selects the pest control option that, relative to other options, broadly demonstrates:</p> <ul style="list-style-type: none"> <li>• The least social and environmental damage</li> <li>• Greater effectiveness, and</li> <li>• Equal or greater social and environmental benefit.</li> </ul> <p>c) Interested parties are informed about this risk assessment process and provided with opportunities for engagement.</p> <p>d) These risk assessments are reviewed and, if necessary, revised at least every five years.</p> <p>a) The owner/manager shall prepare and implement an effective integrated pest management strategy that:</p> <ul style="list-style-type: none"> <li>• Is appropriate to the scale of the woodland</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental and social risk assessment documentation</li> <li>• Discussion with the owner/manager/manager and relevant workers</li> <li>• Written policy and strategy or statement</li> <li>• Field observations</li> <li>• Evidence of consultation</li> <li>• Evidence of review process.</li> </ul>	<p>As part of the stepwise integrated pest management approach summarised in section 3.4.1, risk assessment processes are relevant only if a decision has been made to take remedial action, in which case they inform the choice of control method.</p> <p>As a matter of principle, preference should be given to non-chemical methods over chemical methods and, when chemical control methods are considered, preference should be given to the least hazardous chemical pesticides.</p> <p>Engagement with interested parties may be carried out at the time of management plan review or renewal (see 2.3.1).</p> <p>Sites and features with special biodiversity attributes include:</p> <ul style="list-style-type: none"> <li>• All ancient woodland sites</li> <li>• Valuable or diverse wildlife communities</li> <li>• Priority habitats and species, including breeding sites, regularly used roost or resting sites and feeding areas.</li> <li>• Water courses, ponds and lakes</li> <li>• Wetland habitats</li> <li>• Lowland heath</li> <li>• Peatlands covered by the policies of relevant forestry authorities.</li> <li>• Rides and open ground</li> <li>• Woodland margins and hedges</li> <li>• Veteran trees, wood pasture and historic parkland</li> <li>• Decaying deadwood habitat</li> <li>• Any other valuable habitats or features.</li> </ul> <p>Identification and mapping of areas and features may be carried out on an ongoing basis, provided that it has been completed for an area prior to operations taking place.</p> <p><b>Advice to owners/managers</b>  Owners/managers are advised to seek guidance from their certification body or group scheme manager on any specific certification scheme requirements relating to risk assessment processes.</p>
--------------	--	---	--

<p>and the intensity of management</p> <ul style="list-style-type: none"> <li>• Adopts management systems that shall promote the development and application of non-chemical methods of pest and crop management by placing primary reliance on prevention and, where this is not practicable, biological control methods</li> <li>• Takes account of the importance of safeguarding the value of sites and features with special biodiversity attributes when considering methods of control, and</li> <li>• Demonstrates knowledge of the latest published advice and its appropriate application.</li> </ul> <p>b) The strategy shall specify specifies aims for the minimisation or elimination of pesticide usage, taking into account considerations of cost (economic, social and environmental), and the cyclical nature of woodland management operations.</p>		<p>See also section 4 in relation to conservation values.</p> 
---	--	---

Second Revision Draft Master Copy

<p>e) Where pesticides and biological control agents are to be used the strategy shall justify their use demonstrating that there is no practicable alternative, in terms of economic, social and environmental costs. Any use of pesticides is justified on the basis of a process of environmental and social risk assessment.</p> <p>d) In a given situation, the risk assessment process selects the pest control option that, relative to other options, broadly demonstrates:</p> <ul style="list-style-type: none"> <li>• The least social and environmental damage</li> <li>• Greater effectiveness, and</li> <li>• Equal or greater social and environmental benefits.</li> </ul> <p>e) Risk assessments are reviewed and, if necessary, revised at least every five years.</p> <p>df) The strategy shall include a description of all known use over the previous five years, or the duration of the current woodland</p>		
---	--	--

Second Revision Draft Master Copy

	ownership if that is less than five years.		
3.4.3	<p>Where pesticides and biological control agents are to be used:</p> <ul style="list-style-type: none"> <li>• The owner/manager and workers shall be aware of and implement legal requirements and non-legislative guidance for use of pesticides and biological control agents in forestry</li> <li>• The owner/manager shall keep records of pesticide usage and biological control agents as required by current legislation.</li> </ul>	<ul style="list-style-type: none"> <li>• COSHH assessments</li> <li>• Risk assessments</li> <li>• Record of reason for use and pesticide choice</li> <li>• Personal protective equipment</li> <li>• FEPA records</li> <li>• Waste transfer notes</li> <li>• Discussion with the owner/manager and workers</li> <li>• Field observation, particularly in respect to storage, application sites, protective clothing, warning signs and availability of lockable boxes for transport of pesticides</li> <li>• Operators are trained and competent, and hold pesticide operator certification</li> <li>• Adequate written procedures, work instructions, and other documentation</li> <li>• Availability of appropriate absorbent materials</li> <li>• Emergency plan.</li> </ul>	<p>Collection of information on pesticide usage should enable trends to be observed and future action to be targeted accordingly, including any necessary revision of the strategy.</p> <p>Usage should be recorded in such a way that comparisons can be made year on year and fed back into the integrated pest management strategy to demonstrate that pesticide usage is avoided and/or minimised. Therefore, additional to the legal recording requirements (which include product, application rates and area treated), owners and managers may find it useful to sub-divide usage according to operations.</p> 
3.4.3 3.4.4	a) Specific pesticides are only used if their use is permitted by the	<ul style="list-style-type: none"> <li>• Records of chemicals purchased and used</li> <li>• Field observation</li> </ul>	<p><b>Advice to owners/managers</b></p> <p>Owners/managers are advised to seek guidance from their certification body or group scheme manager on any additional certification scheme requirements relating to the use of pesticides.</p>

<p>owner's/manager's certification scheme.</p> <p>a) Pesticides and biological control agents shall be used if:</p> <ul style="list-style-type: none"> <li>• They are approved for forestry use by the UK regulatory authorities</li> <li>• They are not banned by international agreement, and</li> <li>• Their use is permitted by the owner's/manager's certification scheme.</li> </ul> <p>b) Pesticides categorised as Type 1A and 1B by the World Health Organization or any other pesticides whose use is restricted by the owner's/manager's certification scheme shall only not be used unless if:</p> <ul style="list-style-type: none"> <li>• No effective, and practicable and less-hazardous alternatives are available</li> <li>• Their use is sanctioned using a mechanism endorsed by the owner's/manager's certification scheme, and</li> <li>• Any such mechanism provides for their use to</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental and social risk assessment documentation</li> <li>• Discussion with owner/manager and relevant workers.</li> <li>• Pesticide use records.</li> </ul>	
--	---	--

Second Revision Draft Master Copy

	<p>be justified and <del>on the condition that usage shall be discontinued once effective and practicable alternatives are available</del> for research to be carried out into less-hazardous alternatives.</p> <p>c) Pesticides whose use is prohibited by the owner's/manager's certification scheme are only used in emergency situations or by government order, and in compliance with the requirements of the certification scheme.</p>		
3.4.4	<p>a) The use of pesticides complies with legal requirements and non-legislative guidance for their use regarding transport, storage, handling, application, and emergency procedures for clean-up following accidental spillages.</p> <p>b) Operational plans incorporate the results of WMU-level environmental and social risk assessments.</p> <p>c) Application methods minimise quantities used, whilst achieving effective</p>	<ul style="list-style-type: none"> <li>• Discussion with owner/manager and relevant workers</li> <li>• Environmental and social risk assessment documentation</li> <li>• Operational plans</li> <li>• Field observation, particularly in respect to storage, application sites, buffer zones, and personal protective equipment</li> <li>• Pesticide use records</li> <li>• Record or evidence of effectiveness</li> </ul>	

Revision Draft Master Copy

	<p>results, and provide effective protection of environmental values.</p> <p>d) Damage to environmental values from pesticide use is avoided. Any damage which does occur is mitigated and/or repaired, and steps are taken to avoid recurrence.</p>	<ul style="list-style-type: none"> <li>Record of any accidental spillage or environmental damage.</li> </ul> <p>[N.B. Working Group to review verifiers from old 3.4.3 for possible inclusion in revised 3.4.4 or elsewhere in 3.4]</p>	
3.4.5	<p>a) Records of pesticide use are documented and maintained including:</p> <ul style="list-style-type: none"> <li>Trade name</li> <li>Active ingredient</li> <li>Quantity of active ingredient used</li> <li>Period of use</li> <li>Method of application</li> <li>Number and frequency of applications</li> <li>Location and area of use, and</li> <li>Reason for use.</li> </ul> <p>b) Records of pesticide use are kept for at least five years.</p> <p>c) Where chemical pesticide usage cannot be avoided, a trend of elimination or minimisation is demonstrated, or its use is justified taking into account</p>	<ul style="list-style-type: none"> <li>Pesticide use records</li> <li>Annual summaries of pesticide use at a WMU level and for the total certified holding</li> <li>Discussion with owner/manager.</li> </ul>	<p>Collection of information on pesticide use should enable trends to be observed and any appropriate changes to be made to integrated pest management.</p> <p>Use should be recorded in such a way that comparisons can be made year on year both at a WMU and total certified area level to demonstrate that pesticide use is avoided, eliminated or minimised. Therefore, owners and managers may find it useful to sub-divide use according to the pesticide used, operation type and target species.</p>

	considerations of the cyclical nature of woodland management operations.		
3.4.6	<p>a) Where biological control methods are considered necessary, an environmental and social risk assessment is prepared at WMU level.</p> <p>b) The use of biological control agents is minimised, monitored and controlled.</p> <p>c) The use of biological control agents complies with legal requirements and non-legislative guidance for their use regarding transport, storage, handling, application/release, and emergency procedures.</p> <p>d) Damage to environmental values from biological control agent use is avoided. Any damage which does occur is mitigated and/or repaired, and steps are taken to avoid recurrence.</p> <p>e) Records of biological control agent use are maintained, including type, quantity, period, location and reason for use.</p>	<ul style="list-style-type: none"> <li>• Environmental and social risk assessment documentation</li> <li>• Discussion with owner/manager and relevant workers</li> <li>• Relevant permission or licence for release</li> <li>• Biological control use records</li> <li>• Annual summaries of use at a WMU and total certified holding level.</li> </ul>	<p>Owners/managers should note that, for regulatory purposes, some biological control agents are subject to Defra licensing requirements while others are classified as biopesticides and are subject to regulatory requirements for pesticides.</p> <p>Collection of information on biological control use should enable trends to be observed and any appropriate changes to be made to integrated pest management.</p> <p>Use should be recorded in such a way that comparisons can be made year on year both at a WMU and total certified area level to demonstrate suitable use and effectiveness. Therefore, owners and managers may find it useful to subdivide use according to the biological control used, operation type and target species.</p>

3.5	Fertilisers		
<p>3.4.5 3.5.1</p>	<p>a) The use of fertilisers is minimised or avoided.</p> <p>b) Fertilisers are only used where they are necessary to secure establishment or to correct subsequent nutrient deficiencies.</p> <p>a) Fertilisers (inorganic and organic) shall be used where they are necessary to secure establishment or to correct subsequent nutrient deficiencies.</p> <p>b) Where fertilisers are to be used the owner/manager and workers shall be aware of and shall be implementing legal requirements and best practice guidance for their use in forestry.</p> <p>c) No fertilisers shall be applied:</p> <ul style="list-style-type: none"> <li>• In priority habitats</li> <li>• Around priority plant species, or</li> <li>• Around veteran trees</li> </ul>	<ul style="list-style-type: none"> <li>• Fertiliser use records</li> <li>• Discussion with the owner/manager and workers</li> <li>• Field observations, particularly in respect to storage, application sites, protective clothing and warning signs</li> <li>• Adequate written procedures, work instructions, and other documentation.</li> </ul>	<p>Unnecessary use of fertilisers may be avoided through the appropriate choice of species or species-mixtures.</p> <p>Note that a reduction in the use of nitrogen fertilisers considerably reduces the embedded-carbon budget of forestry operations.</p> 

	<p>d) In addition, bio-solids shall are only be used following an assessment of environmental impacts in accordance with section 2.5.</p> <p>e) The owner/manager shall keeps a record of fertiliser usage, including types, rates, frequencies and sites of application.</p>		
3.5.2	<p>a) The use of fertilisers complies with legal requirements and non-legislative guidance for their use in forestry.</p> <p>b) Choice of product and application methods minimise quantities used, whilst achieving effective results, and provide effective protection to environmental values.</p> <p>c) There is no aerial application of fertilisers.</p> <p>d) No fertilisers are applied:</p> <ul style="list-style-type: none"> <li>• In priority habitats</li> <li>• Around priority plant species, or</li> <li>• Around veteran trees.</li> </ul> <p>e) Bio-solids are only used following an assessment of</p>	<ul style="list-style-type: none"> <li>• Discussion with owner/manager and relevant workers</li> <li>• Field observation, particularly in respect to storage, application sites, buffer zones, and personal protective equipment</li> <li>• Adequate written procedures, work instruction and other documentation.</li> </ul>	<p>Owners/managers should be aware of legal requirements relating to buffers along water courses, bodies and supplies.</p> <p>Aerial applications of fertiliser carry unacceptable risks in terms of lack of targeting and drift.</p>

	<p>environmental impacts in accordance with section 2.5.</p> <p>f) Damage to environmental values from fertiliser use is avoided. Any damage which does occur is mitigated and/or repaired, and steps are taken to avoid recurrence.</p>		
3.5.3	Records of fertiliser use are maintained, including types, rates, frequencies, and sites of application	<ul style="list-style-type: none"> <li>Fertiliser use records</li> <li>Annual summaries of use at a WMU and the total certified holding level.</li> </ul>	Collection of information on fertiliser use should enable trends to be observed and any appropriate changes to be made to future use.
3.5-3.6	Fencing		
3.5.4 3.6.1	Where appropriate, wildlife management and control shall be used in preference to fencing.	<ul style="list-style-type: none"> <li>Discussion with the owner/manager</li> <li>Herbivore population and impact surveys and risk assessment.</li> </ul>	<p>Owners/managers should have a good understanding of the herbivore and wildlife's actual impacts and/or the potential risk posed to planting, restocking and natural regeneration.</p> <p>Fencing can prevent low levels of browsing which may be required to maintain grassland or other habitats in good ecological condition. For this reason deer management and control of numbers is preferred.</p> <p>This requirement is especially important in areas where Capercaillie (<i>Tetrao urogallus</i>) and Black Grouse (<i>Tetrao tetrix</i>) are present.</p> 
3.5.2 3.6.2	Where fences are used, they are correctly specified, maintained and their alignment shall be designed to minimise impacts on access	<ul style="list-style-type: none"> <li>Field visits to verify alignments chosen</li> <li>Discussion with the owner/manager demonstrates an awareness of impacts of</li> </ul>	<p>The fence should be of a specification suitable for the risk posed by those herbivore species present.</p> <p>Decisions to erect fences and their alignment should take account of:</p> <ul style="list-style-type: none"> <li>Landscape</li> <li>Public rights of way</li> </ul>

	(particularly public rights of way), landscape, wildlife and historic environment sites.	<p>fence alignments and of the alternatives</p> <ul style="list-style-type: none"> <li>Documented policy or guidelines regarding any specific significant impacts</li> <li>Expert advice sought for significant one-off fencing operations</li> <li>Evidence of periodic herbivore damage and fence condition assessments.</li> </ul>	<ul style="list-style-type: none"> <li>Existing users of the woodland</li> <li>The need for bespoke water gates for every water-crossing point</li> <li>The need for fence-marking to protect wildlife especially woodland grouse</li> <li>The historic environment</li> <li>The need for badger gates, tunnels and ladders</li> <li>Potential impacts of any fence on displacement of herbivores and wildlife</li> <li>The need for ongoing checks for herbivore damage or presence within the fence line and to undertake wildlife management where necessary</li> <li>The need to check and maintain fence lines</li> <li>The need for removal of redundant fences.</li> </ul> <p>Where fence crossings are provided, they should be appropriate to the abilities of likely users.</p> 
3.6-3.7	Waste		
3.6.1 3.7.1	Waste disposal shall be is in accordance with current waste management legislation and regulations.	<ul style="list-style-type: none"> <li>No evidence of significant impacts from waste disposal</li> <li>Documented policy or guidelines on waste disposal including segregation, storage, recycling, return to manufacturer.</li> </ul>	<p>Removal of wastes is a legal obligation.</p> <p>Waste includes:</p> <ul style="list-style-type: none"> <li>Plastic waste including tree shelters and tree bags</li> <li>Surplus chemicals</li> <li>Chemical containers</li> <li>Fuels and lubricants</li> <li>Fuel and lubricant containers</li> <li>Wooden packaging</li> <li>Old equipment/parts</li> <li>General refuse.</li> </ul> 
3.6.2 3.7.2	a) The owner/manager selects materials which are best suited for waste	<ul style="list-style-type: none"> <li>Field observation</li> <li>Discussion with the owner/manager</li> </ul>	<p>Prioritisation and timescales for removal should take into account social, environmental, and economic impacts and legal requirements.</p>

	<p>minimisation and materials reduction where they are available, economically viable and aligned with management objectives.</p> <p>b) The owner/manager shall prepares and implements a prioritised plan to manage and progressively remove redundant materials.</p>	<ul style="list-style-type: none"> <li>Removal plan</li> <li>Budget.</li> </ul>	<p>Examples of redundant materials include:</p> <ul style="list-style-type: none"> <li>Tree shelters</li> <li>Fencing</li> <li>Culvert pipes</li> <li>High seats.</li> </ul>
3.7 3.8	Pollution		
3.7.4 3.8.1	<p>The owner/manager shall adopts management practices that minimise diffuse pollution arising from woodland operations.</p>	<ul style="list-style-type: none"> <li>Records of consultation with statutory environment protection agencies</li> <li>Field observation</li> <li>Operational plans</li> <li>Incident response plans</li> <li>Diffuse pollution risk assessment in high risk situations</li> <li>Pre-operational diffuse pollution control plan</li> <li>Use of biodegradable lubricants.</li> </ul>	<p>Good site supervision minimises pollution risks.</p> <p>Diffuse pollution may arise from:</p> <ul style="list-style-type: none"> <li>Oil spills and leaks</li> <li>Cutting-chain lubricants</li> <li>Siltation of water courses or drains that connect to water courses</li> <li>Pesticide or fertiliser run-off</li> <li>Smoke.</li> </ul> <p>Biodegradable cutting-chain lubricants should be used where practicable. Practicability encompasses operator health and costs of running machinery.</p> 
3.7.2 3.8.2	<p>Plans and equipment shall be are in place to deal with accidental spillages of fuels, oils, fertilisers or other chemicals.</p>	<ul style="list-style-type: none"> <li>Discussion with the owner/manager and relevant workers</li> <li>Appropriate equipment available in the field</li> <li>Written plans</li> <li>Evidence of workers' training</li> </ul>	<p>Incident reporting should be included in any pollution prevention and control plan.</p> 

		<ul style="list-style-type: none"><li>• Evidence that all relevant workers are aware of site pollution prevention and control plans and response procedures</li><li>• Incident reporting.</li></ul>	
--	--	---	--

Second Revision Draft Master Copy

## **4. Natural, historical and cultural environment**

Second Revision Draft Master Copy

#### 4. Natural, historical and cultural environment

	REQUIREMENT	EXAMPLE VERIFIERS	GUIDANCE
4.1	Statutory <del>designated sites and protected species</del> nature conservation sites		
4.1.1	<p>a) Areas and features of high conservation value having particular significance for biodiversity shall be identified by reference to statutory designations at national or regional level and/or through assessment on the ground.</p> <p>b) Adopting a precautionary approach, the identified areas, species and features of high conservation value shall be maintained and, where possible, enhanced brought into good condition over time.</p> <p>c) There shall be ongoing communication and/or consultation with statutory bodies and, as necessary, with local authorities, county/local biological records centres, wildlife trusts and other relevant organisations.</p>	<ul style="list-style-type: none"> <li>All known areas and features mapped</li> <li>Field observation</li> <li>Approval of forest plan by the relevant forestry authority</li> <li>Workers are aware of such sites and of plans for their management</li> <li>For all potentially damaging operations, awareness is demonstrated of how areas will be protected and/or safeguarded</li> <li>Management plans for statutory conservation areas and monitoring of implementation of those plans</li> <li>Condition statements from statutory bodies</li> <li>Maps</li> <li>Discussion with the owner/manager demonstrates how areas will be safeguarded and/or enhanced</li> </ul>	<p>The system of designated sites in the UK forms a representative sample of existing ecosystems within the landscape.</p> <p>These areas and features of high conservation value include:</p> <ul style="list-style-type: none"> <li>Special Areas of Conservation</li> <li>Special Protection Areas</li> <li>Sites of Special Scientific Interest or Areas of Special Scientific Interest</li> <li>Ramsar Sites</li> <li>National Nature Reserves.</li> <li>Priority habitats</li> </ul> <p>Assessment on the ground should pay particular attention to identifying priority habitats and species. Priority species include:</p> <ul style="list-style-type: none"> <li>Endemic species</li> <li>Species on UK Red Lists species with red and or amber status</li> <li>Species listed as a priority in the UK and/or country or local Biodiversity Action Plans.</li> </ul> <p>UK Red Lists are lists of animals or plants naturally occurring within the UK which have been assessed using criteria based on the IUCN approach. Species are assigned a red, amber or green status, with red status being species of highest conservation concern and green of least concern, species of high conservation value are identified as red or amber and receive legal protection.</p> <p>Identification and mapping of these features may be carried out on an ongoing basis, provided that it has been completed for an area prior to significant woodland management operations taking place.</p>

	<p>d) Statutory designated sites <del>shall be</del> <b>are</b> managed in accordance with plans agreed with nature conservation agencies and <del>shall be</del> <b>are</b> marked on maps.</p>	<ul style="list-style-type: none"> <li>• Planning documentation shows how areas will be safeguarded and/or enhanced</li> <li>• Pro-active approach to the identification of areas and features of significance for <b>biodiversity</b>, appropriate to likely biodiversity <b>value</b>.</li> </ul>	<p>Where the boundaries of a designated site extend beyond the boundary of the WMU, it may not be possible for the owner/manager <b>acting alone</b> to significantly influence or change the overall condition of the site.</p> 
4.1.2	<p>Appropriate measures <del>shall be</del> <b>are</b> taken to protect identified <b>priority habitats and species</b> in accordance with plans agreed with nature conservation agencies. In planning and implementing measures within the WMU, the owner/manager <del>shall</del> <b>takes</b> into account the geographic range and ecological requirements of priority species beyond the boundary of the WMU.</p>	<ul style="list-style-type: none"> <li>• Field observation</li> <li>• Management planning documentation</li> <li>• Discussion with the owner/manager.</li> </ul>	<p><b>In some cases afforestation may not be appropriate on either the whole or part of the land.</b></p> <p>Measures should include steps to protect features such as breeding sites, resting places, <b>core feeding areas</b> and display sites of priority species.</p> 
4.2	Conservation of ancient semi-natural woodlands (ASNW)		
4.2.1	<p>a) <b>Ancient semi-natural woodland</b> <del>shall be</del> <b>is</b> identified by reference to published maps and/or by assessment on the ground.</p> <p><del>b) Adopting a precautionary approach, the high conservation value of ancient semi-natural woodlands shall</del></p>	<ul style="list-style-type: none"> <li>• Field observation</li> <li>• Discussion with the owner/manager</li> <li>• Management planning documentation including relevant <b>forestry authority</b> management plan and <b>restocking plans</b></li> <li>• <b>Ancient woodland inventories</b></li> </ul>	<p>Ancient semi-natural woodlands are the key priority sites for woodland conservation in the UK.</p> <p>Establishing the validity of the site's status should not solely rely on ancient woodland inventories. Assessment on the ground should take account of:</p> <ul style="list-style-type: none"> <li>• Soils</li> <li>• Vegetation</li> <li>• Old <b>or veteran</b> trees</li> <li>• Historical and archaeological features and <b>heritage assets</b></li> <li>• <b>Landscape</b> <del>landscape</del> implications.</li> </ul>

	<p><del>be maintained and, where possible, enhanced.</del></p> <p><del>c) Adverse ecological impacts of pests, diseases and non-native species shall be identified and inform management.</del></p> <p>b) Conservation values and threats to them are identified and evaluated.</p> <p>c) Actions are prioritised using the precautionary approach, based on the level of threat.</p> <p>d) The conservation values are maintained and where possible enhanced.</p> <p>e) Management regimes and targeted actions are implemented.</p>	<ul style="list-style-type: none"> <li>• Other studies</li> <li>• Monitoring records.</li> </ul>	<p>Many of these woods were historically managed over a long period and their character and conservation value often depends on the continuation of such management regimes. Maintenance and enhancement of conservation values often therefore requires adoption of management regimes as well as targeted interventions.</p> <p>Management should be in accordance with the relevant FC practice guides for semi-natural woodlands.</p> <p><del>Use should be made of natural regeneration or planting stock from parental material growing in the local native seed zone where appropriate and possible.</del> Following outbreaks of pests or diseases, the owner/manager may seek advice from relevant forestry authorities or statutory bodies.</p> <p><del>Maintenance of biodiversity values often requires targeted interventions. Management should be in accordance with the relevant FC practice guides for semi-natural woodlands.</del></p> <p>Potential <del>adverse impacts</del> threats may include:</p> <ul style="list-style-type: none"> <li>• Browsing by rabbits, deer and other animals</li> <li>• <del>Grazing</del> Over-grazing by livestock</li> <li>• Colonisation by <del>invasive</del> non-native species</li> <li>• Visitor pressure</li> <li>• Tree pest and diseases.</li> </ul> 
4.3	Management of plantations on ancient woodland sites (PAWS)		
4.3.1	<p><del>a) The owner/manager shall maintain and enhance or restore features and areas of high conservation value within plantations on ancient woodland sites.</del></p> <p>b) The owner/manager shall:</p>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Ancient woodland inventories</li> <li>• Other studies</li> <li>• Mapping all remnants and conservation</li> </ul>	<p>Establishing the validity of the site's status need not solely rely on ancient woodland inventories.</p> <p>In evaluating, prioritising and implementing actions owners/managers should take account of:</p> <ul style="list-style-type: none"> <li>• Historical and archaeological features and landscape implications</li> <li>• <del>Remnant features</del></li> <li>• The potential for restoration</li> </ul>

<ul style="list-style-type: none"> <li>• Identify and evaluate remnant features</li> <li>• Identify and evaluate threats</li> <li>• Adopting a precautionary approach, prioritise actions based on the level of threat and the value of remnants, and</li> <li>• Implement targeted actions.</li> </ul> <p>a) Plantations on Ancient Woodland Sites are identified by reference to published maps and/or by assessment on the ground.</p> <p>b) Remnant and conservation features and threats to them are identified and evaluated.</p> <p>c) Restoration and conservation opportunities are evaluated within the context of the WMU and wider landscape.</p> <p>d) Actions are prioritised using the precautionary approach, based on the value of the remnants and the level of threat.</p>	<p><b>features and recording their condition</b></p> <ul style="list-style-type: none"> <li>• Remnant and conservation feature threat analyses</li> <li>• Field observation</li> <li>• Discussion with the owner/manager.</li> </ul>	<ul style="list-style-type: none"> <li>• The relationship with other biodiversity features and priorities and management objectives within the WMU and adjacent land use as a whole.</li> </ul> <p>In prioritising actions, particular attention should be given to remnant features which include:</p> <ul style="list-style-type: none"> <li>• Woodland specialist flora.</li> <li>• Trees originating from the pre-plantation stand, such as ancient and veteran trees.</li> <li>• Old coppice stools and pollards</li> <li>• Natural regeneration of site-appropriate native trees</li> <li>• Deadwood originating from the pre-plantation stand</li> <li>• Undisturbed woodland soil profile.</li> </ul> <p>Active management is likely to be required to maintain the biodiversity, environmental and cultural values of these sites, including where continued growth of plantations for timber or woodfuel production is to be undertaken. Restocking and thinning should be carried out in such a way that remnant features are enhanced and suffered.</p> <p>A precautionary approach is appropriate in most instances even if initially no remnant features may appear to be present. A gradual approach should be the default where remnants are threatened. The site should be assessed for presence of remnant features before each significant intervention as the spread of woodland specialist flora and natural regeneration will change with time.</p> <p>Restoration to native woodland of a type appropriate to the site should be the primary objective where there is potential. Opportunities to enhance edges edge habitat and topographic features, protect and enhance remnants and restore areas of native woodland should be taken.</p> <p>Active management is likely to be required to maintain the biodiversity, environmental and cultural values of these sites, including where continued growth of plantations for timber or woodfuel production is to be undertaken. Restocking and thinning should be carried out in such a way that remnant</p>
---	--	--

<p>e) Remnants and conservation features are maintained and enhanced.</p> <p>f) Targeted conservation and management actions are implemented.</p> <p>g) The primary management objective for PAWS is restoration to native woodland of a type appropriate to the site.</p>		<p>features are enhanced and buffered. Non-native species may be retained where they have a high ecological or cultural value (e.g. veteran trees).</p> <p>Active management in support of PAWS restoration may include:</p> <ul style="list-style-type: none"> <li>• Halo thinning around veteran trees.</li> <li>• Promoting native natural regeneration and native tree recruitment through thinning</li> <li>• Thinning or creating buffers around areas of native ground flora remnants to facilitate their spread.</li> <li>• The protection and widening of existing and historical open spaces such as rides, wood pasture, glades and riparian habitats.</li> <li>• Restocking with site-native trees and shrubs</li> <li>• Thinning and restocking plans that allow for native tree regeneration from adjoining ASNW.</li> </ul> <p>PAWS should be actively managed to address potential threats. These may include shading, deer browsing, windthrow. Woodland operations should avoid substantial soil disturbance and damage to veteran trees.</p> <p><del>Threats may include shading, deer browsing, windthrow and ground damage from harvesting, and damage to veteran trees from woodland operations.</del></p> <p><del>Where remnants are not threatened or where site characteristics allow a more rapid approach may be adopted. In some situations, such as inaccessible, unthinned stands or where there are heavy shade-casting species present, it may not be possible to apply a gradual approach, even though it would be the preferred option for threatened remnant features. In such circumstances, where possible, remnant features should be bolstered before operations.</del></p> <p>Exploratory silvicultural interventions may help inform the choice of management prescriptions. A gradual precautionary approach is preferred but in some situations this may not be possible such as in unthinned and wind-prone stands. In such circumstances, where possible, remnant features should be bolstered before operations.</p> <p><del>Where complete canopy removal has occurred it will be important to ensure a successor canopy is established as soon as possible to alleviate further</del></p>
--	--	---

			<p>threats. The context of the site within the WMU and wider landscape will also inform any prioritised restoration plans. All operations within PAWS need to take account of remnant features, including ground flora, and mitigate against damage to them.</p> <p>All operations within PAWS should take account of remnant features, including ground flora, and mitigate against damage to them.</p> <p>Where complete canopy removal has occurred, it is important to ensure a successor canopy is established as soon as possible.</p> <p>The context of the site within the WMU and wider landscape may also inform restoration.</p> 
4.4	Protection of conservation values in other woodlands and semi-natural habitats		
4.4.1	<p>a) Areas, species and features of conservation value in other woodlands shall be identified.</p> <p>b) The identified areas, species and features of conservation value shall be maintained and where possible enhanced.</p> <p>c) Adverse ecological impacts shall be identified and inform management.</p>	<ul style="list-style-type: none"> <li>• Field observation</li> <li>• Discussion with the owner/manager</li> <li>• Management planning documentation</li> <li>• Historical maps</li> <li>• Monitoring records.</li> </ul>	<p>This requirement relates to woodlands other than ASNW and PAWS (see sections 4.2 and 4.3).</p> <p>Priority should be given to woodlands or woodland relicts that may have retained/acquired valuable ecological characteristics.</p> <p>Typically, these values may be found in:</p> <ul style="list-style-type: none"> <li>• Semi-natural woodlands</li> <li>• Long established woodlands of planted origin</li> <li>• Woodland relicts</li> <li>• Veteran trees</li> <li>• New native woodlands</li> <li>• Wood pasture/parklands.</li> </ul> <p>Positive management operations or interventions to promote semi-natural woodland structure may include:</p> <ul style="list-style-type: none"> <li>• Creating temporary and permanent open spaces such as rides and glades and buffering of riparian habitats including where appropriate the planting of site native shrub edges</li> <li>• Facilitating natural regeneration from adjoining semi-natural woodland</li> </ul>

			<ul style="list-style-type: none"> <li>Promoting any natural regeneration or existing native tree(s)</li> <li>Planting/restocking of areas with site-native broadleaves particularly where these link to existing semi-natural woodland or open ground habitats</li> <li>Diversifying age structure within the WMU</li> <li>Promoting and creating graded edges and transitional habitat zone with adjoining land</li> <li>Linking of Extending open spaces and linking with those on adjoining land</li> <li>Promoting deadwood and retention of damaged trees.</li> </ul> <p>Potential adverse impacts may include:</p> <ul style="list-style-type: none"> <li>Browsing by rabbits, deer and other animals</li> <li>Grazing by livestock</li> <li>Colonisation by invasive non-native species</li> <li>Visitor pressure.</li> </ul>
4.4.2	<p>a) Valuable small-scale semi-natural habitats that have been colonised, planted, or incorporated into the WMU, but which have retained their ecological characteristics (or have a high potential to be restored), shall be are identified and enhanced, restored or treated in a manner that does not lead to further degradation of their potential for restoration.</p> <p>b) Adverse ecological impacts shall be are identified and inform management.</p>	<ul style="list-style-type: none"> <li>Workers are aware of such sites and of any plans for their management</li> <li>For all potentially damaging operations, awareness demonstrated of how areas shall are to be protected and/or safeguarded</li> <li>Discussion with the owner/manager demonstrates how such areas will be managed</li> <li>Planning documentation shows how areas will be managed.</li> </ul>	<p>This requirement relates to small-scale habitats within the WMU, which may include:</p> <ul style="list-style-type: none"> <li>Moorland</li> <li>Peatland</li> <li>Wetland</li> <li>Heathland</li> <li>Wood pasture/parklands</li> <li>Grassland</li> <li>Freshwater habitats such as ponds.</li> </ul> <p>Appropriate management may include:</p> <ul style="list-style-type: none"> <li>Rides and glades containing remnant semi-natural communities are widened and extended</li> <li>Areas with a rich ground flora and shrub layer are heavily thinned</li> <li>Remnants of wood pasture, veteran trees or other 'open-forest' habitat are gradually opened up</li> <li>Heathland, bog and other open habitats are re-created by premature felling without restocking</li> <li>Maintenance of open ground around historic environment sites.</li> </ul> <p>Particular attention should be paid to priority habitats and to habitats identified in country-level forest and peatland policies.</p>

			<p>Potential adverse impacts may include:</p> <ul style="list-style-type: none"> <li>• Browsing by rabbits, deer and other animals</li> <li>• Grazing by livestock</li> <li>• Colonisation by <b>invasive non-native</b> species</li> <li>• <b>Drainage</b></li> <li>• Lack of appropriate management or grazing e.g. development of dense scrub.</li> </ul> <p>Non-native species may be retained where they have a high ecological or cultural <b>value</b>.</p> <p>Woodland removal to facilitate infrastructure or built development which is not integral to the management of the rest of the woodland cannot meet this requirement.</p> <p>See also section 2.13.2 which covers larger-scale habitat restoration through conversion to non-forested land.</p> 
4.4.3	<p>Areas of <b>semi-natural habitats</b> shall constitute a minimum of <del>5%</del> 10% of the WMU. Where existing habitats or restored <b>remnant</b> features comprise less than <del>5%</del> 10% of the WMU, the owner/manager shall take action to convert other areas to more <b>natural conditions</b>.</p>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Field observation.</li> </ul>	<p>These areas contribute to the minimum of 15% of the WMU where management for conservation and enhancement of biodiversity is the primary objective, as identified in section 2.11.1.</p> <p>Preference should be given to restoring to <b>semi-natural woodland</b> unless there are clear <b>biodiversity</b> gains to be made by restoring to open habitats.</p> <p>Where restoration to an open ground habitat is chosen, preference should be given to locating this adjacent to similar habitat within the WMU or on the boundary of the WMU to optimise benefits.</p> <p>Within the spirit of continual improvement, opportunities to create further areas of semi-natural habitat and their positive management should be under continual review as opportunities arise through felling and restocking programmes, roading, drainage and other works.</p>

			These areas contribute to the minimum of 15% of the WMU where management for conservation and enhancement of biodiversity is the primary objective, as identified in section 2.11.1.
4.5	Watershed management and erosion control		
4.5.1	<p>a) Areas and features of critical importance for watershed management or erosion control shall be are identified in consultation with relevant statutory bodies.</p> <p>b) Where critically important areas or features are identified, their management shall be is agreed with the relevant statutory bodies.</p>	<ul style="list-style-type: none"> <li>Records of consultation</li> <li>Management planning documentation</li> <li>Monitoring records</li> <li>Licences or consents.</li> </ul>	<p>Situations where forest woodland management is critical for watershed management or erosion control are relatively rare, and are likely to be identified during consultation processes.</p> <p>Woodland owners/managers should identify and contact public water supply organisations prior to undertaking significant operations which have the potential to impact those water supplies, taking a precautionary approach.</p> <p>Further information is available in UKFS guidelines on soils and water.</p> 
4.6	Maintenance of biodiversity and ecological functions		
4.6.1	<p>Natural reserves shall:</p> <ul style="list-style-type: none"> <li>Be Are located where they will deliver the greatest biodiversity benefit</li> <li>Constitute a proportion of the WMU equivalent to at least 1% of the plantation area and 5% of the semi-natural woodland area</li> <li>Are maintained in a favourable condition.</li> </ul>	<ul style="list-style-type: none"> <li>Management planning documentation including maps</li> <li>Field observation.</li> </ul>	<p>Where a WMU is made up of more than one woodland, the owner/manager should locate natural reserves where they will deliver greatest biodiversity benefit, rather than necessarily in every individual woodland.</p> <p>There should be no loss of existing natural reserves.</p> <p>Areas managed as natural reserves within the areas identified by sections 4.1-4.5 may fulfil this requirement.</p> <p>These areas contribute to the minimum of 15% of the WMU where management for conservation and enhancement of biodiversity is the primary objective, as identified in section 2.11.1.</p> 

4.6.2	<p>Long-term retentions and/or areas managed under lower-impact silvicultural systems (LISS) shall constitute a minimum of 1% of the WMU. Where this is impracticable, an additional minimum 1% of natural reserve shall be identified.</p>	<ul style="list-style-type: none"> <li>Management planning documentation including maps</li> <li>Field observation.</li> </ul>	<p>Where a WMU is made up of more than one woodland, the owner/manager should locate long-term retentions or LISS areas where they will deliver greatest biodiversity benefit, rather than necessarily in every individual woodland.</p> <p>Areas managed as long-term retentions and/or LISS within the areas identified by sections 4.1-4.5 may fulfil this requirement.</p> <p>These areas contribute to the minimum of 15% of the WMU where management for conservation and enhancement of biodiversity is the primary objective, as identified in section 2.11.1.</p>
4.6.3	<p>The owner/manager shall plans and takes action to maintain continuity of veteran tree habitat by:</p> <ul style="list-style-type: none"> <li>Keeping and protecting existing veteran trees, and</li> <li>Managing or establishing suitable trees to eventually take the place of existing veterans.</li> </ul>	<ul style="list-style-type: none"> <li>Field observation</li> <li>Harvesting contracts</li> <li>Discussion with the owner/manager and workers</li> <li>If there is a conflict with safety, the issues have been documented</li> <li>Safety issues are assessed and managed in accordance with current guidance</li> <li>Management planning documentation reflects the presence of veteran trees and plans for the recruitment of veteran trees.</li> </ul>	<p><del>This requirement applies in WMUs where there are existing veteran trees.</del></p> <p>Owners/managers should seek specialist advice on veteran tree management where appropriate and make use of trained workers.</p> <p>Owners/managers of WMUs without veteran trees may choose to should promote future veteran trees, as part of their wider management to maintain and/or enhance biodiversity value.</p> <p>Actions may include:</p> <ul style="list-style-type: none"> <li>Freeing potential future veteran trees from shading and/or competition</li> <li>Pollarding younger trees, restoration of old pollards, and or lopping pruning older trees to prolong their life</li> <li>Protection of the root zone during operations and in sites with high visitor numbers</li> <li>Adopting a continuous cover approach in some parts of the WMU.</li> </ul> <p>Careful management in accordance with best practice guidance can ensure that veteran Veteran tree management does should not conflict with safety of the public or workers.</p> 
4.6.4	<p>a) The owner/manager shall plans and takes action to accumulate a diversity of</p>	<ul style="list-style-type: none"> <li>Field observation</li> <li>Harvesting contracts</li> </ul>	<p>The owner/manager should refer to deadwood guidance produced by relevant statutory conservation agencies, forestry authorities and others when</p>

<p>both standing and fallen <b>deadwood</b> over time in all wooded parts of the WMU, including felled areas.</p> <p>b) The owner/manager <b>shall identify</b> identifies areas where deadwood is likely to be of greatest nature conservation benefit, and <b>shall</b> plans and takes action to accumulate large dimension standing and fallen deadwood and deadwood in living trees in those areas.</p>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager and <b>workers</b></li> <li>• If there is a conflict with safety or woodland health, the issues have been documented</li> <li>• Management planning documentation.</li> </ul>	<p>identifying areas of greatest nature conservation benefit and when planning actions to accumulate deadwood.</p> <p>Current evidence suggests that, over the long term, deadwood (not including stumps, which are usually retained after felling) should accumulate to roughly 20 m<sup>3</sup> per hectare averaged – though not uniformly distributed – across the WMU.</p> <p>In most hectares there should be a few standing and fallen stems contributing to the overall deadwood provision.</p> <p>Deadwood management should not conflict with safety of the public or workers or the health of the woodland.</p> <p><b>Decaying wood should comprise a wide range of forms and decay states and actions</b> Actions may include:</p> <ul style="list-style-type: none"> <li>• Keeping standing dead trees and <b>snags</b></li> <li>• Keeping and protecting old and/or previously pollarded trees alive through appropriate management</li> <li>• Only harvesting windblow when it is of significant value unless more than 3 m<sup>3</sup>/ha is blown and sufficient deadwood is already accumulating on site</li> <li>• Keeping naturally fallen trees or major branches</li> <li>• When <b>thinning</b> or <b>clearfelling</b>, and where safe to do so, creating snags and providing fallen deadwood where insufficient has already accumulated.</li> </ul> <p>The accumulation of deadwood throughout a rotation provides for greater continuity of the full range of deadwood habitat types.</p> <p>The most valuable areas within which to develop deadwood habitats are where linkages can be made with existing deadwood habitats to develop ecological connectivity over time; these areas include:</p> <ul style="list-style-type: none"> <li>• <b>Wood pasture/parklands</b></li> <li>• <b>Ancient semi-natural woodland with veteran trees</b></li> <li>• <b>Long-term retentions</b> and <b>natural reserves</b></li> <li>• Riparian or wet woodland.</li> </ul> <p>Retained deadwood should be matched to the requirements of those species likely to be important on the site. Habitat diversity is improved by having:</p>
--	--	---

			<ul style="list-style-type: none"> <li>• Stems of greater than 20 cm diameter, particularly large dimension timber from <b>native</b> species</li> <li>• Snags at variable height</li> <li>• A range of tree/shrub species at varying stages of decay and in a variety of light conditions</li> <li>• Deadwood in living trees</li> <li>• <b>Retained deadwood close to the tree from which it fell.</b></li> </ul> <p><b>Where feasible, some areas with accumulations of deadwood of 150 m<sup>3</sup> or more per ha should be developed within existing deadwood habitats.</b></p> <p><i>See also section 5.2.1 in relation to mitigation of risks to public health and safety.</i></p> 
4.7	Maintenance of local native seed sources		
4.7.1	<p>a) In woodlands identified in sections <b>4.1-4.4</b> <b>4.1-4.3</b>, where appropriate and possible, owners/managers <b>shall</b> use natural <b>regeneration</b> or planting stock from parental material growing in the local native seed zone (<b>native</b> species).</p> <p>b) In ancient and other <b>semi-natural woodland</b>:</p> <ul style="list-style-type: none"> <li>• <b>Preference is given to natural regeneration;</b> where <b>natural regeneration</b> <b>this</b> is insufficient, planting stock from 'source-identified' stands in the local native seed zone</li> </ul>	<ul style="list-style-type: none"> <li>• Seed and plant supply invoices and other relevant records</li> <li>• Evidence of efforts to identify planting stock from source-identified stands in the local native seed zone.</li> </ul>	<p>There should be clear justification where non-local sources are used. This may include reasons of tree vigour, timber quality, and long-term <b>forest resilience</b>.</p> <p>The identity code used for parental material includes an 'N' when it applies to native material from known indigenous sources.</p> 

	<p>shall be is used if it is available</p> <ul style="list-style-type: none"> <li>If timber quality is an objective of the planting, the use of planting stock deriving from selected stands within the local native seed zone shall be is considered appropriate.</li> </ul>		
4.8	Cultural and historical features/sites Protection of cultural and historic environment sites		
4.8.1	<p>a) Through engagement with the relevant statutory historic environment agencies, local authorities, local people and other interested parties, and using other relevant sources of information, the owner/manager shall:</p> <ul style="list-style-type: none"> <li>Identify identifies sites and significant heritage features and other aspects of special cultural and historical significance</li> <li>Assesses their condition, identifies potential threats, and</li> <li>Adopting a precautionary approach, devises and implements measures to maintain and/or enhance them</li> <li>Maintains ongoing communication and/or</li> </ul>	<ul style="list-style-type: none"> <li>Any known Known significant heritage features are mapped and/or documented</li> <li>Discussion with the owner/manager demonstrates rationale for management of relevant sites appropriate features</li> <li>Records of consultation with statutory bodies historic environment agencies, local authorities authority archaeology services and other interest groups to identify features</li> <li>Documented plans</li> <li>Relevant management plans and site condition surveys.</li> </ul>	<p>Where appropriate, designated historic assets should be managed in accordance with plans and maps agreed with statutory historic environment agencies.</p> <p>Most historic environment sites in woodland have no statutory designation or protection and management advice on these sites is provided by local authority archaeology services, who maintain local Historic Environment Records, rather than the national statutory historic environment agencies.</p> <p>Examples of relevant sources of information include:</p> <ul style="list-style-type: none"> <li>Historical maps Maps</li> <li>Databases</li> <li>Historic Environment Records</li> <li>Field observations</li> <li>Archaeological surveys.</li> </ul> <p>Typical examples include:</p> <ul style="list-style-type: none"> <li>Prominent viewing points</li> <li>Landscape features</li> <li>Veteran and other notable trees</li> <li>Historical features and archaeological sites</li> <li>Significant heritage features such as important historic structures and archaeological sites</li> <li>Designated historic assets such as scheduled monuments and listed buildings</li> </ul>

	<p>consultation with statutory bodies historic environment agencies, local authority archaeology services, and other relevant organisations.</p> <p>b) Statutory designated sites are managed in accordance with plans agreed with historic environment agencies and are marked on maps.</p>		<ul style="list-style-type: none"> <li>• Woodlands which feature in literature or which are of artistic significance</li> <li>• Historic and designed landscapes and woodlands which are still managed under traditional systems.</li> </ul> <p>Where relevant, a professional archaeological walkover survey may be required to inform decisions and provide baseline evidence.</p> <p>Sites of potential historical importance discovered during the course of forest woodland management should be reported to the local authority and relevant statutory historic environment agency agencies.</p> <p>See also section 2.3.1 in relation to consultation.</p> 
4.9	Game-rearing, shooting and fisheries management		
4.9.2 4.9.1	<p>a) Game-rearing and release are carried out sustainably and in accordance with the spirit of codes of practice produced by relevant organisations.</p> <p>b) Game release pens are located outside areas of high conservation value.</p>	<ul style="list-style-type: none"> <li>• Field observation</li> <li>• Relevant permissions and leases</li> <li>• Discussion with the owner/manager/responsible person demonstrates awareness of the law and good practice</li> <li>• Discussion with interested parties</li> <li>• Permissions from statutory bodies where these are required</li> <li>• Membership of a sporting and conservation organisation.</li> </ul>	<p>Areas identified within the WMU as of high conservation value are not to be used for game release or disposal of associated waste.</p> <p>Release and feeding areas should be located in areas where there will be low impact on ground flora, arboreal lichens and priority species.</p> 
4.9.1 4.9.2	<p><del>Game rearing and release, shooting and fishing shall be</del> Shooting is carried out</p>	<ul style="list-style-type: none"> <li>• Field observation</li> <li>• Relevant permissions and leases</li> </ul>	<p>Consider impacts on priority habitats and species and other native species. Where appropriate, issues should be discussed with neighbouring land managers.</p>

	sustainably and in accordance with the spirit of codes of practice produced by relevant organisations.	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager/responsible person demonstrates awareness of the law and good practice</li> <li>• Discussion with interested parties</li> <li>• Permissions from statutory bodies where these are required</li> <li>• Membership of a sporting and conservation organisation.</li> </ul>	<p><del>Release and feeding areas should be located in areas where there will be low impact on ground flora.</del></p> <p>Predator control, where necessary, should be carried out in line with best practice using methods that meet all regulatory requirements.</p> <p><del>The use of lead shot over wetland is restricted by regulations.</del></p> 
4.9.4 4.9.3	Non-toxic ammunition is used in all shooting activities.	<ul style="list-style-type: none"> <li>• Sporting leases, agreements and licences stipulate the use of non-toxic ammunition.</li> </ul>	<p>This will eliminate lead contamination of game and game-based food products and the diffuse pollution by lead into the wider environment.</p> <p>The use of lead shot over wetland is already restricted by regulations.</p>
4.9.3 4.9.4	Fishing and associated activities are carried out sustainably and in accordance with the spirit of codes of practice produced by relevant organisations.	<ul style="list-style-type: none"> <li>• Field observation</li> <li>• Relevant permissions and leases</li> <li>• Discussion with the owner/manager/responsible person demonstrates awareness of the law and good practice</li> <li>• Discussion with interested parties</li> <li>• Permissions from statutory bodies where these are required</li> <li>• Membership of a sporting and conservation organisation.</li> </ul>	<p>Associated activities include bankside vegetation management, infrastructure such as permanent shelters and huts, parking locations and waste disposal locations.</p> <p>Leases should require appropriate biosecurity measures to be taken to prevent accidental importation of invasive non-native species or diseases.</p>

## 5. People, communities and workers

Second Revision Draft Master Copy

## 5. People, communities and workers

	REQUIREMENT	EXAMPLE VERIFIERS	GUIDANCE
5.1	<del>Woodland access and recreation including traditional and permissive use rights</del> Public access rights, permissive uses, traditional rights, and the health and wellbeing of local people, visitors and communities		
5.1.1	There is compliance with public access legislation.		<p>Access rights include public rights of way through or beside the wood.</p> <p><b>In Scotland:</b>            In addition to public rights of way, the The Land Reform (Scotland) Act (2003) provides for responsible access on foot, cycle or horse and also for responsible management of access by landowners and managers.</p> <p>The Scottish Outdoor Access Code provides guidance on responsible behaviour of those taking and managing access together with circumstances where access may be restricted.</p> <p>In addition, supplementary guidance is published on specific aspects such as events and core paths.</p> <p><b>In England and Wales:</b>            By voluntarily dedicating woodland for public access under the In addition to public rights of way, the The Countryside and Rights of Way Act 2000 (CROW) provides for the voluntary dedication of woodland for public access.</p>
5.1.1 5.1.2	a) Permissive uses authorised by the owner/manager and traditional rights Existing permissive or traditional uses of the woodland shall be identified and sustained except when such uses can be shown to threaten the	<ul style="list-style-type: none"> <li>Documentation or maps of all existing permissive and traditional uses of the woodland</li> <li>Discussion with interested parties</li> <li>Field observation of public rights of way</li> </ul>	<p>Permissive and traditional uses include:</p> <ul style="list-style-type: none"> <li>Permissive access routes</li> <li>Formal or informal community use.</li> <li><del>De facto access to well-known landmarks.</del></li> <li><del>Gathering fruit or fungi by the public for their own consumption where this does not jeopardise the achievement of biodiversity objectives (having regard to codes of good practice)</del></li> <li><del>Water supplies.</del></li> </ul>

	<p>integrity of the woodland or the achievement of the objectives of management.</p> <p>b) A <b>precautionary approach shall be is</b> adopted in relation to <b>private (household or community)</b> water supplies.</p>	<ul style="list-style-type: none"> <li>Evidence presented to justify any restriction of permissive or traditional uses.</li> </ul>	<p><b>Permissive routes can be closed annually to maintain their permissive status. Where public access for recreation and other responsible uses is well established and recognised as a public benefit, or a potential benefit, consideration should be given to the design and provision of appropriate facilities.</b></p> <p><b>Traditional rights include:</b></p> <ul style="list-style-type: none"> <li><i>De facto</i> access to well-known landmarks</li> <li>Gathering fruit or fungi by the public for their own consumption where this does not jeopardise the achievement of <b>biodiversity</b> objectives (having regard to codes of good practice)</li> <li>Water supplies.</li> </ul> <p>Traditional uses that exploit the woodland resource (e.g. peat cutting) should be carried out at a traditional scale <b>in order to minimise negative impacts on the biodiversity or carbon balance</b> of the WMU.</p> <p>'Integrity' refers principally to <b>maintaining</b> the <b>ecological integrity</b> <del>maintenance</del> of the woodland.</p> <p><b>Woodland owners/managers should identify and contact water supply organisations and owners of private water supplies prior to undertaking significant operations. Due regard should be given to protecting the source area of private (household or community) water supplies.</b></p> 
<p>5.1.2 5.1.3</p>	<p>a) There <del>shall be is</del> provision for some public <b>access</b> subject only to limited exemptions.</p> <p>b) Where there is a special demand for further public access, <b>specific types of access provision or community use for the purpose of environmental</b></p>	<ul style="list-style-type: none"> <li>Field observation to confirm that access is available</li> <li>Maps show <b>public rights of way</b> and/or core paths through or beside the wood</li> <li>Evidence of publicised annual open days or guided walks</li> </ul>	<p>Woodlands containing or adjoining notable historic environment or ecological features <b>or in urban areas</b> may attract large numbers of visitors even to small properties. This presents an opportunity to promote public <b>and community</b> access and/or educate visitors about the multiple benefits of <b>forestry</b>.</p> <p><del>Professional associations can advise on necessary safety and insurance provisions, ways of supporting educational visits and studies, and methods for recovering some or all of the extra costs of satisfying public demand.</del></p> <p><b>The owner/manager should take into account, and should seek professional advice on, necessary safety and insurance provisions.</b></p>

	<p>education, the owner/manager shall make reasonable efforts to meet this demand.</p>	<ul style="list-style-type: none"> <li>• Lease, licence or management agreement with community group for use or part-use of the woodland</li> <li>• Access agreements with local authorities</li> <li>• Evidence that account has been taken of local demand</li> <li>• Evidence from consultation with interested parties</li> <li>• Records of publicised annual open days or guided walks, school visits or research undertaken in the woodland</li> <li>• Evidence of access provision, path maintenance, conservation management (particularly in regard to visitor erosion and avoiding wildlife disturbance) and interpretation at significant cultural and historic environment assets</li> <li>• Public consultation records.</li> </ul>	<p>Support and advice may be available for sustainable access and community use including educational visits and studies.</p> <p>Unlike Scotland, there is no statutory right of general access to woodland in England, Wales and Northern Ireland thus emphasising the value of allowing some public access.</p> <p>Public access, other than on public rights of way, may be restricted in certain situations. In Scotland these are clearly defined in the Scottish Outdoor Access Code. The following example situations could be applied in England, Wales and Northern Ireland:</p> <ul style="list-style-type: none"> <li>• Woodland within the curtilage of houses and gardens, and non-residential buildings and associated land</li> <li>• Land next to a forest school</li> <li>• Land developed and in use for recreation and where the exercise of access rights would interfere with such use</li> <li>• Places such as telecommunication sites, working quarries and construction sites</li> <li>• Visitor attractions or other places which charge for entry.</li> </ul> <p>Access may be restricted on a temporary basis:</p> <ul style="list-style-type: none"> <li>• For the safe management of forest operations including timber harvesting and tree felling operations, where chemicals are being applied for forest management purposes, and during the construction and maintenance of forest roads and infrastructure</li> <li>• For areas of the woodland that contain sites, species or features that would be particularly vulnerable to disturbance</li> <li>• During organised events where they are not compatible with continued safe access</li> <li>• In order to ensure public safety.</li> </ul> <p><b>In Scotland:</b>  <del>The Land Reform (Scotland) Act (2003) provides for responsible access on foot, cycle or horse and also for responsible management of access by land owners and managers.</del></p>
--	--	---	--

			<p>The Scottish Outdoor Access Code provides guidance on responsible behaviour of those taking and managing access together with circumstances where access may be restricted.</p> <p>In addition, supplementary guidance is published on specific aspects such as events and core paths.</p> <p><b>In England, Wales and Northern Ireland:</b>  There is no statutory right of general access to woodland thus emphasising the value of allowing some public access which may be provided through one or more of:</p> <ul style="list-style-type: none"> <li>• A permissive freedom to roam</li> <li>• Public rights of way through or beside the wood</li> <li>• Publicised open days or guided walks each year</li> <li>• Permissive access on specified routes</li> <li>• Access management agreements with local authorities</li> <li>• In England and Wales only – by voluntarily dedicating woodland for public access under the Countryside and Rights of Way Act 2000 (CROW).</li> </ul> <p>Public access, other than on public rights of way, and environmental education may be denied in the following example situations:</p> <ul style="list-style-type: none"> <li>• Woodlands under 10 ha in size with a high private amenity value</li> <li>• Areas that adjoin dwellings or private gardens</li> <li>• Isolated woodlands to which there is no ready access route for the public across adjoining land</li> <li>• Woodlands where there is current evidence of serious and sustained abuse or damage. Persistent vandalism may force owners/managers to place particular woodland blocks or areas ‘out of bounds’. Reasons should be communicated through local schools, libraries, post offices and parish halls to help stimulate community co-operation to combat damage</li> <li>• Areas of the woodland that contain sites, species or features that would be particularly vulnerable to disturbance</li> <li>• Periods or days when country sports, outdoor recreation or special events would be jeopardised</li> <li>• Temporary closures in order to ensure public safety.</li> </ul>
--	--	--	--

			
5.2	Minimising adverse impacts		
5.2.1	The owner/manager shall mitigate the risks to public health and safety and other negative impacts of woodland operations on local people and visitors.	<ul style="list-style-type: none"> <li>No evidence of legal non-compliance</li> <li>Evidence that complaints have been dealt with constructively</li> <li>Documented evidence that owners/managers have considered actual and potential impacts of operations on local people and interest groups and have taken steps to mitigate them</li> <li>Tree safety policy</li> <li>Use of risk assessment and site management with safety signs and diversions around active operational sites.</li> </ul>	<p>Examples of impacts include:</p> <ul style="list-style-type: none"> <li>Public safety and access implications of woodland operations</li> <li>Timber traffic, particularly in and around the woodland</li> <li>Natural hazards identified as posing risks to workers and the public, e.g. hazardous trees especially such as those infected with Ash dieback (<i>Hymenoscyphus fraxineus</i>)</li> <li>Smoke</li> <li>Management of hazards caused by visitor use.</li> </ul> 
5.2.2	The owner/manager shall respond constructively to complaints, seeks to resolve grievances through engagement with complainants in the first instance, and follows established legal process should this become necessary.	<ul style="list-style-type: none"> <li>Discussion with interested parties</li> <li>A complaints process</li> <li>A public contact point.</li> </ul>	
5.3	Rural Local economy		
5.3.1	The owner/manager shall promote the integration of	Evidence of:	Promotion of integration into the local economy may be achieved by:

	<p>woodlands into the local economy by:</p> <ul style="list-style-type: none"> <li>• Making the best use of the woodland's potential products and services consistent with other objectives</li> <li>• Providing local people with equitable opportunities for employment and to supply goods and services.</li> </ul>	<ul style="list-style-type: none"> <li>• Local or specialist market opportunities</li> <li>• Promoting and encouraging enterprises to strengthen and diversify the local economy</li> <li>• Provision for local employment and suppliers.</li> </ul>	<ul style="list-style-type: none"> <li>• Allowing local or specialist markets opportunities to purchase small-scale or specialist parcels</li> <li>• Promoting and encouraging enterprises which will strengthen and diversify the woodland economy and the local economy</li> <li>• Making equitable provision for local employment for contractors and suppliers to provide services and supplies and making this known.</li> </ul> <p>When considering local or specialist markets for different wood products, their potential for carbon storage and cascading uses should be taken into account.</p> <p>The woodland's potential products include non-wood forest products non-timber woodland products and recreational activities.</p> <p>An example of how the owner/manager might help to diversify the processing industry is that a proportion of timber parcels are advertised and sold by open tender or auction.</p> <p>Reference to country forestry strategies and engagement with local woodland and community forest initiatives or networks may highlight opportunities to fulfil this requirement.</p>
5.4	Health and safety		
5.4.1	<p>(a) There shall be is:</p> <ul style="list-style-type: none"> <li>• Compliance with health and safety legislation</li> <li>• Conformance with associated codes of practice</li> <li>• Conformance with FISA guidance.</li> </ul> <p>(b) There shall be are contingency plans for any accidents.</p>	<ul style="list-style-type: none"> <li>• Field observation that health and safety legislation and codes of practice are being implemented</li> <li>• Discussion with workers demonstrates that they are aware of relevant requirements and have access to appropriate FISA guidance, and</li> </ul>	<p>This requirement relates to anyone everyone on the work site, including, this includes all categories of workers (see glossary definition), volunteers and members of the public.</p> <p><b>Advice to owners/managers</b> With respect to health and safety, it is important for owners/managers to be aware of their legal responsibilities in regard to fulfilling one or more of the relevant management roles as described in FISA guidance.</p> <p>See FISA Guidance listed in the appendix of references.</p> 

	<p>(c) There shall be is appropriate competency.</p>	<p>codes of practice and welfare provisions</p> <ul style="list-style-type: none"> <li>• Contracts specifying health and safety requirements</li> <li>• Records maintained and up to date (e.g. accident book, site risk assessments, chemical record book, tree safety reports)</li> <li>• System to ensure that anyone working in the woodland has had relevant instruction in safe working practice and that the appropriate number has had training in basic first aid and, where relevant, holds a certificate of competence</li> <li>• Procedure for monitoring compliance with safety requirements (written for larger organisations) and for dealing with situations where safety requirements are not met</li> <li>• Documented health and safety policy and consideration of issues in all procedures and work instructions</li> <li>• Evidence of a systematic approach to accident prevention.</li> </ul>	
5.5	Training and continuing development		

5.5.1	All <b>workers</b> including <b>volunteers</b> shall have appropriate qualifications, training and/or experience to carry out their roles in <b>conformance</b> to the requirements of this standard, unless working under proper supervision if they are currently undergoing training.	<ul style="list-style-type: none"> <li>• Copies of appropriate certificates of competence</li> <li>• Discussion with workers</li> <li>• System to ensure that only workers who are appropriately trained or supervised work in the woodland</li> <li>• No evidence of workers without relevant training, experience or qualifications working in the woodland</li> <li>• Documented training programme for employees <b>and/or</b> <b>volunteers</b></li> <li>• Training records for all employees</li> <li>• <b>Copy of volunteering policy.</b></li> </ul>	<p>Where requirements of the work are likely to change, a programme of ongoing training and development should be undertaken.</p> <p><b>Where volunteers work on a site, they are treated commensurately with employees.</b></p>
5.5.2	<b>The owner/manager of large enterprises</b> shall promote training, and encourage and support new recruits to the industry.	<ul style="list-style-type: none"> <li>• Documented policy</li> <li>• Involvement with industry bodies promoting training, including <b>FISA</b></li> <li>• Records of training sessions, provision of sites for training, <b>subsidies funding</b> for training courses.</li> </ul>	<p>Promotion of training may be achieved through:</p> <ul style="list-style-type: none"> <li>• Providing sites for training courses</li> <li>• Offering <b>subsidies funding</b> for training courses</li> <li>• <b>Graduate training opportunities, apprenticeships, or sponsorships.</b></li> </ul> <p><b>Owners/managers of small-medium enterprises should also consider promoting training and development opportunities.</b></p> <p><b>Owner/managers should promote equality so that all workers are able to access and enjoy the same recruitment, training, development and promotional opportunities.</b></p>
5.6	Workers' rights		

<p>5.6.1</p>	<p>a) There shall be is compliance with workers' rights legislation, including equality legislation.</p> <p>b) Owners/managers promote equality, so that all workers are able to access and enjoy the same rewards, resources and opportunities.</p> <p>bc) There is no use of child labour except as permitted under employment legislation.</p> <p>ed) There is compliance with modern slavery legislation.</p> <p>ede) Workers shall are not be deterred from joining a trade union or employee association.</p> <p>ee) Direct employees shall be are permitted to negotiate terms and conditions, including grievance procedures, collectively should they so wish.</p> <p>ef) Workers shall have recourse to mechanisms for resolving grievances which meet the requirements of statutory codes of practice.</p>	<ul style="list-style-type: none"> <li>• Discussion with workers</li> <li>• Documented policies.</li> </ul>	<p>UK equality legislation provides protection against discrimination, harassment and victimisation. Protected characteristics include age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.</p> <p>Owner/managers should promote equality, so that all workers are able to access and enjoy the same rewards, resources and opportunities.</p> <p>Owner/managers should promote flexible working practices.</p> <p>The statutory national living wage is defined in national minimum wage regulations. The owner/manager may choose are encouraged to pay wages that are higher than the statutory national living wage, for example a voluntary living wage such as that calculated by the Living Wage Foundation.</p> 
--------------	---	---	--

	egh) Wages paid to workers shall meet or exceed the statutory national living wage.		
5.7	Insurance		
5.7.1	The owner/manager and workers shall be are covered by adequate public liability and employer's liability insurance.	<ul style="list-style-type: none"> <li>• Insurance documents</li> <li>• Self-insurance with a policy statement.</li> </ul>	For events and licensed activities held in the WMU by third parties, the owner/manager should ensure that appropriate insurance is held by the responsible party.

Second Revision Draft Master Copy

# Glossary of terms

Second Revision Draft Master Copy

## Glossary of terms

Access (for public)	Refers to woodland and its associated land open to the public for recreational or educational use (sometimes subject to charges).
Accreditation service	An authoritative body which evaluates and recognises the competence of bodies to certify that woodland management conforms to the specific requirements of the UK Woodland Assurance Standard. Accreditation Services International (ASI) and the United Kingdom Accreditation Service (UKAS) both provide an accreditation service in the UK. Those bodies which are accredited are referred to as certification bodies.
Ancient semi-natural woodland (ASNW)	See <i>Woodland</i> .
Ancient woodland	See <i>Woodland</i> .
Ancient woodland site	See <i>Woodland</i> .
Appropriate Assessment	Appropriate Assessment (AA) is a stage in the process and documentation associated with the statutory requirement to undertake a Habitats Regulations Assessment (HRA) under the EU Habitats and Species Directive applicable Habitats Regulations: Conservation of Habitats and Species Regulations 2017 (as amended) in England & Wales, The Habitats Regulations 1994 (as amended) in Scotland), The Conservation (Natural Habitats etc.) Regulations (Northern Ireland) 1995.
Area of Special Scientific Interest (ASSI)	A designated site providing statutory protection for the best examples of the flora, fauna, or geological or physiographical features of Northern Ireland. ASSIs also underpin other national and international nature conservation designations.
Biodiversity	The variety of ecosystems and living organisms (species), including genetic variation within species.
Biological control agent	A living organism used to eliminate or regulate the population of another living organism. Their use can play an important role in an integrated pest management strategy.
Brash mats	Cut branches spread along the route where forest machinery will be driving to reduce soil damage.
Broadleaves	Broadleaved trees are characterised by their broad leaves and most are deciduous. They produce 'hardwood' timber.  Also see <i>Conifers</i> .
Buffer	An area of non-invasive trees or other land use of sufficient width to protect semi-natural woodland from significant invasion by seed from a nearby non-native source.

An area of land where use and/or management is restricted to conserve or enhance the value of adjacent environmental, cultural or heritage assets.

Examples include a buffer protecting a water course from polluted run-off, a semi-natural woodland or other valuable habitat from invasion by seed from a nearby non-native source, or an historic feature from physical damage by growing trees and roots.

Carbon balance

The carbon balance is an expression of whether over time the store of carbon in an ecosystem is increasing, decreasing or in equilibrium.

This is determined by a process of identifying and quantifying the amount of carbon, expressed as CO<sub>2</sub> equivalent, added to or removed from the WMU's vegetation and soils due to natural and human activity. A positive carbon balance indicates that carbon is being accrued whilst a negative carbon balance indicates that carbon is being lost.

Certification body

A body which is accredited by an accreditation service to certify (by giving written assurance) that woodland management conforms to the specific requirements of the UK Woodland Assurance Standard. Also sometimes referred to as a conformity assessment body.

Certification scheme

A scheme that establishes a set of standards and processes that govern a system to verify that its standards (e.g. for sustainable forest management and chain-of-custody) are met and thereby provide assurance to customers and stakeholders.

Chain-of-custody certification

Chain-of-custody certification is a traceability system that ensures that certified products come from a well-managed source. The chain starts at the forest and is maintained through every link of the chain through to the end user.

Clearfelling

Cutting down of an area of woodland (if it is within a larger area of woodland it is typically a felling greater than 0.25 ha). Sometimes a scatter or small clumps of trees may be left standing within the felled area.

Compliance

In the context of this certification standard, the term 'compliance' refers to meeting legal requirements.

Conformance

In the context of this certification standard, the term 'conformance' refers to meeting the requirements of the certification standard.

Conifers

Coniferous trees are characterised by their needle or scale-like leaves and most are evergreen. They produce 'softwood' timber.

*Also see Broadleaves.*

Coppice	<p>Management based on regeneration by regrowth from cut stumps (coppice stools). The same stool is used through several cycles of cutting and re-growth.</p> <p><i>Also see Short rotation coppice.</i></p>
Coppice with standards	Coppice with a scatter of trees of seedling or coppice origin, grown on a long rotation to produce larger-sized timber and to regenerate new seedlings to replace worn out stools.
COSHH	Control of Substances Hazardous to Health Regulations.
Coupe	An area of woodland that has been or is planned for clearfelling.
Cultural features	Historic environment sites, historic buildings and <b>heritage assets and</b> landscapes including ancient woodlands <b>and veteran trees</b> .
Deadwood	All types of wood that are dead including whole or wind-snapped standing trees, fallen branch wood and stumps, decaying wood habitats on living trees such as rot holes, dead limbs, decay columns in trunks and limbs, and wood below the ground as roots or stumps.
Diffuse pollution	Diffuse pollution comes from non-point source, widespread activities in the forest environment. Of particular relevance to woodland operations are oil spills and leaks, cutting-chain lubricants, siltation of water-courses, pesticide or fertiliser run-off and smoke.
Drainage	An operation to remove excess water from an area in a controlled way. In woodlands, drains are usually open, unlined channels.
Ecological integrity	The health and vitality of the woodland's physical and biological components.
Ecosystem	A community of plants and animals (including humans) interacting with each other and the forces of nature.
Ecosystem services	<p>The benefits people obtain from ecosystems. These include:</p> <ul style="list-style-type: none"> <li>• provisioning services such as food, forest products and water</li> <li>• regulating services such as regulation of floods, drought, land degradation, air quality, climate and disease</li> <li>• supporting services such as soil formation and nutrient cycling; and</li> <li>• cultural services and cultural values such as recreational, spiritual, religious and other non-material benefits.</li> </ul>
Endemic Species	A species (or distinct sub-species) naturally occurring and confined to a specific geographical area or country. For the purposes of this standard this is the British Isles (Great Britain and the island of Ireland).

Environmental and social risk assessment

A process to predict, assess and review the likely or actual environmental and social effects of a well-defined action, to evaluate alternatives, and to design appropriate mitigation, management and monitoring measures.

Environmental appraisal

Generic term for the process of assessing the impact of plans or operations on the environment.

Environmental impact assessment

Environmental impact assessment (EIA) is the process and documentation associated with the statutory requirement under the EU Environmental Assessment Directive.

Environmental values

The following set of elements of the biophysical and human environment:

- Ecosystem functions (including carbon sequestration and storage)
- Biological diversity
- Water resources
- Soils
- Atmosphere
- Landscape values (including cultural and spiritual values).

The actual worth attributed to these elements depends on human and societal perceptions.

Felling licence

Licence issued by the relevant forestry authority to permit trees to be felled. With certain exceptions it is illegal to fell trees without prior approval.

FEPA

Food and Environment Protection Act 1985.

FISA

Forest Industry Safety Accord.

Forest

Synonymous with woodland.

*See Woodland.*

Forest management unit (FMU)

Synonymous with woodland management unit.

*See Woodland management unit (WMU).*

Forest resilience

The ability of a forest system to recover from short-term disturbances or to adapt to long-term changes, such as climate change, pests or diseases, while retaining or recovering the same basic structure and ways of functioning. Resilience should be considered in both ecological and economic terms.

Forestry

The science and art of managing woodlands.

Forestry authority(ies)	The competent body with responsibility for the regulation of forestry in each country of the United Kingdom: Forestry Commission (in England), Department of Agriculture and Rural Development/Northern Ireland Forest Service, Scottish Forestry Commission Scotland and Welsh Government/Natural Resources Wales or their successor bodies.
Forestry leaseholder	The holder of a forest lease that grants control over the management of forestry operations.
Game	Animals, either wild or reared, managed for hunting or shot for food.
General Licences	<p>General licences are permissive licences, meaning that users do not need to apply for them, but they must comply with their terms and conditions.</p> <p>They allow users to kill or take certain species for defined purposes such as preventing serious damage to certain commodities e.g. livestock and crops, for the purposes of conserving wild birds, plants and animals, or for public health and safety reasons.</p>
Genotype	The genetic constitution of an organism, as contrasted with its expressed characteristics which are known as the phenotype.
Genetically modified organisms (GMOs)	Organisms in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination.
Glade	Small area of open ground which forms an integral part of the woodland.
Greenhouse gases	Gases that trap heat in the earth's atmosphere and cause warming that disrupts the world's climate. These include carbon dioxide, methane and nitrous oxides.
Group selection	A method of managing irregular stands in which regeneration is achieved by felling trees in small groups.
Heritage assets	A building, monument, site, place, area or landscape having a heritage interest. Heritage assets may be 'designated heritage assets' identified by a statutory historic environment body or 'non-designated heritage assets' such as those identified by the local planning authority.
High conservation value	Areas and features of ecological and biodiversity interest identified in sections 4.1-4.3 and 4.5.
Historic environment	<p>Several thousand years of human activity has contributed to the landscape of the UK that we experience today. The surviving elements of the past take many forms, including ancient woods and forests, veteran trees, earthworks, ruined structures and features buried below ground. Together these elements provide a rich source of information about past societies and how they used and managed the land including their woods and forests.</p> <p>All tangible evidence of past interactions between humans and their environment, incorporating heritage assets, archaeological sites, historic landscapes and natural heritage.</p>

Horticultural	In relation to section 2.13.3 on Christmas trees: intensive production on a small or large scale in a setting that cannot reasonably be considered to be a forest or woodland.
Interested parties	People directly affected by or who have a significant interest in the woodland being managed.
International agreement	An agreement under international law entered into by sovereign states and international organisations which may also be known as a treaty, protocol, covenant, convention, exchange of letters, etc. It provides a means for willing parties to assume obligations among themselves, and a party that fails to live up to their obligations can be held liable under international law. The Foreign & Commonwealth Office's 'UK Treaties Online' database on <a href="http://fco.gov.uk">fco.gov.uk</a> lists those involving the UK.
Invasive (species)	Introduced non-native species which spread readily and dominate native species.
IUCN Red List	The IUCN Red List of Threatened Species is widely recognised as the most comprehensive, objective global approach for evaluating the conservation status of plant and animal species. It provides a global context for the establishment of conservation priorities at the local level.
Landscape level	The level of the landscape unit.
Landscape unit	An area of broadly homogeneous landscape character.
Large enterprise	An organisation with at least 250 employees.
Local Authority	<i>See Statutory body.</i>
Local people	Anyone living or working in the vicinity who has an interest in the woodland. It is intentional that this term is not more closely defined, and the wider public is not excluded. It is particularly difficult to be precise about how local people are to be contacted or consulted. In some situations, it would be appropriate for this simply to mean those living beside the woodland (e.g. concerning noise disturbance). In other cases (such as using local services), a much wider geographical area will be appropriate. If there is difficulty in identifying local contacts, then the elected representatives should be the first choice.
Long-term retention	Individual, stable stands and clumps of trees retained for environmental benefit significantly beyond the age or size generally adopted by the woodland enterprise.
Lop and top	Woody debris from cutting operations, sometimes converted into chippings.
Low-intensity managed woodland	Woodland management units are classed as being managed in a low-intensity manner when: <ul style="list-style-type: none"> <li>a) the rate of timber harvesting is less than 20% of the mean annual increment (MAI) within the total production woodland area of the unit</li> </ul>

AND

either

b) the annual harvest from the total production woodland area is less than 5,000 cubic metres

or

c) the average annual timber harvest from the total production woodland is less than 5,000 m<sup>3</sup>/year during the period of validity of the certificate as verified by harvest reports and surveillance audits.

*Note: where Woodland Management Unit-specific estimates of mean annual increment are unavailable or impracticable, regional estimates of growth rates for specific woodland types may be used.*

Lower-impact silvicultural systems (LISS)

Silvicultural systems including group selection, shelterwood or under-planting, small coupe felling, coppice or coppice with standards, **continuous cover forestry**, minimum intervention and single tree selection systems which are suitable for windfirm conifer woodlands and most broadleaved woodlands.

*[N.B. The working group seeks views on replacing this term with 'Lower intensity forest management approaches' defined as below.]*

Lower intensity forest management approaches

Lower intensity forest management approaches are characterised by silvicultural operations which have limited impact upon stand and site conditions.

*[N.B. The working group seeks views on this term replacing 'Lower impact silvicultural systems' as defined above.]*

Examples would include a preference for natural regeneration, no chemical inputs, and small-scale harvesting.

Lower intensity forest management approaches would include minimum intervention, continuous cover forestry, and traditional coppice regimes. They can be implemented by a variety of silvicultural systems including shelterwood and selection systems as well as coppice and coppice with standards.

Management planning documentation

See *Woodland management plan*.

Minimum intervention

Management with no systematic felling or planting of trees. Operations normally permitted are fencing, control of exotic plant species and vertebrate pests, maintenance of paths and rides and safety work.

National Nature Reserve (NNR)

A designated site containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems, managed to conserve their habitats or to provide special opportunities for scientific study of the habitats, communities and species represented within them. In addition, they may be managed to provide public recreation that is compatible with their natural heritage interests.

Native (species)	A species that has arrived and inhabited an area naturally, without deliberate assistance by man, or would occur had it not been removed through past management. For trees and shrubs in the UK this is usually taken to mean those species present after post-glacial recolonisation and before historical times. Some species are only native in particular regions. Differences in characteristics and adaptation to conditions occur more locally hence the term 'locally native'.
Natural conditions	Native species, associations of native species and other environmental values that are typical of the locality.
Natural reserve	Natural reserves are predominantly wooded, usually mature and intended to reach biological maturity. They are permanently identified and in locations which are of particularly high wildlife interest or potential. They are managed by minimum intervention unless alternative interventions have higher conservation or biodiversity value.
Non-timber woodland products (NTWP)	Non-timber woodland products include foliage, moss, fungi, berries, seed, venison and other animal products. Also known as non-timber forest products (NTFP).
Non-toxic ammunition	Any firearm ammunition, bullet or shot made of metals other than lead.
Non-Wood Forest Products (NWFP)	Non-wood forest products include plants or parts of plants, bark, sap, moss, fungi, fruits, seeds and nuts, honey, venison and other animal products. Also known as non-timber forest products (NTFP).
Open space	In a woodland this includes streams, ponds and well laid-out roads and rides.
Origin (of seed)	The original natural genetic source of those trees which are native to the site.
Owner/manager	The person or entity holding or applying for certification and therefore responsible for demonstrating conformance to this standard. This may be a forestry leaseholder.
PAWS	Plantation on ancient woodland site.  <i>See Woodland.</i>
Peatland	<i>[Text to be reviewed in event of a revised UKFS definition]</i>  Peatlands are areas of peaty soil formed from organic matter from wetland plants which accumulates faster than the annual decomposition. Accumulation is favoured by acidity and water saturation. They are important carbon sinks. Where the waterlogged organic horizon is >30cm this is classed as peat.  Peatlands are important carbon sinks but those damaged by, for example, drainage, peat-cutting, or farming and forestry operations may emit carbon into the atmosphere as they oxidise.
Permissive (access/use)	Use is by permission whether written or implied, rather than by right.

## Pest

An organism harmful to plants or to wood or other plant products, an undesired plant and any harmful creature.

Pesticide

Any substance, preparation or organism prepared or used, among other uses, to protect plants or wood or other plant products from harmful organisms, to regulate the growth of plants, to give protection against harmful creatures or to render such creatures harmless.

Plantation

See *Woodland*.

Plantation on ancient woodland site (PAWS)

See *Woodland*.

Precautionary approach

Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental damage. (Based on Principle 15 of the Rio Declaration on Environment and Development.)

Priority habitats

Habitats identified by statutory nature conservation and countryside agencies **as required** under Section 41 (England) and **Section 7 of the Environment (Wales) Act 2016** ~~Section 42 (Wales) of the Natural Environment and Rural Communities (NERC) Act 2006~~, Section 2(4) of the Nature Conservation (Scotland) Act 2004, and Section 3(1) of the Wildlife and Natural Environment Act (Northern Ireland) 2011. **Lists of habitats identified by statutory agencies are published differently in each country; see the appendix of references.**

*Also see Statutory body.*

Priority habitats and/or species

See *Priority habitats and Priority species*

Priority species

Protected, rare and endangered species which are:

- Identified by statutory nature conservation and countryside agencies **as required** under Section 41 of the **Natural Environment and Rural Communities (NERC) Act 2006** (England) ~~and Section 42 (Wales) of the Natural Environment and Rural Communities (NERC) Act 2006~~, **Section 7 of the Environment (Wales) Act 2016**, Section 2(4) of the Nature Conservation (Scotland) Act 2004, and Section 3(1) of the Wildlife and Natural Environment Act (Northern Ireland) 2011. **Lists of species identified by statutory agencies are published differently in each country; see the appendix of references.**
- Protected under the Wildlife and Countryside Act 1981
- Protected under European law (European Protected Species), and/or
- Categorised as Near Threatened, Vulnerable, Endangered or Critically Endangered in the IUCN Red List
- **Categorised as red or amber in the UK Red Lists**
- **Endemic species.**

For UKWAS, IUCN Red List species will qualify as priority species only if they are within or geographically close to their natural range as described by IUCN in global or regional lists.

Also see Statutory body, **endemic species, UK Red Lists** and IUCN Red List.

Provenance	Location of trees from which seed or cuttings are collected. Designation of Regions of Provenance under the Forest Reproductive Materials regulations is used to help nurseries and growers select suitable material. The term is often confused with 'origin' which is the original natural genetic source.
Publicly available	Accessible to local people or other interested parties. For example, placing material on a website or on signage, providing electronic or hard copies of documents, or making documents available for inspection at a local office. In most cases, a charge may not be made for making material publicly available. However, where a summary of material has been made publicly available free of charge, a charge to cover costs of reproduction and handling may be made if any additional material is requested.
Public Rights of Way	<p><b>In England and Wales</b>, Public Rights of Way are statutory rights of way <b>in England and Wales</b> and are recorded on Definitive Maps held by local authorities showing whether the right of way is by foot, horse or vehicle.</p> <p>In Northern Ireland, records of Public Rights of Way are held by <b>local authorities district councils</b>. <b>There are three types: footpaths (walkers only), bridleways (walkers and horse riders), carriageways (walkers, cyclists, horse riders, horse-drawn and motor vehicles).</b></p> <p><b>In Scotland, ScotWays maintains a National Catalogue of Rights of Way and local authorities hold their own records. The primary source of law relating to rights of way is the common law but they are also referred to in statute. It is not necessary for a route to be recorded for it to be a right of way; it simply needs to meet all the necessary criteria.</b></p>
Ramsar sites	Wetlands of international importance designated under the Ramsar Convention.
Recreation	Activity or experience of the visitor's own choice within a woodland setting. (Facilities may sometimes be provided and charges levied for their use.)
Regeneration	Also see Access. Renewal of woodland through sowing, planting, or natural regeneration.
Relict	A remnant of a formerly widespread species or habitat that persists in an isolated area from a previous land-use or vegetation cover.
Remnant	The baseline of surviving ancient woodland features found in PAWS, for which there is physical or documentary evidence.

These include:

- Woodland specialist flora. These are species with a strong affinity for ancient woodland but may vary in relation to geographic region
- Trees originating from the pre-plantation stand. They can be maidens, standards, coppice stools or pollards and may include ancient or veteran trees
- **Natural regeneration of site-appropriate native trees**
- Deadwood originating from the pre-plantation stand, coarse woody debris and associated decomposer communities
- Undisturbed woodland soil profile.

These features provide the continuity of habitat with the pre-plantation phase.

Restocking

Replacing felled areas by sowing seed, planting or natural regeneration.

Retentions

Trees retained, usually for environmental benefit, significantly beyond the age or size generally adopted by the owner for felling.

Ride

Permanent unsurfaced access route through woodland.

**Root zone(s)**

**Root zones include the area below the drip line/extent of the tree's crown.**

**Semi-natural habitat**

**Semi-natural habitats have ecological assemblages that have been modified in their composition, balance or function by human activities. They may have evolved through traditional agricultural, pastoral or other human activities and depend on their continuation to retain their characteristic composition, structure and function. Despite being modified, these habitats and ecosystems often have high value in terms of biodiversity and the services they provide.**

Semi-natural woodland

*See Woodland.*

Shelterwood

The shelterwood system involves the felling of a proportion of the mature trees within an area whilst leaving some trees as a seed source and shelter for natural regeneration. The seed trees are subsequently removed. Note that the term 'seed tree system' is often used to describe 'shelterwoods' with densities of <50 retained mature trees per hectare.

**The spatial arrangement of the retained trees can be uniform, in groups, or in strips, so giving rise to the name of different shelterwood systems. The removal of the seed trees may involve several felling operations.**

Short rotation coppice (SRC)

Short rotation coppice (usually willow or poplar) typically grown ~~as an energy crop~~ and harvested every ~~3~~<sup>2</sup> to 6 years.

	<i>Also see Coppice.</i>
Short rotation forestry (SRF)	Short rotation forestry crops are typically harvested at between 8 and 20 years.
Significantly high carbon stock	[PEFC UK to feedback on definitions that might be found in other PEFC national standards.]
Silviculture (silvicultural)	The techniques of tending and regenerating woodlands, and harvesting their physical products.
Single tree selection	A method of managing irregular stands in which individual trees of any size are removed more or less uniformly throughout the stand.
Site of Special Scientific Interest (SSSI)	A designated site providing statutory protection for the best examples of the flora, fauna, or geological or physiographical features of England, Scotland and Wales. SSSIs also underpin other national and international nature conservation designations.
Small coupe felling	A small-scale clearfelling system. The system is imprecisely defined but coupes are typically between 0.5 ha and 2.0 ha in extent, with the larger coupes elongated in shape so the edge effect is still high.
Snag	A standing dead tree that has lost its top.
Special Area of Conservation (SAC)	Area designated under the EU Habitats Directive.
Special Protection Area (SPA)	Area designated under the EU Birds Directive.
Spirit, conformance to	Conformance to the spirit means that the owner/manager is aiming to achieve the principles set out in the certification standard.
Statutory body(ies)	There are four categories: <ul style="list-style-type: none"> <li>• The statutory nature conservation and countryside agencies: Natural England, NatureScot Scottish Natural Heritage, Natural Resources Wales and the Northern Ireland Environment Agency or their successor bodies</li> <li>• The statutory environment protection agencies: Environment Agency (in England), Scottish Environment Protection Agency, Natural Resources Wales and the Northern Ireland Environment Agency or their successor bodies</li> <li>• The statutory historic environment agencies: Historic England, Historic Environment Scotland, Cadw (in Wales) and the Northern Ireland Environment Agency or their successor bodies</li> <li>• Local authorities responsible for a wide range of functions including highways, and planning and archaeology services.</li> </ul>
Thinning	Tree removal, which results in a temporary reduction in basal area, made after canopy closure to promote growth and greater value in the remaining trees.
Timely manner	As promptly as circumstances reasonably allow; not intentionally postponed by the owner/manager.

Trademarks	'UKWAS' and 'United Kingdom Woodland Assurance Standard' are registered trademarks.
<del>Traditional</del>	<del>In relation to section 2.13.3 on Christmas trees: production on a small scale in a setting that can reasonably be considered to be a woodland.</del>
Traditional rights	Rights which result from a long series of habitual or customary actions, which have, by uninterrupted acquiescence, acquired the force of a law within a geographical or sociological unit.
Under-planting	The planting of young trees under the canopy of an existing stand – often combined with a shelterwood or group selection system.
UK General Data Protection Regulation (UK GDPR)	The UK GDPR controls how personal information is used by organisations, businesses or the government.
UK Red Lists	<p>These are lists of animals or plants naturally occurring within the UK which have been assessed using criteria based on the IUCN approach. Species are assigned a Red, Amber or Green status, with red being species of highest conservation concern and green of least concern. The lists are maintained by the Joint Nature Conservation Committee (JNCC).</p> <p>Species which are Red or Amber-listed usually receive legal protection as they are protected by statute or listed in the Annexes of EU conservation Directives and/or appear on the UK Biodiversity Action Plan (BAP) priority species list. A list of conservation designations for UK taxa is maintained by the Joint Nature Conservation Committee (JNCC).</p>
United Kingdom (UK)	References to the 'United Kingdom' or 'UK' refer to the 'United Kingdom of Great Britain and Northern Ireland' which comprises England, Scotland and Wales (collectively referred to as 'Great Britain') and Northern Ireland.
Value(s)	The weights given to economic, biodiversity, recreational, environmental, social and cultural impacts when considering management options.
Veteran tree	A tree that is of interest biologically, culturally or aesthetically because of its age, size or condition, including the presence of deadwood micro-habitats.
Water course	<del>Streams and rivers.</del> Any natural or man-made channel through which water flows continuously or intermittently. References to forestry practice on adjacent land should be taken as applying also to adjacent water bodies e.g. ponds and lakes.
Whole tree harvesting	The removal from the harvesting site of every part of the tree above ground <del>or above and below ground.</del>
Windthrow	Uprooting of trees by the wind.
Windthrow risk	A technical assessment of risk based on local climate, topography, site conditions and tree height.

Wood pasture	Areas of historical, cultural and ecological interest, where grazing is managed in combination with a proportion of open tree canopy cover.
Woodland	<p>Predominantly tree-covered land whether in large tracts (generally called forests) or smaller units (known by a variety of terms such as woodlands, woods, copses and shelterbelts).</p> <p>Those woodlands which are comprised mainly of locally native trees and shrubs, and have some structural c referred to as <b>semi-natural woodland</b>.</p> <p>Those woodlands which are derived principally from the human activity of planting, sowing or intensive silvicultural treatment but lack most of the principal characteristics and key elements of semi-natural woodland are generally referred to as <b>plantations</b> or <b>woodlands of planted origin</b>. They often include a proportion of naturally regenerated trees and are often managed to become more like natural woodlands over time.</p> <p>Woodland is referred to as <b>ancient woodland</b> when it has been in continuous existence since before AD 1600 in England, Wales and Northern Ireland or since before AD 1750 in Scotland.</p> <p>The term <b>ancient semi-natural woodland (ASNW)</b> is used to describe those semi-natural stands on ancient woodland sites. The precise definition varies according to the local circumstances in each country within the United Kingdom and guidance should be sought from the relevant forestry authority.</p> <p>The term <b>ancient woodland site</b> refers to the site of an ancient woodland irrespective of its current tree cover. Where the native tree cover has been felled and replaced by planting of tree species not native to the site it is referred to as a <b>plantation on ancient woodland site (PAWS)</b>.</p>
Woodland management plan	The collection of documents, reports, records and maps that describe, justify and regulate the activities carried out by any manager, staff or organisation in a management unit, including statements of objectives and policies.
Woodland management unit (WMU)	The woodland management unit (WMU) is the area to which the management planning documentation relates. A WMU is a clearly defined woodland area, or areas, with mapped boundaries, managed to a set of explicit long-term objectives.
Workers	All employed persons including public employees as well as self-employed persons and volunteers. This includes <b>owners/managers</b> , part-time and seasonal employees, of all ranks and categories, including labourers, administrators, supervisors, executives, contractor employees, self-employed contractors and sub-contractors and other licensed operators.

Second Revision Draft Master Copy

# References

Second Revision Draft Master Copy

**References** *[N.B. Text in this section and the Annex of References is to be reviewed and updated at a later stage in the revision]*

## **Main legislation, regulations, guidelines and codes of practice referred to in the UKWAS**

The main legislation, guidelines and codes of practice relevant to the UK Woodland Assurance Standard are shown here. These are correct and as complete as possible as at August 2017 but should not be treated as an exhaustive list. It is important at all times to refer to the most recent and/or new documents and relevant websites should be checked frequently.

The key main documents are listed below and the other main documents are available in a separate UKWAS Appendix document under the five section headings of the certification standard.

### **Key Legislation**

1967: Forestry Act 1967 (as amended)

1967: Plant Health Act 1967

1982: Forestry Commission Bye-laws

1953: Forestry Act (Northern Ireland) 1953

2010: Forestry Act (Northern Ireland) 2010

### **Key Publications**

2017: The UK Forestry Standard (fourth edition) which incorporates previously separate guidelines on seven themes:

Forests and Biodiversity

Forests and Climate Change

Forests and Historic Environment

Forests and Landscape

Forests and People

Forests and Soil

Forests and Water

### Other main reference documents

Other main reference documents are provided in a separate UKWAS Appendix document available on [ukwas.org.uk](http://ukwas.org.uk).

For easy reference, the documents are assigned to the appropriate section headings of the certification standard.

### Further information sources

Information on the UK Forestry Standard and to download a copy - [forestry.gov.uk/ukfs](http://forestry.gov.uk/ukfs)

Information on forestry grant schemes and regulations may be obtained from the relevant [forestry authorities](#).

Guidance on environmental regulations is provided on the following websites:

England – [gov.uk/government/organisations/environment-agency](http://gov.uk/government/organisations/environment-agency)

Scotland & Northern Ireland - [netregs.gov.uk](http://netregs.gov.uk)

Wales – [naturalresources.wales](http://naturalresources.wales)

Second Revision Draft Master Copy

Second Revision Draft Master Copy

*This page has been left blank*

Second Revision Draft Master Copy

**UKWAS Support Unit  
59 George Street  
Edinburgh  
EH2 2JG**

[www.ukwas.org.uk](http://www.ukwas.org.uk)  
E: [ukwas@ukwas.org.uk](mailto:ukwas@ukwas.org.uk)

Second Revision Draft Master Copy