

# United Kingdom Woodland Assurance Standard

## Fifth Edition

(Version 5.0)

### Changes to UKWAS 4:

Deletions are shown thus: ~~Word~~

Additions are shown thus: **Word**

N.B. Collation from several source documents means that this document will contain some errors so always use the definitive Version 5.0 document for any use other than to get an idea of where changes have been made.

**Document history:**

Version 5.0 approved by the Steering Group: 22 May 2024

Effective date: 1 December 2024

Commencement date of next periodic review: 31 July 2026

© Copyright UKWAS 2024



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.

UKWAS 5.0 (tracked changes)

## UKWAS Vision Statement

### Vision

Responsibly managed UK woodlands that are healthier, more abundant, more diverse and which deliver a wide and sustainable range of benefits for society, the economy and the environment.

### Mission

To work through a consensus-driven partnership representing economic, environmental and social perspectives to develop and manage a voluntary certification standard for woodland management. The standard provides a basis for continuous improvement, independent auditing and certification under the FSC and PEFC schemes thus demonstrating that wood or non-wood products are responsibly sourced.

### UKWAS Strategic goals/objectives

1. To improve the standards of UK woodland management.
2. To increase the public's trust and confidence in UK woodland products.
3. To increase the area of certified British woodlands.

### UKWAS values

Collaborative	Working collectively and making decisions by consensus.
Inclusive	Embracing a broad range of views without prejudice.
Objective	Working impartially and making decisions based on evidence.
Ethical	Working ethically for the benefit of all sections of society.
Ambitious	Seeking continuous improvement and leading on good practice.

UKWAS 5.0 (tracked changes)

## Contents

### Introduction

- |  |   |
|--|---|
| 1. Background and purpose  | x |
| 2. Procedures for use of the certification standard  |   |
| – The woodland management unit   |   |
| – Flexibility in meeting requirements  |   |
| – Research   |   |
| – Third-party rights – leases, burdens in title, ownership rights and legal restrictions on management                   |   |
| – Timing for full implementation of the requirements relating to woodland structure and layout                           |   |
| – Application of the certification standard to different scales of woodland management unit and intensities of operation |   |
| – Use of the certification standard by certification bodies  | x |
| 3. Interpretation of the certification standard  | x |
| 4. Complaints and disputes   |   |

### Certification Standard

#### Using the certification standard

- |                             |   |
|-----------------------------|---|
| – Requirements              |   |
| – Example verifiers         |   |
| – Guidance notes            | 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 <del>Long-term</del> Policy and objectives                 | x |
| 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 <del>structure</del> restructuring                | x |
| 2.8 Tree species selection                                     | x |
| 2.9 Introduction of non-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	
<del>3.5</del> 3.6 Fencing	x
<del>3.6</del> 3.7 Materials and waste	x
<del>3.7</del> 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 Other priority habitats	x
4.4 4.5 Protection of conservation values in other woodlands and semi-natural habitats	x
4.5 4.6 Watershed management and erosion control	x
4.6 4.7 Maintenance of biodiversity and ecological functions	x
4.7 4.8 Maintenance of local native seed sources	x
4.8 4.9 <del>Cultural and historical features/sites</del> Protection of cultural and historic environment sites	x
4.9 4.10 Game-rearing, shooting and fisheries management	x

UKWAS 5.0 (tracked changes)



## 5. People, communities and workers

### 5.1 ~~Woodland access and recreation including traditional and permissive use rights~~

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

## UKWAS 5 formats & amendments

~~**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)

UKWAS 5.0 (tracked changes)

# Introduction

UKWAS 5.0 (tracked changes)

## Introduction

The introduction is a 'normative'<sup>1</sup> part of UKWAS 5. Sections 1, 3 and 4 provide context and information for users of the standard. Section 2 details procedures for using the standard which include compulsory elements of the certification standard.

### 1. Background and purpose

~~Primarily, the certification standard~~ The United Kingdom Woodland Assurance Standard (UKWAS)<sup>2</sup> is a certification standard; it provides a tool for UK woodland owners to demonstrate their responsible forest management.

The UKWAS is designed to reflect:

- The **legal and good forestry practice** requirements set out in the governmental UK Forestry Standard (UKFS) 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.
- ~~In response to the demand from the UK forestry and forest products sector, the certification standard is also designed to reflect~~ The requirements of **set out by** the two leading global forest certification schemes – the Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC).
- Good practice guidance and research findings drawn from a range of sources and adapted, where appropriate, to UK circumstances.
- An ethos of continuous improvement.

Whilst the UKFS and UKWAS are closely linked, their roles are distinct and complementary:

- The UKFS is a governmental standard which sets out the requirements that all woodland owners/managers are expected to meet; the forestry authorities will assess applications for new planting, forest management and tree-felling against these requirements before granting any necessary permissions or offering grant aid.

---

<sup>1</sup> The word 'normative' denotes a compulsory element of the standard.

<sup>2</sup> 'UKWAS' and 'United Kingdom Woodland Assurance Standard' are registered trademarks.

- The UKWAS is a voluntary certification standard developed by a stakeholder group representing economic, environmental and social perspectives; the certification standard is more widely drawn than the UKFS and provides the basis for independent auditing and certification under the FSC and PEFC schemes so demonstrating that wood or non-wood forest products are sourced from a responsibly managed woodland.

~~Products certified through these schemes~~ FSC- and PEFC-certified products may carry a label and are in much in demand in the UK and global timber markets as they provide a widely recognised way to inform customers that those timber and other woodland products have been responsibly sourced ~~come from responsibly managed sources.~~

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.

~~The UK arms of~~ FSC UK and PEFC UK take responsibility for submitting the revised 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~~ UKWAS as the basis for certification in the UK can be found on ukwas.org.uk.

## 2. Procedures for use of the certification standard

Note: in this section of the Introduction, 'shall' indicates a compulsory element of the standard. Where 'should' is stated it indicates a recommendation. Where 'may' is stated it indicates a permissible option or a list of permissible options. Where 'can' is stated it indicates a possibility or a list of possibilities.

### 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~~ ~~may~~ 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 good** 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~~ **Some** requirements ~~will be~~ **may not 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~~ **shall** be met, there may be flexibility in exactly how requirements are fulfilled. Any different approach taken ~~must~~ **shall** 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, where possible, contribute to and/or support relevant research activities which benefit the future management of woodlands.** The establishment of research trials or plots ~~may~~ **shall** 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

**Owners/managers retain overall responsibility for conformance to the certification standard. However, in ~~in~~ certain situations, pre-existing leases, burdens in title and third-party ownership rights ~~may~~ **might** restrict management actions in such a way that the owner/manager ~~may not be able~~ **is unable** 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~~ **might** 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 shall still~~ be achieved provided the owner/manager ~~is able to~~ demonstrates 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 should~~ assist with conformance. It is not however ~~necessary essential~~ 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 might~~ have their own requirements which apply when the owner/manager does not have full management control of a woodland management unit ~~including where national infrastructure developments are imposed by a third party~~. ~~Owners/managers are advised to seek guidance from their certification body or group scheme manager on any specific certification scheme requirements.~~

### **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 to~~ the certification standard, certification bodies will not evaluate woodlands solely on their 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 shall~~ 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 shall~~ 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** **might** 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** **might** 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** **might** 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.

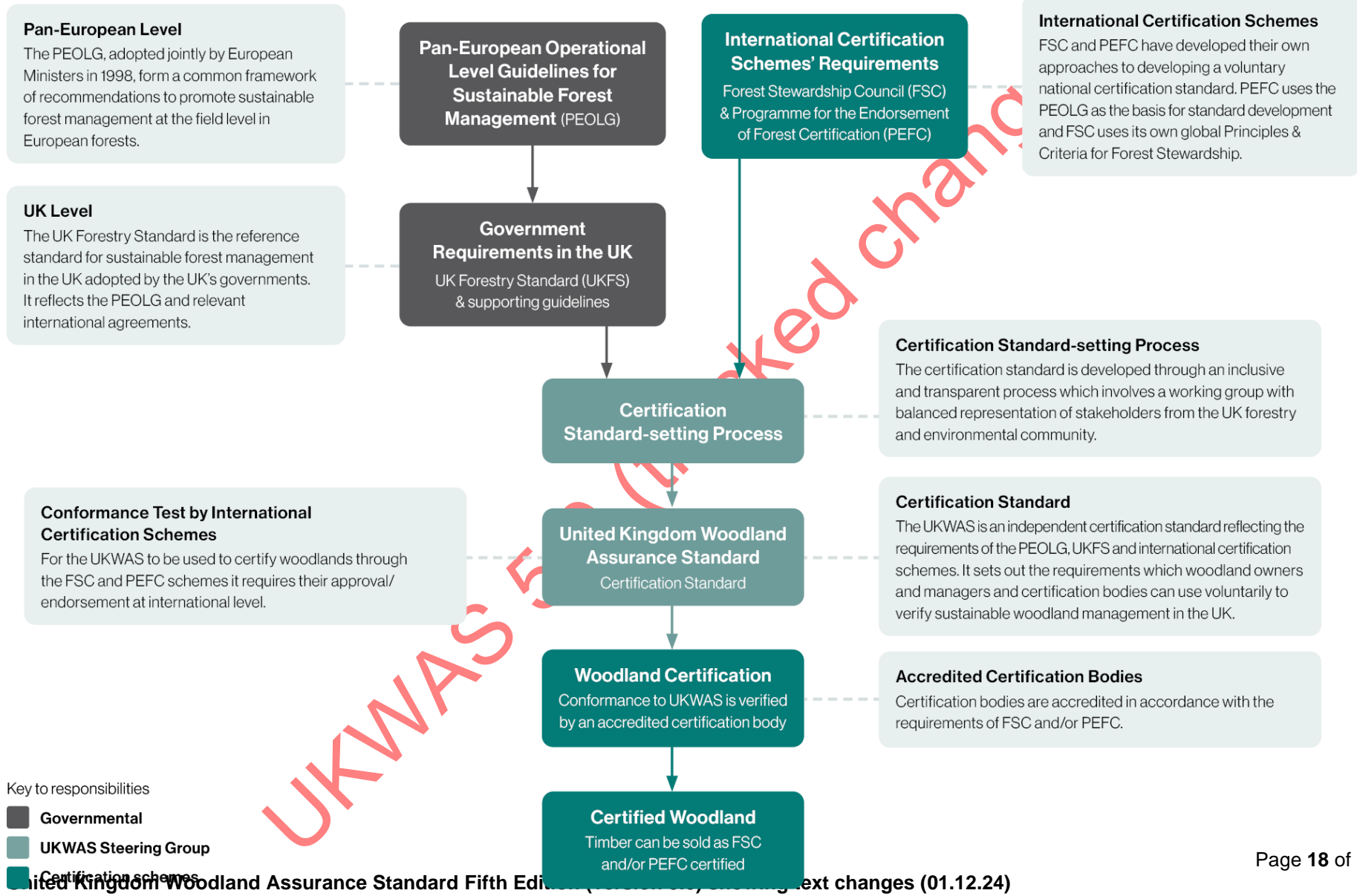
### **4. Complaints & disputes**

Section 5.2.2 of the standard **requires owners/managers to respond constructively to complaints and seek to resolve grievances through engagement with complainants.**



In the first instance, any complaints about a certified woodland management unit should be made to the woodland owner or manager. If the complaint or dispute cannot be resolved to the satisfaction of all parties, the complainant may contact the certification body which issued the certificate. Further information is provided on the UKWAS website ([ukwas.org.uk](http://ukwas.org.uk)).

UKWAS 5.0 (tracked changes)



UKWAS 5.0  
Unlocked changes

N.B. Collation from several source documents means that this document will contain some errors so always use the definitive Version 5.0 document for any use other than to get an idea of where changes have been made.

# **Certification standard Fifth edition (version 5.0)**

UKWAS 5.0 (tracked changes)

## 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 reference documents.

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 applicable 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 applicable 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~~ **permission**.

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~~ **a permissible** option or a list of **permissible** options. **Where it is stated as 'can' it indicates a possibility or a list of possibilities.**

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, **for example, 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 of References [Documents](#) for further guidance.

### 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
- 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

~~NTWP – Non-timber woodland products~~

NWFP - Non-wood forest product

PAWS – Plantation on ancient woodland site


UKFS – UK Forestry Standard

WMU - Woodland management unit

# 1. Legal compliance and UKWAS conformance

UKWAS 5.0 (tracked changes)


## 1. Legal compliance and UKWAS conformance

	REQUIREMENT	EXAMPLE VERIFIERS	GUIDANCE
1.1	Compliance and conformance		
1.1.1	There <b>is</b> compliance with the law. There <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 <b>documents</b> 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 workers 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 interested parties.</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 <b>is</b> conformance to the spirit of any relevant codes of practice or good practice guidelines.	<ul style="list-style-type: none"> <li>No evidence of non-conformance from audit</li> <li>Evidence of correction of any previous non-conformance</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 <b>documents</b> 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 workers understand and conform to the spirit of codes and guidelines relevant to their roles and responsibilities</li> </ul>



			<ul style="list-style-type: none"> <li>All documentation including procedures, work instructions and contracts conform to the spirit of relevant codes and guidelines.</li> </ul> <p>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.</p>
1.1.3	<p>a) The legal identity of the owner/manager <b>is</b> documented.</p> <p>b) The boundaries of the owner's/manager's legal ownership or tenure <b>are</b> documented.</p> <p>c) The scope of the owner's/manager's legal rights to manage the WMU and to harvest <b>wood and non-wood forest</b> products and/or supply services from within the WMU <b>is</b> documented.</p> <p>d) Legal authority to carry out specific operations, where required by the relevant authorities, <b>is</b> documented.</p> <p>e) Payment <b>is</b> made in a timely manner of all applicable legally prescribed charges connected with <b>forest woodland</b> 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 <b>may can</b> 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 <b>may can</b> include the relevant forestry authorities, <b>and statutory bodies</b>: 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 <b>may can</b> include fees for licences or permissions or grant repayments where grant conditions have not been fulfilled.</p>

1.1.4	<p>a) Mechanisms <b>are</b> employed to identify, prevent and resolve disputes over tenure claims and use rights through appropriate consultation with interested parties.</p> <p>b) Where possible, the owner/manager <b>seeks</b> to resolve disputes out of court and in a timely manner.</p>	<ul style="list-style-type: none"> <li>• Use of dispute resolution mechanism.</li> </ul>	<p>Unresolved disputes of substantial magnitude involving a significant number of interests will normally disqualify an entity from being certified.</p> <p>Examples of relevant tenure claims and use rights <del>may</del> <b>can</b> include:</p> <ul style="list-style-type: none"> <li>• <del>Water</del> <b>Private water</b> supplies</li> <li>• Joint access routes</li> <li>• Shooting rights</li> <li>• <b>Peat-cutting rights</b></li> <li>• <b>Crofting rights.</b></li> </ul>
1.1.5	<p>a) The owner/manager:</p> <ul style="list-style-type: none"> <li>• <b>Commits</b> to conformance to this certification standard, and</li> <li>• <b>Has</b> declared an intention to protect and maintain the woodland management unit and its ecological integrity in the <b>short and</b> long term.</li> </ul> <p>b) A statement of these commitments <b>is</b> made publicly available <del>upon request.</del></p>	<ul style="list-style-type: none"> <li>• Signed declaration of commitment</li> <li>• Dissemination of the requirements of this certification standard to workers, 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 <del>might</del> <b>may</b> 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>For group schemes to meet requirement (b), whilst each group member is required to make a commitment, it is acceptable for a single commitment covering the entire group to be made available.</b></p> <p><b>Advice to owners/managers</b>  Owners/managers <del>may</del> <b>might</b> be subject to additional requirements from their certification scheme relating to any adjustment of the area in the woodland management unit. Owners/managers are advised to seek guidance from their certification body or group scheme manager.</p>
1.1.6	<p>a) There <b>is</b> conformance to guidance on anti-corruption legislation.</p>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Written procedures</li> </ul>	<p>Guidance on procedures to prevent bribery is available from the Ministry of Justice.</p>

	b) Large enterprises have and implement a publicly available anti-corruption policy which meets or exceeds the requirements of legislation.	<ul style="list-style-type: none"> <li>Public statement of policy.</li> </ul>	
1.1.7	There <b>is</b> compliance with legislation relating to the transportation and trade of forest products including, <del>where relevant, the EU Timber Regulation (EUTR)</del> applicable timber legality legislation and phytosanitary requirements.	<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>Plant passports might 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) <del>may</del> might 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 the monkey puzzle tree <del>Monkey-puzzle</del> (<i>Araucaria araucana</i>).</p>
1.1.8	Where foodstuffs are produced as non-wood forest products, there is compliance with legislation relating to their handling, transportation and trade.	<ul style="list-style-type: none"> <li>Relevant procedures and records.</li> </ul>	
1.2	Protection from illegal activities		
1.2.1	The owner/manager takes <b>all</b> reasonable measures, including engagement with the police and statutory bodies, to prevent or stop illegal or unauthorised uses of the woodland that could jeopardise fulfilment of the objectives of management.	<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> <li>Evidence of a proactive approach to potential and actual problems including follow-up action</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> <p>The scope of illegal activities which the owner/manager <del>may</del> might encounter is so diverse that it is not possible to prescribe actions in every case. In specific cases a legal opinion <del>may</del> might be required in order to prescribe 'reasonable measures'.</p>

		<ul style="list-style-type: none"> <li>Engagement with statutory bodies.</li> </ul>	
1.3	Genetically modified organisms		
1.3.1	Genetically modified organisms (GMOs) <b>are</b> not used.	<ul style="list-style-type: none"> <li>Plant supply records</li> <li>Discussion with the owner/manager.</li> </ul>	<del>GMOs are created through gene transfer under laboratory conditions and are not the product of tree breeding, vegetative propagation, cloning or tissue culture programmes.</del>

UKWAS 5.0 (tracked changes)

## 2. Management planning

UKWAS 5.0 (tracked changes)


## 2. Management planning

	REQUIREMENT	EXAMPLE VERIFIERS	GUIDANCE
2.1	<del>Long-term policy</del> Policy and objectives		
2.1.1	<p>a) The owner/manager <b>has</b> a long-term policy and management objectives which are environmentally <b>positive sound</b>, socially beneficial, <b>and</b> economically viable <b>and enhance forest resilience</b>.</p> <p>b) The policy and objectives, or summaries thereof, <b>are available and</b> 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 <b>in terms of economic, environmental and social outputs</b>. Management objectives should set out tangible, shorter-term steps towards achieving that vision <b>and management planning should demonstrate a commitment to continuous improvement</b>.</p> <p>The owner/manager should be aware that long-term forest resilience will underpin environmental, social and economic objectives. <b>This should include consideration of the effects of various woodland management practices on carbon sequestration and storage in trees and soils across the WMU</b>.</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, <del>may</del> <b>might</b> 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 <del>may</del> <b>might</b> be appropriate for a large organisation, it <del>may</del> <b>might</b> 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>

			Means of communicating the policy and objectives to workers should always be proportionate to the extent of their influence on the outcomes of management and <del>might</del> <del>may</del> range from detailed notes or staff meetings to a simple verbal 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 takes <del>fully into</del> account <del>of the</del> <del>short- and</del> 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, soils and wood-based products. Consideration should be given to 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 demonstrates a commitment to long-term economic viability.</p> <p>b) The owner/manager aims to secure the necessary investment to implement the management plan in order to meet 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><del>Management planning should be proportionate to the scale and intensity of woodland management.</del></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, <del>other ecosystem services</del> or <del>other</del> <del>alternative</del> sources of income. Detailed projections are not required but there should be evidence that the longer-term resourcing of essential <del>forest</del> <del>woodland</del> operations has been considered. For example, management planning documentation <del>may</del> <del>can</del> show how silvicultural systems, species choice and tree densities and other woodland management are designed to achieve long-term economic viability.</p>
2.2	Documentation		
2.2.1	All areas in the WMU <del>are</del> covered by management planning documentation which <del>is</del> retained for at least	<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), (f) and (g<del>f</del>) and the setting of management objectives. Equally, monitoring</p>

<p><del>ten</del> 10 years and incorporates:</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 forest</b> products and services which are consistent with the management objectives.</p> <p>c) Assessment of environmental values, 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><b>e) Identification of a conservation area network and a record of its location and condition. This includes areas identified in sections 4.1-4.6, 4.9 and 5.1.4.</b></p>		<p>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><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><b>Where a woodland is being managed for non-timber ecosystem services there should be an assessment of what these are and how the level of service is to be permanently maintained.</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 <del>might</del> <b>can</b> include:</p> <ul style="list-style-type: none"> <li>• For low-intensity managed woodlands: 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 landscape level</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 <del>may</del> <b>can</b> 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>A veteran tree management plan</b></li> <li>• <b>A deadwood conservation plan</b></li> <li>• <b>An invasive non-native species control plan</b></li> <li>• <b>An historic environment site management plan.</b></li> </ul>
--	--	--




<p><b>ef)</b> Specific <b>conservation management</b> measures to maintain and where possible enhance those areas identified <del>under sections 4.1-4.5 and 4.8,</del> within the <b>conservation area network</b> considering areas where either the extent of these areas or their sensitivity to operations <del>may</del> <b>might</b> be unknown.</p> <p><b>fg)</b> Identification of community and social needs and sensitivities.</p> <p><b>gh)</b> Prioritised objectives, with verifiable targets to measure progress.</p> <p><b>hi)</b> Rationale for management prescriptions.</p> <p><b>ij)</b> Outline planned felling and regeneration over the next 20 years.</p> <p><b>jk)</b> Where applicable, annual allowable harvest of <b>non-wood forest products (NWFPs)</b> <del>non-timber woodland products (NTWPs).</del></p>		<p>A conservation area network is made up of those areas of the WMU for which the primary objective is the conservation of environmental and biodiversity values, ecosystem services and community needs, or cultural and heritage values.</p> <p>The conservation area network includes:</p> <ul style="list-style-type: none"> <li>• Environment and biodiversity values <ul style="list-style-type: none"> <li>– Statutory nature conservation sites (section 4.1)</li> <li>– Ancient semi-natural woodlands (ASNW) (section 4.2)</li> <li>– Plantations on ancient woodland sites (PAWS) (section 4.3)</li> <li>– Other priority habitats (section 4.4)</li> <li>– Other woodlands and semi-natural habitats with identified areas, species or features of conservation value (section 4.5)</li> </ul> </li> <li>• Ecosystem services and community needs <ul style="list-style-type: none"> <li>– Areas and features of critical importance for watershed management and erosion control (section 4.6) as they provide important ecosystem services</li> <li>– Private water supplies (section 5.1.4)</li> </ul> </li> <li>• Cultural and heritage values <ul style="list-style-type: none"> <li>– Cultural and historic environment sites (section 4.9).</li> </ul> </li> </ul> <p>Areas and features within the conservation area network should be mapped and this might require specialist surveys.</p> <p><i>In relation to requirement <del>(j-k)</del>, see also section 2.4.3 on non-wood forest products.</i></p> 
--	--	---


	<p>k) Rationale for the operational techniques to be used.</p> <p>m) Plans for implementation, first five years in detail.</p> <p>n) Appropriate maps.</p> <p>o) Plans to monitor at least those elements identified under section 2.15.1 against the objectives.</p>		
2.2.2	<p>a) The owner/manager publicises the availability of management plans and provides details of a public contact point.</p> <p>b) While respecting the confidentiality of information, the owner/manager has a mechanism, upon request, to make 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>	<ul style="list-style-type: none"> <li>• Evidence of fulfilling requests for management planning documentation or summaries</li> <li>• A public contact point</li> <li>• Summary management planning documentation.</li> </ul>	<p>Owners/managers may demonstrate that they are receptive to requests to make documentation available by providing details of a public contact point in a manner proportionate to the scale and intensity of their operations. Examples may include provision of an email address, a website or on-site notices.</p> <p>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 might be an unnecessary administrative burden. This may might often be the 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 might be more useful for non-specialist stakeholders.</p> <p><del>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.</del></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> </ul>

			<ul style="list-style-type: none"> <li>• Which is, by law, confidential including personal information covered by the UK General Data Protection Regulation (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><del>The management planning documentation shall be reviewed periodically (at least every ten years), taking into account:</del></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> <li>• Changed environmental, social, or economic circumstances.</li> </ul> <p>b) All management planning documentation is reviewed at least every 10 years.</p>	<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 spread of 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 sections 2.15.1 and 2.15.2.</p>

2.3	Consultation and co-operation		
2.3.1	<p>a) Local people, relevant organisations and interested parties <b>are</b> identified and made aware that:</p> <ul style="list-style-type: none"> <li>• <b>The woodland is being evaluated for initial certification</b></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>• <del>The woodland is being evaluated for certification.</del></li> </ul> <p>b) The owner/manager ensures that there is full co-operation with the relevant forestry authority's consultation processes.</p> <p>c) The owner/manager consults, <b>through culturally appropriate means,</b> <del>appropriately</del> with local people, relevant organisations and other interested parties, and provides opportunities for their engagement in planning and monitoring processes.</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>• <b>Evidence that consultation feedback has been evaluated and considered</b></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><del>For social and economic issues,</del> <b>During consultation, owners/managers should 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.</b></p> <p><b>For timber transport issues, owners/managers should seek to identify and consult with the regional groups from the Timber Transport Forum, local authority roads or highways authorities, and appropriate community groups.</b></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>For biodiversity issues, owners/managers should seek to identify and consult <del>local</del> representative groups or <b>relevant</b> bodies which can represent biodiversity interests, including the Local Biodiversity Partnership (or equivalent) <del>where relevant,</del> <b>experts and nature groups.</b></p>

<p>d) Methods of consultation and engagement <b>are</b> designed to ensure that local people, relevant organisations and other interested parties have reasonable opportunities to participate equitably, <del>and</del> without discrimination <b>and through culturally appropriate means.</b></p> <p>e) <b>At least 30 days are allowed for people to respond to notices, letters or meetings.</b></p> <p>f) <b>The owner/manager engages with local people and takes action to identify and avoid significant negative social, environmental and economic impacts of management activities, and to minimise or repair any that do occur.</b></p> <p><del>e) g) The owner/manager responds to issues raised or requests for ongoing dialogue and engagement and shall demonstrate how the results of the consultation including community and social impacts have been taken into account in</del></p>		<p>For historic environment issues, owners/managers should seek to identify and consult 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, local authorities or appropriate inspectorates, water supply organisations and the owners of (household or community) private 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 <del>may</del> <b>might</b> 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 <del>must should</del> be assessed on a case-by-case basis. A proportionate, risk-based assessment of social impacts <del>might can</del> 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>Owners/managers should take a balanced view of consultation responses and evaluate the information provided accordingly. It might not be possible to fully resolve all issues raised but it is good practice to inform consultees how their comments have been taken into account in refining plans.</p>
---	--	---

	<p>management planning and operations.</p> <p><del>f) At least 30 days are allowed for people to respond to notices, letters or meetings before certification.</del></p> <p>h) The owner/manager ensures that where possible and practicable there is appropriate sharing of knowledge gathered during consultation.</p>		<p>See also section <del>4.8.1</del> 4.9.1 which covers sites and features of special cultural or historical significance and section <del>5.1.1</del> 5.1.2 which covers permissive <del>or</del> traditional uses.</p> 
2.3.2	<p>The owner/manager seeks to engage with neighbouring woodland owners and to ensure that the management of each woodland complements and does not unreasonably compromise, the management of the others.</p> <p><del>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.</del></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><del>• Membership of a wildlife management group</del></li> <li><del>• Where there is a significant problem caused by wildlife, a documented plan (which may take the form of a contract or licence) for control.</del></li> </ul>	<p>Potential and actual impacts, both negative and positive, can 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 can 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 and from the neighbouring woodland</li> <li>• Spread of invasive non-native species from the WMU which is incompatible with the management and condition of the neighbouring 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><del>If management cannot maintain populations of wild mammals at a level that ensures they are not causing ecological damage, then sensitive areas – including</del></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> <p>c) Where appropriate and possible, the owner/manager shall consider opportunities for co-operating with neighbours in landscape-scale conservation initiatives.</p>		<p>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> 
2.3.3	<p>The owner/manager seeks to engage with neighbouring landowners and considers, where possible, opportunities for co-operating in wider forestry and conservation initiatives.</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>Opportunities for co-operating can include:</p> <ul style="list-style-type: none"> <li>• Timber harvesting</li> <li>• Integrated pest management</li> <li>• Wild mammal control</li> <li>• Control of invasive non-native species.</li> </ul> <p>Co-operation with neighbouring landowners has the potential to broaden the positive impacts of responsible forest management. It can increase the effectiveness of forestry initiatives, such as shared access/haulage routes, or conservation initiatives, such as the establishment of woodland and other habitat corridors.</p> <p>Co-operation can also increase the effectiveness of management to mitigate negative impacts on forest management and conservation which might occur on either or both sides of the ownership boundary and often operate across landscapes.</p> <p>Impacts might be caused by:</p> <ul style="list-style-type: none"> <li>• Deer browsing</li> <li>• Invasive non-native species such as:</li> </ul>


			<ul style="list-style-type: none"> <li>○ <i>Rhododendron ponticum</i></li> <li>○ Himalayan balsam</li> <li>○ Feral mink</li> <li>○ North American signal crayfish</li> <li>• Damage to the conservation of priority habitats and species due to: <ul style="list-style-type: none"> <li>○ 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 out of the adjoining woodland and priority habitat.</li> </ul> </li> </ul> <p>An example of a wildlife management group might be a grey squirrel (<i>Sciurus carolinensis</i>) control group or a deer management group.</p>
2.4	Productive potential of the woodland management unit (WMU)		
2.4.1	The owner/manager plans and implements measures practices to maintain and/or enhance long-term soil, and hydrological and ecological 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, and adopt good practice.
2.4.2	<p>a) Timber is normally 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.</p> <p>c) Selective harvesting is not 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> <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>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> </ul>





	<p>d) Throughout the WMU, management planning identifies opportunities where sustainable timber harvesting can be achieved alongside other objectives.</p>		<ul style="list-style-type: none"> <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 woodland 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 20 years or even longer for very small woods.</p> <p>In relation to requirement (c), timber crops should not be creamed or high-graded <del>(b)</del>. However, selective harvesting of high-quality stems <del>may</del> might be entirely appropriate in stands which have been managed to promote regeneration from the most promising individuals, for example.</p>
2.4.3	<p>a) Harvesting of <del>non-timber woodland products (NTWPs)</del> non-wood forest products (NWFPs) or use of ecosystem services from the WMU 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> </ul>	<p><del>Non-timber woodland products include foliage, moss, fungi, berries, seed, venison and other animal products.</del></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 good practice information on harvesting levels and avoiding negative impacts is (at the time of writing) available only for the NWFPs listed below, only these products are explicitly included within the scope of this standard:</p>


	<p>b) Where venison or wild boar/feral pig meat are to be supplied as certified, the owner/manager has:</p> <ul style="list-style-type: none"> <li>• Policies and procedures for lethal wildlife management activities with reference to animal welfare and public safety</li> <li>• Procedures for monitoring the impacts of management activities on wildlife populations</li> <li>• A general evaluation of the ecological impact of wildlife management activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Evidence includes reference and conformance to recognised good practice information and guidance.</li> </ul>	<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>• Christmas trees</li> <li>• Bulbs</li> <li>• Fungi</li> <li>• Wild garlic.</li> </ul> <p>The UKWAS appendix of reference documents 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 <del>NWFPs</del> is limited, and also that in the case of venison and wild boar/feral pig meat it <del>may</del> might be desirable to harvest at a level that reduces the deer or wild boar/feral pig population <del>in the long term</del> to aid tree establishment and biodiversity.</p> <p><del>However,</del> In all cases the owner/manager should give careful thought to the annual <del>allowable</del> sustainable harvest and should be able to justify harvest levels based on <del>the basis of</del> their objectives and best available information <del>practice</del>. Where the information necessary to determine a sustainable harvesting level is not available, the owner/manager should not harvest this product.</p> <p>Policies and procedures for lethal wildlife management activities should follow industry good practice. The owner/manager should consider adopting national standards/schemes such as the Scottish Quality Wild Venison (SQWV) Assurance Scheme in Scotland.</p> <p>Both wildlife population-monitoring and evaluations of ecological impact should be proportionate to the scale and intensity of wildlife management activities but should also be sufficiently detailed to inform adaptive management.</p>
--	--	---	--

			<p>The owner/manager should update policies and procedures for lethal wildlife management activities if monitoring suggests that they are not meeting management objectives or if there is evidence of negative impacts on environmental values.</p> <p>Methods for evaluating the ecological impact of wildlife management activities might include routine monitoring using the herbivore impact assessment method.</p> <p><i>See also sections 1.1.3 (c), 1.1.7 and 1.1.8 regarding appropriate legal authority, section 2.3.2 2.3.3 in relation to protection from wild mammals, section 2.12.1 in relation to a wild deer management strategy, section 2.13.3 for Christmas trees, and section 4.9 4.10 in relation to game management.</i></p> <p><b>Advice to owners/managers</b></p> <p>It might be possible to certify other NWFPs not included in the list above if good practice on harvesting levels can be demonstrated. Owners/managers are advised to seek guidance from their certification body or group scheme manager.</p>
2.4.4	<p>Priority species <del>shall not be</del> are:</p> <p>a) <del>Not harvested or</del> commercially exploited</p> <p>b) Only harvested or controlled <del>without</del> with the consent of the relevant statutory body <del>nature conservation and countryside agency.</del></p>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Monitoring records</li> <li>• Species inventories</li> <li>• Regulatory consent notices</li> <li>• Specific licence issued by the relevant statutory body</li> <li>• General Licence's terms and conditions.</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>Where no regulatory consent is required and there are no priority-species-appropriate General Licences then good practice should be followed.</p>
2.5	Assessment of environmental impacts <b>in existing woodland</b>		

2.5.1	<p><del>a) The impacts of new planting and other woodland plans on environmental values shall be assessed before operations are implemented, in a manner appropriate to the scale of the operations and the sensitivity of the site.</del></p> <p>a) During woodland management planning, the positive and negative impacts of proposed operations on environmental values are assessed in a manner appropriate to their scale and the sensitivity of the site.</p> <p>b) The results of the environmental assessments are incorporated into planning and implementation in order to <del>avoid, minimise or repair</del> prevent, adverse environmental impacts of management activities.</p>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Documented environmental impact assessment or Appropriate Assessment where such has been requested by the relevant forestry authority</li> <li>• Documented environmental appraisals</li> <li>• Discussion with the owner/manager</li> <li>• Field observation</li> <li>• Evidence of appropriate consultation with relevant organisations.</li> </ul>	<p>An assessment of potential impacts on environmental values as per requirement (a) should be carried out in all circumstances. The owner/manager should also be aware of relevant legal requirements for environmental impact assessment.</p> <p>Depending on scale and sensitivity, the assessment of environmental impacts <del>may</del> can be include:</p> <ul style="list-style-type: none"> <li>• Information received during the consultation process (see section 2.3)</li> <li>• Brief environmental appraisals for <del>planting or felling</del> management practices or operations which might affect sites recognised for their cultural features, landscape, hydrological, or ecological value or for their impact on priority habitats and species</li> <li>• Ecological assessments of ancient semi-natural woodland and projections of their response to management and natural processes</li> <li>• Specific assessments for unusual and/or extensive operations</li> <li>• Specific assessments for non-wood forest products</li> <li>• <del>Checks against relevant country level plans for priority habitats and species.</del></li> </ul> <p>It <del>may</del> might 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>• Statutory designated sites</li> <li>• Priority habitats and species</li> <li>• Raptor nest sites</li> <li>• Historic environment 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 are considered at a landscape level, taking due account of the interaction with adjoining land and <del>other</del> nearby priority habitats and species.</p>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Maps</li> <li>• Discussion with the owner/manager</li> </ul>	<p>In particular, planning including layout, <del>and</del> design and 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> </ul>


		<ul style="list-style-type: none"> <li>Evidence of appropriate consultation with relevant organisations.</li> </ul>	<ul style="list-style-type: none"> <li>Scale and pattern of open land</li> <li>Habitats which are continuous from inside to outside the woodland (e.g. water courses)</li> <li>Buffering of water courses and water bodies, and connectivity of riparian habitats</li> <li>Changes in hydrology including drainage both into or out of the adjoining woodland and priority habitat</li> <li>Woodland margins as transitional habitats</li> <li>Linking open space within the woodland with to similar habitats outside the woodland</li> <li>The spread of invasive non-native species into or out of the woodland</li> <li>The potential spread of tree species onto priority habitats</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 historic environment sites inside and outside the woodland</li> <li>Priority habitats and species inside and outside the woodland.</li> </ul> <p>See also sections 2.3.3 and 2.12.1.</p> 
2.5.3	<p>a) The owner/manager assesses the potential negative impacts of natural hazards on the WMU, including drought, floods, wind, fire, non-native plant and animal species, and other pests and diseases.</p> <p>b) Planting Management and restructuring plans are designed to mitigate the risk</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 planting restructuring design</li> <li>Long-term forest resilience</li> <li>Diversity of species, and ages and distribution</li> <li>Distribution of open ground</li> <li>Flood hazard maps</li> <li>Potential impact of windthrow.</li> </ul> 


	of damage from natural hazards.		
2.6	Woodland creation		
2.6.1	<p>a) During woodland management planning, the impacts of proposed woodland establishment operations on environmental values are assessed in a manner appropriate to their scale and the sensitivity of the site.</p> <p>b) New woodlands are located and designed in ways that will:</p> <ul style="list-style-type: none"> <li>• Deliver economic goods and/or social benefits and/or ecosystem services</li> <li>• Maintain or enhance the visual, cultural and ecological environmental values and character of the wider landscape, and</li> <li>• Ensure the creation of a diverse and resilient woodland over time, and</li> <li>• Seek to mitigate against the risk of damage from natural hazards.</li> </ul>	<ul style="list-style-type: none"> <li>• Management planning documentation including relevant consents</li> <li>• Field surveys</li> <li>• Discussion with the owner/manager</li> <li>• Maps</li> <li>• Field observation</li> <li>• Evidence of appropriate consultation with relevant organisations.</li> </ul>	<p>Economic goods should be understood in the widest sense and may can include:</p> <ul style="list-style-type: none"> <li>• Timber</li> <li>• Non-timber woodland Non-wood forest products</li> <li>• CO<sub>2</sub> Carbon sequestration</li> <li>• Recreation</li> <li>• Landscape renewal projects.</li> </ul> <p>Field surveys and relevant data sources should be used to inform woodland location and design and can 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>• Priority habitats and species assessments both within the WMU and for adjoining land</li> <li>• Historical, archaeological and cultural features</li> <li>• Local public and permissive access networks</li> <li>• Presence of water courses and water bodies, and connectivity of riparian habitats within the landscape</li> <li>• Water supplies</li> <li>• Water chemistry, ecology and fisheries</li> <li>• Breeding bird surveys.</li> </ul> <p>To mitigate the risk of damage from natural hazards, assessments may can include:</p> <ul style="list-style-type: none"> <li>• Herbivore impacts</li> <li>• Flood and drought risk</li> <li>• Invasive non-native species</li> <li>• Fire risk.</li> </ul>

			<p>New woodlands should contribute to the conservation of neighbouring semi-natural woodland 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>Historic environment 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 forest resilience.</p> <p>A diverse woodland <b>may can</b> 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 and along water courses</b></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 to achieve effective tree establishment avoids or minimises potential negative impacts including:</p> <ul style="list-style-type: none"> <li>• Soil and soil carbon losses</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>• Silvicultural outcomes.</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>• Ground preparation methods</li> </ul>

	<ul style="list-style-type: none"> <li>• Damage to existing peatland, wetland, and water courses or bodies.</li> </ul>		<ul style="list-style-type: none"> <li>• Drainage plans</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 <del>structure</del> restructuring		
2.7.1	<p><del>Even-aged woodlands shall be gradually</del> Woodlands are managed or restructured to achieve an <del>appropriately diverse mosaic</del> appropriate diversity of stand structure, species, sizes, ages, spatial scales, <del>and</del> regeneration cycles and open space. This structural diversity is 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>Woodland management and/or restructuring should be planned to improve forest resilience and biodiversity and implemented in conformance with good forest design practice.</p> <p>A greater degree of uniformity <del>may</del> might be appropriate in very small woodlands.</p> <p>In larger even-aged plantations, the <del>age structure</del> structural diversity can 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 LISS</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 <del>might</del> can include:</p> <ul style="list-style-type: none"> <li>• Windthrow risk</li> <li>• Landscape scale</li> <li>• Historical plantation design</li> </ul>





			<ul style="list-style-type: none"> <li>• Historic environment features</li> <li>• Wildlife habitats.</li> </ul> <p>All WMUs have the potential to be improved so, where appropriate, woodland restructuring provides opportunities for the creation of temporary and permanent open space and open ground habitats (see section 4.5.3). These can 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>Woodland restructuring might also provide opportunities for the restoration of water courses and wetlands and to address 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 <b>is</b> suited to the site and <b>takes</b> into consideration:</p> <ul style="list-style-type: none"> <li>• Improvement of long-term forest resilience <b>including the potential impacts of climate change</b></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 <b>the</b> species diversity of the woodland <b>and individual stands</b>.</p> <p>Larger WMUs will generally present more opportunities for species diversification.</p> <p><b>For production plantation forestry and on new woodland sites, the use of non-native tree species might be appropriate to enhance climate change resilience.</b></p> <p><b>For high conservation value woodlands identified in sections 4.1-4.4, regeneration with native species remains most appropriate and is consistent with a precautionary approach to maintaining conservation values.</b></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) Native species are preferred to non-native. If non-native species are used it is shown that they will clearly outperform native species in meeting the owner's objectives or in achieving long-term forest resilience.</p> <p>c) Regeneration (natural or planted) restores stand composition in a timely manner to pre-harvesting or more natural conditions.</p> <p>d) In woodlands identified in sections 4.1, 4.2 and 4.4:</p> <ul style="list-style-type: none"> <li>• Native species are used for regeneration</li> <li>• Natural regeneration of non-native trees is</li> </ul>	<ul style="list-style-type: none"> <li>• Field observation.</li> </ul>	<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.</p> <p>In ancient semi-natural woodland, regeneration should be in accordance with section 4.2.4.</p> <p>In other semi-natural woodland, regeneration should be in accordance with section 4.4.4 4.5.</p> <p>In plantations on ancient woodland sites, regeneration should be in accordance with section 4.3.4.</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 might be prudent as might 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 might be helpful when considering economic and ecological resilience to climate change. It may might also be appropriate to consider obtaining specialist advice for semi-natural woodlands, especially ancient semi-natural woodlands.</p> <p>See also section 2.9.4 in relation to non-native species and section 4.7.4 4.8 in relation to natural regeneration and planting stock in semi-natural woodland and plantations on ancient woodland sites.</p> 
--	---	--	---

	<p>removed in a timely manner.</p> <p>e) In woodlands identified in section 4.3, regeneration of non-native trees is planned and managed to avoid threats to remnants and conservation features and to allow for increasing native woodland component.</p>		
2.9	Introduction of non-native species		
2.9.1	<p>a) Non-native tree species are only introduced to the WMU an individual woodland when evidence or experience shows that any invasive impacts can be controlled effectively.</p> <p>b) Non-native tree species are not introduced to woodland identified in sections 4.1, 4.2 and 4.4.</p> <p>c) Non-native trees species are only introduced to woodland identified in section 4.3 if, compared with the non-native species they are replacing, they will bring additional biodiversity benefits and will not degrade</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 might be appropriate for a number of reasons not least building forest resilience to the effects of climate change. The relative benefits of introductions should be balanced against the risk of any unintended consequences, for example, the wider spread 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. Owners/managers should be aware that introduced species may might 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 might be desirable to control non-native pests.</p> <p>Game species may be introduced if managed in accordance with section 4.9 4.10.</p> <p><i>In relation to requirement (c), see also section 4.3.1 on PAWS.</i></p>

	<p>the potential for restoration to site-native species.</p> <p>b d) Other non-native plant and animal species are only introduced if they are non-invasive, and bring environmental benefits and all regulatory requirements are met.</p> <p>e e) All new introductions are carefully monitored, and effective mitigation measures are implemented to control negative impacts outside the area in which they are established.</p>		
2.10	Silvicultural systems		
2.10.1	<p>a) Appropriate silvicultural systems 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 and management objectives allow, a range of silvicultural approaches, and</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>• Carbon sequestration and storage in trees and soils across the WMU</li> <li>• The carbon impacts of the operational requirements of differing silvicultural systems</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> </ul>


	<p>in particular <b>LISS lower-impact silvicultural systems</b>, are adopted with the aim of diversifying ages, species and stand structures.</p>		<ul style="list-style-type: none"> <li>Views of local people.</li> </ul> <p>The choice of woodland management approach should be made clear in management planning as this determines subsequent thinning and operational regimes.</p> <p>Use of <b>LISS lower-impact silvicultural systems</b> may <b>might</b> not be appropriate where there is evidence that clearfelling is necessary for the conservation of priority habitats or species.</p> <p><i>In relation to requirement (b), see also section 2.7 in relation to stand structure.</i></p> 
2.10.2	<p>a) In semi-natural woodland, <b>LISS lower-impact silvicultural systems</b> are adopted. All felling <b>is</b> in accordance with <b>the</b> specific <b>good practice</b>-guidance for that type of woodland <b>in the relevant Forestry Commission Practice Guide</b>.</p> <p>b) In semi-natural woodlands over 10 ha, no more than 10% <b>is</b> felled in any five-year period unless justified in terms of biodiversity enhancement or lower impact.</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 <b>may might</b> be practical or biodiversity enhancement reasons for clearfelling in some semi-natural woodlands, but owners/managers should be aware that <b>best good</b> practice guidance for semi-natural woodlands managed as high forest generally advises <b>using</b> small coupe fellings <b>which, depending on the type of woodland, may be up to around 2 ha in size</b>.</p> <p>An appropriate woodland 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 <b>identifies</b> a minimum of 15% of the WMU <b>to be managed</b></p>	<ul style="list-style-type: none"> <li>Management planning documentation including maps</li> </ul>	<p>Where areas and features identified in (a) comprise more than 15% of the WMU all of these areas should be managed for conservation and enhancement of biodiversity as the primary objective.</p>

<p><del>where</del> management for conservation and enhancement of biodiversity <del>is</del> <del>as</del> the primary objective.</p> <p><del>b)</del> This includes <del>all</del> biodiversity conservation areas and features identified in the following sections:</p> <ul style="list-style-type: none"> <li>• Statutory <del>designated</del> nature conservation sites (section 4.1)</li> <li>• Ancient semi-natural woodlands (section 4.2)</li> <li>• Plantations on ancient woodland sites (section 4.3)</li> <li>• <b>Other priority habitats (section 4.4)</b></li> <li>• Other <del>valuable</del> woodlands and semi-natural habitats (section <del>4.4</del> <b>4.5</b>)</li> <li>• <del>Areas and features of critical importance for watershed management or erosion control (section 4.5)</del></li> <li>• Natural reserves (section <del>4.6.1</del> <b>4.7.2</b>)</li> <li>• Long-term retentions <del>and/or areas managed under lower impact silvicultural systems (LISS) (section 4.6.2</del> <b>4.7.3)</b>.</li> </ul>	<ul style="list-style-type: none"> <li>• Field observation.</li> </ul>	<p>Where areas and features identified in (a) <del>(b)</del> 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>• <b>LISS Lower impact silvicultural systems</b></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 (a) <del>(b)</del> <del>may</del> <del>might</del> 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><b>The minimum areas 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.</b></p> <p><b>Many species, including priority species, use the wider woodland habitat and careful woodland management is often beneficial for these species. Management might be aimed at a specific species or take the form of management of habitats to benefit wider biodiversity.</b></p>
---	--	--

	<p>b) Throughout the WMU, management planning identifies additional opportunities where conservation and the enhancement of biodiversity may be achieved alongside other objectives.</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 woodland.</p> <p>Examples can include:</p> <ul style="list-style-type: none"> <li>• Management to favour and protect red squirrels or nesting sites for raptors within commercial woodlands</li> <li>• Protection and management of woodland 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 roosts for bats</li> <li>• Enhancement and expansion of wetland, riparian areas and water courses to improve their biodiversity value</li> <li>• Promotion and protection of veteran trees and deadwood components.</li> </ul> <p>The areas included in this requirement contribute to the conservation area network.</p>
2.11.2	<p>a) Management strategies and actions are developed to maintain and, where possible, enhance improve the condition of areas and features of high conservation value identified in the following sections:</p> <ul style="list-style-type: none"> <li>• Statutory designated sites nature conservation sites (section 4.1)</li> </ul>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Discussion with the owner/manager</li> <li>• Specialist Field surveys</li> <li>• Maps.</li> </ul>	<p>Areas and features of high conservation value <del>may not always be well</del> should be mapped and this might require specialist surveys. 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>Recording the location and condition of these areas and 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>Note that the definition of high conservation value used in this standard goes beyond biodiversity conservation. Areas and features identified in section 4.6 on</p>

	<ul style="list-style-type: none"> <li>• Ancient semi-natural woodland (section 4.2)</li> <li>• Plantations on ancient woodland sites (section 4.3)</li> <li>• <b>Other priority habitats (section 4.4)</b></li> <li>• Areas and features of critical importance for watershed management or erosion control (section <b>4.5</b> <b>4.6</b>).</li> </ul> <p>b) Management strategies and actions <b>are</b> developed in consultation with statutory bodies, interested parties and experts.</p> <p>c) <b>Records are kept of the location and condition of these areas and features of high conservation value.</b></p>		<p>watershed management and erosion control are included because they represent critical ecosystem services which must be conserved.</p> <p>The areas included in this requirement contribute to the conservation area network.</p>
2.12	Protection		
2.12.1	<p>a) Management of wild deer <b>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 surveys and risk assessment</b></li> <li>• Awareness of actual damage <b>through use of appropriate impact surveys</b></li> </ul>	<p>For larger organisations and WMUs, the strategy should be in writing.</p> <p>This requirement <b>may can</b> 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>




		<ul style="list-style-type: none"> <li>• Description of appropriate action in the management planning documentation</li> <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 <b>is</b> 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 <b>a</b> 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 <b>may can</b> include:</p> <ul style="list-style-type: none"> <li>• Fire</li> <li>• Extreme weather events</li> <li>• Outbreaks of pests, diseases or <b>spread of</b> invasive <b>non-native</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 FISA <b>best good</b> practice guidance and issues such as the remoteness of some WMUs, which <b>may might</b> 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 the products selected to achieve effective woodland establishment are appropriate to the herbivore risk and 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> <li>• Policy documents</li> <li>• Evidence that recyclable products have been placed into a suitable recycling system.</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> <p>Wildlife management and/or fencing might be a more suitable option than individual tree protection for larger areas and dense planting might also provide a more suitable option for smaller areas.</p> <p>Where tree shelters or vole guards are used, consideration should be given to using:</p> <ul style="list-style-type: none"> <li>• Recycled and readily recyclable materials</li> <li>• Biodegradable materials</li> <li>• Products made from sustainable natural materials rather than oil-based plastics.</li> </ul> <p>The use of non-recyclable or non-biodegradable products should be avoided.</p> <p>Managers should be aware that not all biodegradable plastics will degrade in the woodland environment and might require industrial composting to break down which will require their collection before they begin to break up.</p> <p><i>See also sections 2.12.1 in relation to deer, 3.6. on fencing and 3.7 in relation to waste.</i></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/managers 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 and ash dieback, non-native plants such as Himalayan balsam and Japanese knotweed, and species such as North 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> <p>UK-grown planting stock, preferably from seed sourced in the UK, should be sourced where it is available, commercially viable and aligned with management objectives.</p> <p>Where possible, trees should be sourced from a nursery that is compliant with the Plant Health Management Standard.</p> <p>Where stock is imported, good practice and protocols regarding quarantine periods and treatments should be followed.</p> <p><i>See also section 4.8 on local native seed sources.</i></p>
2.13	Conversion		
<p><b>Advice to owners/managers.</b></p> <p>Owners/ managers should be aware that the introduction of the European Union Deforestation-free products Regulation (EUDR) will have implications for UK forest owners and wood processors.</p> <p>As the name suggests, the regulation aims to ensure that the production of commodities such as timber and agricultural products entering the EU market has not contributed to deforestation or forest degradation. Because the UK exports timber products into the EU, the EUDR will have an impact on UK forestry supply-chains as, under the Regulation, any operator or trader who places these commodities on the EU market, or exports from it, must be able to prove that the products do not originate from recently deforested land or have contributed to forest degradation. Compliance has been deferred but is anticipated as December 2025 for large enterprises and June 2026 for small enterprises.</p> <p>Both the FSC and PEFC schemes are developing mechanisms to support owners/managers to comply with the EUDR. In conforming with the EUDR, it is possible that requirements and the definitions of 'conversion' used by the certification schemes will change and no longer be aligned with UKWAS requirements.</p> <p>Timber exports from Great Britain into Northern Ireland or from Northern Ireland into Great Britain might also be subject to requirements additional to those in this standard or those of the certification schemes.</p>			

Therefore, where owners/managers are planning any conversion they need to have in place a process to be aware of and conform to current legal and/or relevant certification scheme requirements relating to conversion.			
2.13.1	A process is in place to be aware of and conform to current legal and/or relevant certification scheme requirements relating to conversion.	<ul style="list-style-type: none"> <li>• Conversion data</li> <li>• Management planning documentation</li> <li>• Discussion with the owner/manager.</li> </ul>	<p>This requirement is to ensure that owners/managers considering conversion are up to date with current legal and/or relevant certification scheme requirements relating to conversion.</p> <p>The conversion assessment process should ensure that requirements relating to conversion are identified and reviewed at the planning stage and prior to works commencing. Owners/managers should also be aware that legal and/or scheme requirements might change during the course of a planned conversion.</p>
2.13.1 2.13.2	<p>a) <del>Woodland</del> The woodland types identified in sections 4.1-4.3 4.1-4.4 are <del>shall</del> not be converted to plantation or non-forested land through loss or degradation.</p> <p>b) <del>Areas converted from ancient semi-natural and other semi-natural woodlands after 1994 shall not normally qualify for certification.</del></p> <p>b) Based on best available information, accurate data (including conversion dates) are compiled for all conversion of woodland types identified in (a) that have occurred since 1 December 1994.</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> <li>• Conversion data.</li> </ul>	<p><del>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.</del></p> <p><del>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.</del></p> <p>Conversion of woodland type refers to a change from ASNW or wooded priority habitat to plantation and/or from ASNW, wooded priority habitat or PAWS to non-forested land and/or the degradation of these woodland types.</p> <p>A decision to undertake conversion as a positive management action is one form of conversion. However, conversion can also be caused by deliberate management action or inaction resulting in a degradation of the area such that its features and values have been lost or are in decline but for which no corrective management is taking place.</p> <p>For ecological- and biodiversity-based areas this could include a loss or decline of priority species or important structural or ecological functions. Monitoring and avoiding degradation leading to conversion is best achieved</p>

			<p>through following best practice and appropriate management planning (see section 2.2.1).</p> <p>The inclusion within certified areas of historical conversions depends on their date of inclusion within a certificate, the date of conversion and scheme-specific requirements regarding remediation and/or mitigation of that conversion. The conversion assessment system should also determine whether historically converted areas are eligible to be certified.</p>
<p><del>2.13.2</del> 2.13.3</p>	<p>a) <del>Conversion</del> Woodland types not protected from conversion in section 2.13.2 are converted to non-forested land <del>shall take place</del> only in certain limited circumstances as set out in this requirement.</p> <p>b) The new or restored land use <del>shall be</del> 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 <del>shall be</del> are met:</p> <ul style="list-style-type: none"> <li>• The change in land use does not destroy areas of significantly high carbon stock</li> <li>• The woodland is not identified as of high conservation value in sections 4.1-4.3 and 4.5 section 4.6, nor</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 <del>may</del> might 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>Any restoration should be planned to minimise disturbance and damage to soil-carbon stock.</p> <p>See also section <del>4.4.2</del> 4.5.2 in relation to restoration of small-scale habitats within a woodland matrix.</p>

	<p>identified as contributing to the cultural and historical or community values in sections 4.8 4.9 and 5.1.4</p> <ul style="list-style-type: none"> <li>• There is no evidence of unresolved substantial dispute</li> <li>• The conversion change in land use 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 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 converted area shall be</li> </ul>		<p><b>Advice to owners/managers</b></p> <p>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 changes of land use exceeding 5% of the woodland type in the WMU by area or 500 hectares in total, owners/managers are advised to contact their certification scheme to check for specific scheme requirements and to request prior approval.</p> 
--	--	--	---

UKWAS 5.0 (tracked changes)

	<p>is integrated with the rest of the WMU</p> <ul style="list-style-type: none"> <li>There is no overall negative impact on economic benefit across the WMU as a whole.</li> </ul> <p>c) Any planned change in land use that involves the conversion of a woodland type to non-forested land, exceeding 5% of the woodland type in the WMU by area or 500 ha in total, whichever is the least, takes place only with the prior approval of the relevant certification scheme(s).</p>		
2.13.4	<p>a) Non-woodland area types identified in sections 4.1, 4.4, 4.6, 4.9 and 5.1.4 are not converted through loss or degradation unless the removal or addition of trees is justified to protect, maintain or enhance their features or function.</p> <p>b) Based on best available information, accurate data (including conversion dates) are compiled on all conversions of non-woodland area types identified in</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> <li>Conversion data.</li> </ul>	<p>Non-woodland area types are those areas whose identification or designation is not dependent on, or related directly to, woodland features e.g. open-ground priority habitats or cultural or historic features.</p> <p>Conversion of area types means the change from, or degradation of, the identified area type or function e.g. a change from an identified priority habitat, from a designated historic or cultural area, or the removal of a private water supply.</p> <p>The retention, removal or addition of trees on non-woodland area types can be acceptable where this is considered important to protect, maintain or enhance the features or function of the non-woodland area types (see sections 2.6, 2.13.1 and 2.13.3).</p> <p>A decision to undertake conversion as a positive management action is one form of conversion. However, conversion can also be caused by deliberate</p>

	sections 4.1 and 4.4, and areas identified in sections 4.6, 4.9 and 5.1.4 that have occurred since 31 December 2020.		<p>management action or inaction resulting in a degradation of the area such that its features and values have been lost or are in decline but for which no corrective management is taking place.</p> <p>For cultural and historical areas this could include their loss, decline or damage to key features.</p> <p>For watersheds this could include a loss of ecosystem function or for private water supplies an impact on supply. Monitoring and avoiding degradation leading to conversion is best achieved through following best practice and appropriate management planning (see section 2.2.1).</p>
2.13.3 2.13.5	<p>a) Woodland areas are converted to areas used solely for Christmas tree or short rotation coppice production only where conversion is consistent with other requirements of this certification standard, including the need to leave open space, and in accordance with any approved management plan from the relevant forestry authority, or when clearance is required for non-forestry reasons such as a wayleave agreement.</p> <p>b) Christmas trees shall be grown using traditional, non-intensive techniques.</p>	<ul style="list-style-type: none"> <li>Field observation</li> <li>Management records.</li> </ul>	<p>Christmas trees or short rotation coppice grown intensively as temporary crops are outside the scope of this certification standard.</p> <p>The integrated pest management and fertiliser regime must meet all the requirements of sections 3.4 and 3.5.</p> <p>In relation to Christmas trees, the requirement restricting conversion relates applies to areas used use for growing Christmas trees of less than 4 metres in height.</p> <p><del>The chemicals regime for Christmas trees must meet all the requirements of section 3.4.</del></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> </ul>



			<ul style="list-style-type: none"> <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 biodiversity or landscape value, and provided that the adjacent area is managed as part of the woodland management unit.</li> </ul> <p>Christmas trees grown as a horticultural or nursery crop 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 <b>is</b> in close agreement with the details included in the management planning documentation. Any deviation from prescription or planned rate of progress <b>is</b> justified, overall objectives <b>are</b> still achieved and the ecological integrity of the woodland <b>is</b> maintained.</p>	<ul style="list-style-type: none"> <li>• Cross-correlation between the management planning documentation, annual work programmes and operations seen on the ground</li> <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 of operations should be such that they do not jeopardise the ecological integrity of the woodland in the long term.</p> <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 <b>may</b> <b>can</b> 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 <b>devises</b> and <b>implements</b> a monitoring programme appropriate to the scale and intensity of management.</p> <p>b) The monitoring programme <b>is</b>:</p>	<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> </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 <b>may</b> <b>can</b> include:</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 records frequency of assessment</li> <li>• Kept in a form that ensures that results are of use over the long term.</li> </ul> <p>c) The owner/manager where applicable monitors 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> </ul>	<ul style="list-style-type: none"> <li>• Evidence of a consistent approach to recording site visits</li> <li>• Discussion with the owner/manager</li> <li>• Monitoring records.</li> </ul>	<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 ecosystem, 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, and workers' welfare</li> <li>○ Compliance with Conformance to UKFS forests 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 with predicted yields from production forecasts or timber inventories</li> <li>○ Yields of non-wood forest products</li> </ul> </li> <li>• Social impacts <ul style="list-style-type: none"> <li>○ Condition and accessibility of public access facilities including rights of way</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 non-native 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>
--	--	--	--

	<ul style="list-style-type: none"> <li>Environmentally appropriate disposal of waste materials.</li> </ul> <p>d) Monitoring targets fully consider any special features of the WMU of areas and features of high conservation value (sections 4.1-4.4 and 4.6) and of cultural and historical significance (section 4.9) is sufficient to assess changes in their condition.</p>		<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 4.1-4.4 and 4.5 4.6 and to the cultural and historical values identified in section 4.8 4.9. Monitoring of tree health should be linked to integrated pest management in section 3.4.1.</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 can 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 might meet or supplement monitoring needs. It may might also be possible to make use of freely available information from sources such as statutory bodies or local interest groups.</p>
2.15.2	<p>a) The owner/manager takes monitoring findings into account, particularly during revision of the management planning documentation and if necessary, 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>


	b) Management strategies are adapted when monitoring findings, or other new information, show that they are insufficient to ensure the maintenance and/or enhancement of the condition of areas and features of high conservation value (sections 4.1-4.4 and 4.6) or of cultural and historical significance (section 4.9).		
2.15.3	Monitoring findings, or summaries thereof, are made publicly available upon request.	<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 including personal information covered by the UK General Data Protection Regulation (GDPR).</p> <p>The means of sharing monitoring findings should be appropriate to the nature of the records and to the needs of the interested parties.</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>See section 2.2.2 for examples of confidential information.</p>


UKWAS 5.0 (tracked changes)

### 3. Woodland operations

UKWAS 5.0 (tracked changes)

### 3. Woodland operations

	REQUIREMENT	EXAMPLE VERIFIERS	GUIDANCE
3.1	General		
3.1.1	All woodland operations conform to forestry <del>best</del> good 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>	<p>The principal source of UK forestry good practice guidance is the UK Forestry Standard.</p> 
3.1.2	<p>a) The planning of woodland operations includes:</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 prevent negative impacts on environmental values including protecting water resources, <del>and</del> soils, <del>and</del> soil carbon, and preventing disturbance of and damage to priority species, habitats,</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> <li>Pollution prevention plans.</li> </ul>	<p>Planning of woodland operations should consider published guidance on roles and responsibilities for environmental protection.</p> <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>Care should be taken to identify and protect wildlife sites such as raptor nest sites, badger setts and bat roosts.</p> <p>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>ecosystems and landscape values, including adapting standard prescriptions where required. <del>Any disturbance or damage which does occur shall be mitigated and/or repaired, and steps shall be taken to avoid recurrence</del></p> <ul style="list-style-type: none"> <li>• Taking measures to maintain and, where appropriate, enhance the natural capital values of identified services and resources such as watersheds and fisheries</li> <li>• Taking measures to protect water supplies</li> <li>• Adopting, where practicable, operational practices to reduce carbon dioxide and other greenhouse gas emissions.</li> </ul> <p>b) Contingency plans are in place to ensure that if damage occurs it is mitigated and/or repaired and steps are taken to prevent recurrence.</p>		<p>Consideration should be given to the choice of materials and fuels used in woodland management operations. Particular attention should be given to reducing the use of high embedded-carbon products and to the adoption of lower emission vehicles.</p> 
--	---	--	---


UKWAS 5.0 (tracked changes)


3.1.3	Operational plans <b>are</b> 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 <b>priority species</b> , features of high conservation value <b>and cultural and heritage assets</b> .	<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>	Contracts can be in writing or workers may be given oral instructions where this is appropriate to the scale and sensitivity of the operation.
3.1.4	<p>a) Operations cease or relocate immediately where:</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 <del>4.1-4.5</del> <b>4.1-4.6</b> and <del>4.8</del> <b>4.9</b>. <del>Operations in the vicinity recommence only when action has been taken to repair damage and prevent any further damage, including establishing buffer areas where appropriate</del></li> <li>• They reveal previously unknown sites or features which may be of conservation value or</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager</li> <li>• Site diaries</li> <li>• Field observation.</li> </ul>	<p>Previously unknown sites or features of conservation value or of special cultural and historical significance can include:</p> <ul style="list-style-type: none"> <li>• Areas or features of conservation value in statutory nature conservation sites (section 4.1.1)</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>• Priority habitats (section 4.4.1)</li> <li>• Areas, species and features of conservation value in other woodlands (section 4.5.1)</li> <li>• Other valuable small-scale semi-natural habitats (section 4.5.2)</li> <li>• Areas and features of critical importance for watershed management or erosion control (section 4.6.1)</li> <li>• Priority species (section 4.7.1)</li> <li>• Veteran trees (section 4.7.4)</li> <li>• Sites and features of special cultural and historical significance (section 4.9.1).</li> </ul> <p>The owner/manager should confirm the identification of any such sites or features and engage with relevant parties when determining their appropriate management.</p>



	<p>of special cultural and historical significance.</p> <p>b) Operations in the vicinity recommence only when:</p> <ul style="list-style-type: none"> <li>The sites or features have been investigated and appropriate management <b>and/or remedial action</b> agreed, <del>where relevant</del> in discussion with <b>the relevant</b> statutory bodies, <b>and/or</b> local authority historic environment or archaeology services <del>and/or local people.</del></li> <li>Appropriate action has been taken to repair damage and prevent any further damage, including establishing buffer areas.</li> </ul>		
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 non-native species is present, higher-level measures should be taken.</p> <p>If forest machinery has been operating within an area known to contain a specific pest, disease or invasive non-native species, it should be power-washed down or otherwise thoroughly cleaned before leaving site.</p>
3.2	<del>Harvest operations</del> Harvesting and restocking		


3.2.1	<p>a) Timber and <del>non-timber woodland products (NTWPs)</del> <b>non-wood forest products (NWFPs)</b> are harvested and <b>extracted</b> efficiently and with minimum <del>loss of</del> damage to environmental values <b>and high conservation values</b>.</p> <p>b) Timber harvesting particularly seeks to avoid:</p> <ul style="list-style-type: none"> <li>• Damage to soil and water courses <b>including loss of soil carbon</b> during felling, extraction and burning</li> <li>• Damage to standing trees, especially veteran trees <b>and their root zones</b>, during felling, extraction and burning</li> <li>• Degrade in felled timber.</li> </ul>	<ul style="list-style-type: none"> <li>• Field observation</li> <li>• Discussion with the owner/manager.</li> </ul>	<p><b>This requirement applies equally to all forms of silvicultural management.</b></p> <p>Thinning/cutting trees to waste <del>may</del> <b>might</b> be appropriate in some circumstances.</p> <p><b>Particular attention should be given to damage to forest soils due to:</b></p> <ul style="list-style-type: none"> <li>• <b>Inappropriate timing of woodland operations</b></li> <li>• <b>Inadequate soil protection measures.</b></li> </ul> 
3.2.2	<p>Harvesting and sales documentation enables all timber and <del>non-timber woodland products (NTWPs)</del> <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>• Harvesting output records</li> <li>• Contract documents</li> <li>• Sales documentation</li> <li>• <b>Geolocation information.</b></li> </ul>	<p>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 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></p>


			<p>Certification schemes <del>may</del> <b>might</b> require owners/managers to provide additional information on sales documentation relating to:</p> <ul style="list-style-type: none"> <li>• Chain-of-custody certification, and</li> <li>• The use of certification scheme trademarks.</li> </ul> <p>Certification schemes <del>may</del> <b>might</b> also require documentation to be retained for a specific time.</p> <p>Owners/managers are advised to seek guidance from their certification body or group scheme manager.</p>
3.2.3	<p>a) Whole tree harvesting <del>or stump removal</del> <b>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) Stump removal is practised only for:</p> <ul style="list-style-type: none"> <li>• Phytosanitary reasons</li> <li>• Forest infrastructure developments</li> <li>• Restoration of open-ground habitats.</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>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>• <b>Damage to habitat features and priority species.</b></li> <li>• Damage to <del>historical</del> <b>historic environment</b> features, <b>heritage assets</b> and archaeological deposits.</li> </ul> <p>Forest infrastructure includes, for example, roads, extraction tracks, drains and public access routes.</p> 
3.2.4	<p>Lop and top <b>is</b> 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 <b>areas important for priority habitats or species avoided</b></li> <li>• Some lop and top should be left unburned as habitat except where it will result in pest or disease problems. <b>The location of lop and top should be selected with care to avoid sensitive habitats and features, especially peatlands, wetlands and water courses.</b></li> </ul>

			<ul style="list-style-type: none"> <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 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 <del>may</del> <b>might</b> be necessary for burning on site to be registered as an exempt activity with the statutory environment protection agencies.</p> 
3.2.5	When restocking, the owner/manager employs techniques for ground preparation that create the minimum amount of soil disturbance but are still adequate to ensure successful establishment.	<ul style="list-style-type: none"> <li>Discussion with the owner/manager</li> <li>Management planning documentation</li> <li>Field observation</li> <li>Carbon calculations or assessments.</li> </ul>	<p>Minimising soil disturbance is important to reduce soil carbon losses and other negative environmental impacts.</p> <p>Regarding the carbon balance of the WMU, the owner/manager should demonstrate an appropriate choice of silvicultural management, ground preparation technique and species selection.</p> <p>A prolonged fallow period before restocking should generally be avoided as this can exacerbate soil carbon losses unless it is justifiable for other reasons such as pest control.</p> <p>Previously planted peatland, wetland or wet woodland where yield class after restocking will be low should be assessed for potential restoration to their original habitat type or the development of appropriate native woodland types to provide carbon and biodiversity benefits.</p>


			<p>Restocking can also provide opportunities for the realignment and/or disconnection of poorly designed land drainage systems.</p> <p>Owners/managers should be aware of and demonstrate a knowledge of current good practice guidance.</p>
3.3	Forest roads, and associated infrastructure		
3.3.1	<p>All necessary consents are obtained and notifications made for construction, extension and upgrades of:</p> <ul style="list-style-type: none"> <li>• Forest roads</li> <li>• Mineral extraction sites</li> <li>• Management, visitor access and other infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>• Records of consents and/or registrations of exemption</li> <li>• Records of notifications</li> <li>• Environmental assessment where required.</li> </ul>	<p>Consents, exemptions and notifications may might relate to planning, environmental impact assessment or construction regulations.</p> <p>Visitor access infrastructure can include, for example, car parks, welfare facilities, surfaced paths, cycle tracks and constructed viewpoints.</p> <p>Management infrastructure can include, for example, timber stacking areas, buildings, welfare provision, permanent vehicle access points and parking areas.</p> <p>Other infrastructure might be associated with non-forestry activities such as access for shooting and fisheries management and organised events and/or access to adjoining land or infrastructure.</p>
3.3.2	<p>Roads and timber extraction tracks, visitor access, and management, shooting and fisheries infrastructure, and associated drainage are 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 layout, design and creation of permanent roads, and tracks, and visitor access and management infrastructure</li> <li>• Safety inspection records</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 and the public road infrastructure to which the forest roads will connect. <del>Non-timber activities also need to be taken into account, e.g. access for sporting.</del></p> <p>Where new infrastructure is planned there should be an evaluation of its need and a rationale such as 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.</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>• <b>Assessing and minimising indirect adverse impacts</b> such as those caused by increased visitor numbers, disturbance levels or changes in drainage, especially on high conservation values and priority habitats and species</li> <li>• <b>Use of</b> Ensuring that design of permanent bridges, <del>arches or</del> culverts or temporary water-crossing points <del>to cross water courses</del> <b>accords with best good 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>• <b>Careful</b> Landscaping of roads <b>and infrastructure</b>, both internally and externally</li> <li>• On areas managed for biodiversity and conservation, minimising the impact of new roads or other infrastructure, where practicable, by routing or siting it to avoid bisecting these areas and avoiding immediately adjacent land</li> <li>• Sourcing materials to be used as locally as possible</li> <li>• Use of brush mats 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 to take 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 access and events, or the inclusion of on-site renewable energy production to power on-site infrastructure.</p>
--	--	--	--

			
3.4	<del>Pesticides, biological control agents and fertilisers</del> Integrated pest management		
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> <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</p>	<ul style="list-style-type: none"> <li>• An IPM policy or strategy document</li> <li>• Clear records of the decision-making process</li> <li>• Discussion with the owner/manager and relevant workers</li> <li>• Field observations</li> <li>• <del>Pesticide policy or position statement.</del></li> </ul>	<p>Larger organisations and WMUs should have a written integrated pest management strategy and other organisations might find value in developing a written strategy.</p> <p>Integrated pest management should conform to good 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>As a matter of principle, when remedial action is considered, preference should be given to non-chemical methods over chemical methods.</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> </ul>


	<p>published advice and its appropriate application.</p> <p><del>a) The use of pesticides and fertilisers is avoided where practicable.</del></p> <p><del>b) The use of pesticides, biological control agents and fertilisers is minimised.</del></p> <p><del>c) Damage to environmental values from pesticides and biological control agent use is avoided, mitigated and/or repaired, and steps are taken to avoid recurrence.</del></p>		<ul style="list-style-type: none"> <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> 
3.4.2	<p>a) Where chemical control methods or biological control agents 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 impact</li> <li>• Greater effectiveness, and</li> <li>• Equal or greater social and environmental benefit.</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental and social risk assessment documentation</li> <li>• Discussion with the owner/manager and relevant workers</li> <li>• <del>Written policy and strategy or statement</del></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><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 specific certification scheme requirements relating to risk assessment processes.</p>



	<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 prepares and implements an effective integrated pest management strategy that:</p> <ul style="list-style-type: none"> <li>• Is appropriate to the scale of the woodland and the intensity of management</li> <li>• Adopts management systems that 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</li> </ul>		<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 and feeding areas 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</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>See also section 4 in relation to conservation values.</p> 
--	---	--	---

	<p>with special biodiversity attributes when considering methods of control, and</p> <ul style="list-style-type: none"> <li>• Demonstrates knowledge of the latest published advice and its appropriate application.</li> </ul> <p>b) The strategy 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>c) 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.</p> <p>d) The strategy includes a description of all known use over the previous five years, or the duration of the current woodland ownership if that is less than five years.</p>		
--	--	--	--

UKWAS 5.0 (tracked changes)

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 are 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 keeps 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> 
3.4.4 3.4.3	<p>a) Specific pesticides are only used if their use is permitted by the owner's/manager's certification scheme.</p>	<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> 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>a) <del>Pesticides and biological control agents are only used if:</del></p> <ul style="list-style-type: none"> <li><del>• They are approved for forestry use by the UK regulatory authorities</del></li> <li><del>• They are not banned by international agreement, and</del></li> <li><del>• Their use is permitted by the owner's/manager's certification scheme.</del></li> </ul> <p>b) <del>Pesticides categorised as Type 1A and 1B by the World Health Organization or any other pesticides</del> whose use is restricted by the owner's/manager's certification scheme <b>are only not used unless if:</b></p> <ul style="list-style-type: none"> <li>• No effective, <b>and</b> practicable <b>and less hazardous</b> alternatives are available, <b>and</b></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>• <b>Environmental and social risk assessment documentation</b></li> <li>• Discussion with owner/manager and <b>relevant</b> workers.</li> <li>• Pesticide use records.</li> </ul>	
--	--	---	--

UKWAS 5.0 (tracked changes)

	<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>	<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>• Emergency plan</li> <li>• Field observation, particularly in respect to storage, application sites, buffer zones, and personal protective equipment</li> <li>• Pesticide use records</li> </ul>	<p>Owners/managers should be aware of legal requirements relating to buffers along water courses, bodies and supplies.</p>


	<p>c) Application methods minimise quantities used, whilst achieving effective 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 or evidence of effectiveness</li> <li>Record of any accidental spillage or environmental damage</li> <li>COSHH assessments</li> <li>Operators are trained, competent and hold pesticide operator certification.</li> </ul>	
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>	<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 might find it useful to sub-divide use according to the pesticide used, operation type and target species.</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 considerations of the cyclical nature of woodland management operations.</p>		
3.4.6	<p>a) The use of biological control agents is minimised, monitored and controlled.</p> <p>b) 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>c) 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>d) 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>• Operational plans</li> <li>• Emergency plan</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 biological control agents are subject to licensing requirements.</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 might find it useful to sub-divide use according to the biological control used, operation type and target species.</p>


3.5	<b>Fertilisers</b>		
3.4.5 3.5.1	<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><del>a) Fertilisers (inorganic and organic) are only used where they are necessary to secure establishment or to correct subsequent nutrient deficiencies.</del></p> <p><del>b) Where fertilisers are to be used the owner/manager and workers are aware of and shall be implementing legal requirements and best practice guidance for their use in forestry.</del></p> <p><del>c) No fertilisers are applied:</del></p> <ul style="list-style-type: none"> <li><del>• In priority habitats</del></li> <li><del>• Around priority plant species, or</del></li> <li><del>• Around veteran trees</del></li> </ul> <p><del>d) In addition, bio-solids are only used following an assessment of environmental impacts in accordance with section 2.5.</del></p>	<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 <del>may</del> can 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> 





	e) The owner/manager keeps a record of fertiliser usage, including types, rates, frequencies and sites of application.		
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 minimises the quantities used, whilst achieving effective results, and providing effective protection to environmental values.</p> <p>c) Aerial application of fertiliser is only undertaken 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>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>	<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 might carry unacceptable risks in terms of lack of targeting and drift.</p>

	<p>e) Bio-solids are only used following an assessment of 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 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.
<b>3.5 3.6</b>	<b>Fencing</b>		
3.5.4 3.6.1	Where appropriate, wildlife management and control are 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 actual impacts and/or the potential risk posed by herbivores and other wildlife to planting, restocking and natural regeneration.</p> <p>Fencing can prevent low levels of browsing which might be required to maintain grassland or other habitats in good ecological condition. For this reason, deer management and control of numbers are preferred.</p> <p>This requirement is especially important in areas where capercaillie (<i>Tetrao urogallus</i>) and black grouse (<i>Lyrurus / Tetrao tetrix</i>) are present.</p> 
3.5.2 3.6.2	Where fences are used, they are correctly specified and	<ul style="list-style-type: none"> <li>Field visits to verify alignments chosen</li> </ul>	The fence should be of a specification suitable for the risk posed by those herbivore species present.

	<p><b>maintained, and their alignment is</b> designed to minimise impacts on access (particularly public rights of way), landscape, wildlife and historic environment sites.</p>	<ul style="list-style-type: none"> <li>• Discussion with the owner/manager demonstrates an awareness of impacts of fence alignments and of the alternatives</li> <li>• Documented policy or guidelines regarding any specific significant impacts</li> <li>• Expert advice sought for significant one-off fencing operations</li> <li>• <b>Evidence of periodic herbivore damage and fence condition assessments.</b></li> </ul>	<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> <li>• Existing users of the woodland</li> <li>• <b>The need for bespoke water gates for every water-crossing point</b></li> <li>• <b>The need for fence-marking to protect wildlife</b>, especially woodland grouse</li> <li>• The historic environment</li> <li>• The need for badger gates, tunnels and ladders</li> <li>• <b>Potential impacts of any fence on displacement of herbivores and wildlife</b></li> <li>• <b>The need for ongoing checks for herbivore damage or presence within the fence line and to undertake wildlife management where necessary</b></li> <li>• <b>The need to check and maintain fence lines</b></li> <li>• <b>The need for removal of redundant fences.</b></li> </ul> <p>Where fence crossings are provided, they should be appropriate to the abilities of likely users.</p> 
3.6 3.7	<b>Materials and waste</b>		
3.6.2 3.7.1	<p>a) The owner/manager selects materials with consideration for material reduction and waste minimisation.</p> <p>b) The owner/manager prepares and implements a <b>prioritised</b> plan to manage and <b>progressively</b> remove redundant materials.</p>	<ul style="list-style-type: none"> <li>• Field observation</li> <li>• Discussion with the owner/manager</li> <li>• Removal plan</li> <li>• Budget.</li> </ul>	<p>The owner/manager should consider adopting a circular economy approach to use of materials so as to maximise benefits whilst reducing negative environmental impacts through, for example, choice of low-carbon materials, efficient use of materials, reuse of materials and elimination of waste.</p> <p><del>Prioritisation and timescales</del> <b>Plans</b> for removal of <b>redundant materials</b> should take into account social, environmental and economic impacts, <b>and legal requirements.</b></p> <p>Examples of redundant materials include:</p> <ul style="list-style-type: none"> <li>• Tree shelters</li> <li>• Fencing</li> </ul>

			<ul style="list-style-type: none"> <li>• Culvert pipes</li> <li>• Game-release pens</li> <li>• High seats.</li> </ul>
3.6.1 3.7.2	<p>Waste disposal is in accordance with current waste management legislation and regulations.</p> <p>Waste is produced, stored, transported and disposed of without harming the environment in accordance with current regulations.</p>	<ul style="list-style-type: none"> <li>• No evidence of significant impacts from waste disposal management</li> <li>• Documented policy or guidelines on arrangements for waste management disposal including minimisation, segregation, storage, recycling, or return to manufacturer.</li> </ul>	<p>Waste includes:</p> <ul style="list-style-type: none"> <li>• Redundant fencing</li> <li>• Redundant tree shelters and tree bags</li> <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> 
3.7 3.8	Pollution		
3.7.1 3.8.1	<p>The owner/manager 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>• Records of pre-commencement</li> </ul>	<p>The focus of management practices should be on pollution prevention through:</p> <ul style="list-style-type: none"> <li>• Understanding the site – topography, soil, water, drainage</li> <li>• Identifying the pollution risks to water, habitats and conservation features and the measures needed to avoid those risks</li> <li>• Clearly marked and agreed buffer areas before work commences</li> <li>• Clearly defined worker roles and responsibilities</li> <li>• Monitoring of conditions, especially changes in weather and soil conditions</li> <li>• Being prepared to change control measures to meet site conditions.</li> </ul> <p>Diffuse pollution may can 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 including directly connected drains that connect to water courses</li> </ul>

		<p>meetings to discuss roles and responsibilities</p> <ul style="list-style-type: none"> <li>• Use of biodegradable lubricants.</li> </ul>	<ul style="list-style-type: none"> <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 the costs of running machinery.</p> 
<p><del>3.7.2</del> 3.8.2</p>	<p>Plans and equipment 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> <li>• Evidence that all relevant workers are aware of site pollution prevention and control plans and response procedures</li> <li>• Incident reporting.</li> </ul>	<p>Incident reporting should be included in any pollution prevention and control plan.</p> <p>Appropriate spill kits and pollution prevention equipment are operation-, machinery- and risk-specific.</p> 



UKWAS 5.0 (tracked changes)

## 4. Natural, historical and cultural environment


UKWAS 5.0 (tracked changes)

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

	REQUIREMENT	EXAMPLE VERIFIERS	GUIDANCE
4.1	Statutory <del>designated</del> nature conservation sites <del>and protected species</del>		
4.1.1	<p>a) Areas and features of high conservation value having particular significance for biodiversity <del>are identified and their condition is established</del> by reference to statutory <del>nature conservation</del> designations at national or regional level and/or through assessment on the ground.</p> <p><del>b</del> b) There <del>is</del> ongoing communication and/or consultation with statutory bodies <del>and, as necessary, with local authorities, county/local biological records centres, wildlife trusts and other relevant organisations.</del></p> <p><del>b</del> c) Adopting a precautionary approach, the identified areas <del>species</del> and features of high conservation value are maintained and where</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</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> </ul> <p><del>The owner/manager should know the extent of any designation, the reason for its citation, and any operations requiring consent.</del></p> <p><del>In relation to (a), the owner/manager should establish the current condition through either a condition assessment supplied by the relevant statutory nature conservation agency or through an agreed condition monitoring programme.</del></p> <p><del>Identification and Identifying, mapping and establishing the condition of these the areas and</del> 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>Where the boundaries of a designated site extend beyond the boundary of the WMU, it <del>may</del> might not be possible for the owner/manager <del>acting alone</del> to significantly influence or change the overall condition of the site.</p>


	possible enhanced, in accordance with plans agreed with statutory nature conservation agencies.	<p>will be safeguarded and/or enhanced</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 biodiversity, appropriate to likely biodiversity value.</li> </ul>	
4.1.2	<p><del>Appropriate measures are taken to protect identified priority habitats and species in accordance with plans agreed with nature conservation agencies. In planning and implementing measures within the WMU, the owner/manager takes into account the geographic range and ecological requirements of priority species beyond the boundary of the WMU.</del></p>	<ul style="list-style-type: none"> <li><del>• Field observation</del></li> <li><del>• Management planning documentation</del></li> <li>• Discussion with the owner/manager.</li> </ul>	<p><del>Measures should include steps to protect features such as breeding sites, resting places and display sites of priority species.</del></p> 
4.2	Conservation of ancient semi-natural woodlands (ASNW)		
4.2.1	<p>a) Ancient semi-natural woodland is identified by reference to published maps and/or by assessment on the ground.</p>	<ul style="list-style-type: none"> <li>• Field observation</li> <li>• Discussion with the owner/manager</li> <li>• Management planning documentation including a relevant forestry</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> </ul>




	<p><del>b) Adopting a precautionary approach, the high conservation value of ancient semi-natural woodlands shall 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>	<p>authority management plan and restocking plans</p> <ul style="list-style-type: none"> <li>• Ancient woodland inventories</li> <li>• Other studies</li> <li>• Monitoring records.</li> </ul>	<ul style="list-style-type: none"> <li>• Vegetation</li> <li>• <del>Old</del> Veteran trees</li> <li>• Historical and archaeological features and <b>heritage assets</b></li> <li>• Landscape implications.</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 therefore often requires adoption of management regimes as well as targeted interventions.</p> <p>Management should be in accordance with the relevant forestry authority's and/or statutory nature conservation agency's guidance for semi-natural woodlands. Owners/managers should seek advice from experts where necessary.</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 <del>may</del> <b>can</b> 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> <b>threats</b> <del>may</del> <b>can</b> include:</p> <ul style="list-style-type: none"> <li>• Browsing by rabbits, deer and other animals</li> <li>• <b>Over</b>-grazing by livestock</li> <li>• <del>Colonisation by</del> <b>Spread of</b> invasive non-native species</li> <li>• Visitor pressure</li> <li>• <b>Tree pests and diseases.</b></li> </ul> 
4.3	Management of plantations on ancient woodland sites (PAWS)		

<p>4.3.1</p>	<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) <del>The owner/manager shall:</del></p> <ul style="list-style-type: none"> <li><del>• Identify and evaluate remnant features</del></li> <li><del>• Identify and evaluate threats</del></li> <li><del>• Adopting a precautionary approach, prioritise actions based on the level of threat and the value of remnants, and</del></li> <li><del>• Implement targeted actions.</del></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</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 features and recording their condition</li> <li>• Remnant and conservation feature threat analyses</li> <li>• Field observation</li> <li>• Discussion with the owner/manager.</li> </ul>	<p>Establishing the validity of the site's status <b>may take account of a range of evidence and</b> 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>• <b>The potential for restoration</b></li> <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><b>Owners/managers should seek advice from experts where necessary.</b></p> <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><del>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 buffered.</del></p> <p>A precautionary approach is appropriate in most instances even if initially no remnant features <b>may</b> appear to be present. A gradual approach should be the default where remnants are threatened. <b>The site should be assessed for the presence of remnant features before each significant intervention as the</b></p>
--------------	--	---	---


	<p>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>e) Remnants and conservation features are maintained and enhanced.</p> <p>f) Management demonstrates, over time and spatially, a continued reduction in the level of threat to remnant and conservation features and an increasing site-native canopy and characteristics of a type appropriate to the site.</p> <p>g) Remnant and conservation features are marked on maps and records are kept of their condition.</p>		<p>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 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 features are enhanced and buffered. <b>Non-native species may be retained where they have a high ecological or cultural value (e.g. veteran trees).</b></p> <p>Active management in support of PAWS restoration can 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> <li>• Adopting LISS.</li> </ul> <p>PAWS should be actively managed to address potential threats. These can include shading, deer browsing and 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 <del>may</del> <b>can</b> help inform the choice of management prescriptions. A gradual <b>precautionary</b> approach is preferred but in some situations this might 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 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.</del></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 can also inform restoration.</p> 
4.4	Other priority habitats		

UKWAS 5.0 (Draft 01.12.24)



4.4.1	<p>a) The principal priority habitats are identified and their condition is established.</p> <p>b) Adopting a precautionary approach, the identified priority habitats are maintained and where possible enhanced.</p>	<ul style="list-style-type: none"> <li>• Field observation and maps</li> <li>• Workers are aware of such habitats and of plans for their management</li> <li>• Discussion with the owner/manager demonstrates how areas will be safeguarded and/or enhanced</li> <li>• Planning documentation shows how areas will be safeguarded and/or enhanced.</li> </ul>	<p>This requirement applies to any priority habitats not already identified under sections 4.1 and 4.2.</p> <p>Principal priority habitats are likely to be those of greatest scale or biodiversity value.</p> <p>Identifying priority habitats can be challenging. Statutory nature conservation bodies might hold maps of priority habitats and guidance on condition assessment. Identifying habitats and establishing their condition is likely to involve an element of ground assessment.</p> <p>Where priority habitats are present but too small to map accurately or are part of a complex mosaic of mixed habitats, these areas should be identified on an indicative map showing where priority habitats are present or there is a habitat mosaic.</p> <p>Identifying and establishing the condition of priority habitats 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>Where the boundaries of a priority habitat extend beyond the boundary of the WMU, it might not be possible for the owner/manager acting alone to significantly influence or change the overall condition of the site.</p> 
4.4 4.5	Protection of conservation values in other woodlands and semi-natural habitats		
4.4.1 4.5.1	<p>a) Areas, species and features of conservation value in other woodlands are identified.</p> <p>b) The identified areas, species and features of conservation value are</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 the statutory nature conservation sites, ASNW, and PAWS (see sections 4.2 and 4.3) and other priority habitats identified in sections 4.1-4.4.</p> <p>Priority should be given to woodlands or woodland relicts that may have retained and/or acquired valuable ecological characteristics.</p> <p>Typically, these values may can be found in:</p> <ul style="list-style-type: none"> <li>• Semi-natural woodlands</li> </ul>


	<p>maintained and where possible enhanced.</p> <p>c) Adverse ecological impacts <b>are</b> identified and inform management.</p>		<ul style="list-style-type: none"> <li>• Long established woodlands of planted origin</li> <li>• Woodland relicts</li> <li>• Veteran trees</li> <li>• New native woodlands</li> <li>• <b>Wood pasture and parkland.</b></li> </ul> <p>Positive management operations or interventions to promote semi-natural woodland structure can 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> <li>• Promoting any natural regeneration or existing native trees</li> <li>• Planting or restocking of areas with site-native species 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>• 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 <b>may can</b> include:</p> <ul style="list-style-type: none"> <li>• Browsing by rabbits, deer and other animals</li> <li>• Grazing by livestock</li> <li>• <del>Colonisation by</del> <b>Spread of</b> invasive non-native species</li> <li>• Visitor pressure.</li> </ul>
<p><b>4.4.2</b> <b>4.5.2</b></p>	<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), <b>are</b> identified and enhanced, restored or</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 <del>shall</del> <b>are to</b></li> </ul>	<p>This requirement relates to small-scale habitats within the WMU, which <del>may</del> <b>can</b> include:</p> <ul style="list-style-type: none"> <li>• Moorland</li> <li>• Peatland</li> <li>• <b>Wetland</b></li> <li>• Heathland</li> <li>• Wood pasture <b>and parkland</b></li> <li>• Grassland</li> </ul>


	<p>treated in a manner that does not lead to further degradation of their potential for restoration.</p> <p>b) Adverse ecological impacts <b>are</b> identified and inform management.</p>	<p>be protected and/or safeguarded</p> <ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>• Freshwater habitats such as ponds.</li> </ul> <p>Appropriate management <b>may can</b> 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 <b>may can</b> include:</p> <ul style="list-style-type: none"> <li>• Browsing by rabbits, deer and other animals</li> <li>• Grazing by livestock</li> <li>• <del>Colonisation by</del> <b>Spread of</b> invasive non-native species</li> <li>• Drainage</li> <li>• <b>Lack of appropriate management or grazing e.g. development of dense scrub.</b></li> </ul> <p>Non-native species may be retained where they have a high ecological or cultural value.</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><i>See also section 2.13.2 which covers larger-scale habitat restoration through conversion to non-forested land.</i></p> 
--	--	---	---


<p>4.4.3 4.5.3</p>	<p>a) Areas of semi-natural habitats constitute a minimum of <del>5%</del> 10% of the WMU that is either native woodland or of equivalent biodiversity value.</p> <p>b) Where existing habitats or restored remnant features comprise less than <del>5%</del> 10% of the WMU, the owner/manager takes action to <del>convert</del> restore other areas to a more natural conditions.</p> <p>c) Areas of semi-natural habitat are identified as the 'representative sample area'.</p>	<ul style="list-style-type: none"> <li>• Management planning documentation</li> <li>• Field observation</li> <li>• Map evidence.</li> </ul>	<p>Where areas are to be restored to a more natural condition, the owner/manager should prioritise those woodland and habitat types already present on the site and/or those within their natural range.</p> <p>Preference should be given to <del>restoring to</del> restoration of semi-natural woodland unless there are clear biodiversity gains to be made by restoring to open-ground habitats. Restoration to woodland should not be at the expense of other priority habitats.</p> <p>Where restoration to a non-forested 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>These areas contribute to the minimum of 15% of the WMU where the primary objective is management for the conservation and enhancement of biodiversity is the primary objective as identified in section 2.11.1.</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> <p>Representative sample areas in a WMU serve to:</p> <ul style="list-style-type: none"> <li>• Represent the environmental values that exist in native ecosystems</li> <li>• Inform forest or habitat management practices so as best to maintain or enhance environmental values</li> <li>• Form part of the conservation area network.</li> </ul> <p><i>See also section 2.13 on conversion to non-forested land.</i></p>
<p>4.5 4.6 Watershed management and erosion control</p>			
<p>4.5.1 4.6.1</p>	<p>a) Areas and features of critical importance for watershed management or erosion control are identified</p>	<ul style="list-style-type: none"> <li>• Records of consultation</li> <li>• Management planning documentation</li> </ul>	<p>Situations where <del>forest</del> woodland management is critical for watershed management or erosion control are relatively rare and are likely to be identified during consultation processes.</p>




	<p>and their condition is established in consultation with relevant statutory bodies.</p> <p>b) Where critically important areas or features are identified, their management is agreed with the relevant statutory bodies.</p>	<ul style="list-style-type: none"> <li>Monitoring records</li> <li>Licences or consents.</li> </ul>	<p>Further information is available in UKFS guidelines on soils and water.</p> <p>The areas included in this requirement contribute to the conservation area network.</p> 
4.6 4.7	Maintenance of biodiversity and ecological functions		
4.1.2 4.7.1	<p>Appropriate measures are taken to protect identified priority <del>habitats and</del> species and their habitats in accordance with plans agreed with nature conservation agencies.</p> <p>In planning and implementing measures within the WMU, the owner/manager takes 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>Local records of species presence</li> <li>Management planning documentation</li> <li>Discussion with the owner/manager.</li> </ul>	<p>Priority species include:</p> <ul style="list-style-type: none"> <li>Endemic species</li> <li>Species on UK Red Lists 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>Habitat protection measures should include steps to protect features such as breeding sites, resting places, roost sites, core feeding areas and display sites of priority species.</p> 
4.6.1 4.7.2	<p>Natural reserves constitute a minimum of 1% of the WMU. These reserves are located where they will deliver biodiversity benefits, and any adverse ecological impacts are managed on a minimum-intervention basis.</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 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 4.1-4.6 may fulfil this requirement.</p>



	<p>Natural reserves:</p> <ul style="list-style-type: none"> <li>• <del>Are located where they will deliver the greatest biodiversity benefit</del></li> <li>• <del>Constitute a proportion of the WMU equivalent to at least 1% of the plantation area and 5% of the semi-natural woodland area.</del></li> </ul>		<p>These areas contribute to the minimum of 15% of the WMU where <b>the primary objective is</b> management for conservation and enhancement of biodiversity <del>is the primary objective</del>, as identified in section 2.11.1.</p> <p>Potential adverse impacts can include:</p> <ul style="list-style-type: none"> <li>• Browsing by rabbits, deer and other animals</li> <li>• Grazing by livestock</li> <li>• Spread of invasive non-native species</li> <li>• Visitor pressure.</li> </ul> 
4.6.2 4.7.3	<p>Long-term retentions and/or areas managed under <b>LISS</b> <del>lower impact silvicultural systems (LISS)</del> constitute a minimum of 1% of the WMU. Where this is impracticable, an additional minimum 1% of natural reserve <b>is</b> 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 <del>4.1-4.5</del> 4.1-4.6 may fulfil this requirement.</p> <p>These areas contribute to the minimum of 15% of the WMU where <b>the primary objective is</b> management for conservation and enhancement of biodiversity <del>is the primary objective</del>, as identified in section 2.11.1.</p>
4.6.3 4.7.4	<p>The owner/manager <b>plans</b> and <b>takes</b> action to maintain continuity of veteran tree habitat by:</p> <ul style="list-style-type: none"> <li>• Keeping <b>and protecting</b> existing veteran trees, and</li> <li>• Managing or establishing suitable trees to eventually take</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>• <del>If there is a conflict with safety, the issues have been documented</del></li> <li>• <b>Safety issues are assessed and managed</b></li> </ul>	<p><del>This requirement applies in WMUs where there are existing veteran trees.</del></p> <p><b>Owners/managers should seek specialist advice on veteran tree management where appropriate and make use of trained workers.</b></p> <p>Owners/managers of WMUs without veteran trees <del>may choose to</del> <b>should</b> promote future-veteran trees, as part of their wider management to maintain and/or enhance biodiversity value.</p> <p>Actions <del>may</del> <b>can</b> include:</p>

	the place of existing veterans.	<p>is accordance with current guidance</p> <ul style="list-style-type: none"> <li>Management planning documentation reflects the presence of veteran trees and plans for the recruitment of veteran trees.</li> </ul>	<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 <del>or lopping</del> 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 good practice guidance can ensure that veteran tree management does <del>should</del> not conflict with safety of the public or workers.</p> 
4.6.4 4.7.5	<p>a) The owner/manager plans and takes action to accumulate a diversity of both standing and fallen deadwood over time in all wooded parts of the WMU, including felled areas.</p> <p>b) The owner/manager identifies areas where deadwood is likely to be of greatest nature conservation benefit and 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>Field observation</li> <li>Harvesting contracts</li> <li>Discussion with the owner/manager and workers</li> <li>If there is a conflict with safety or woodland health, the issues have been documented</li> <li>Management planning documentation</li> <li>Evidence of planning for accumulation of deadwood over time.</li> </ul>	<p>The owner/manager should refer to deadwood guidance produced by relevant statutory conservation agencies, forestry authorities and others when identifying areas of greatest nature conservation benefit and when planning actions to accumulate deadwood.</p> <p>To provide for a functional woodland ecosystem, 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> or more per hectare averaged – though not uniformly distributed – across the WMU. In temperate natural woodlands accumulations of deadwood of 150 m<sup>3</sup> or more per hectare are often found and might be aspired to in areas of greatest nature conservation benefit.</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>Deadwood should comprise a wide range of forms and decay-states and actions may include:</p> <ul style="list-style-type: none"> <li>Keeping standing dead trees and snags</li> </ul>


			<ul style="list-style-type: none"> <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 thinning or clearfelling, 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>• Wood pasture/parklands</li> <li>• Ancient semi-natural woodland with veteran trees</li> <li>• Long-term retentions and natural reserves</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 native 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><i>See also section 5.2.1 in relation to mitigation of risks to public health and safety.</i></p> 
4.7 4.8	Maintenance of local native seed sources		

<p>4.7.4 4.8.1</p>	<p>a) In woodlands identified in sections 4.1-4.4, where appropriate and possible, owners/managers use natural regeneration or planting stock from parental material growing in the local native seed zone (native species).</p> <p>b) In ancient and other semi-natural woodland:</p> <ul style="list-style-type: none"> <li>• Preference is given to natural regeneration. Where natural regeneration is insufficient, planting stock from 'source-identified' stands in the local native seed zone is used if it is available</li> <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 is considered appropriate.</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 forest resilience.</p> <p>The identity code used for parental material includes an 'N' when it applies to native material from known indigenous sources.</p> 
<p>4.8 4.9</p>	<p>Protection of cultural and historic environment sites Cultural and historical features/sites</p>		
<p>4.8.4 4.9.1</p>	<p>Through engagement with the relevant statutory historic environment agencies, local</p>	<ul style="list-style-type: none"> <li>• Any Known significant heritage features are</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>authorities, local people and other interested parties, and using other relevant sources of information, the owner/manager:</p> <ul style="list-style-type: none"> <li>Identifies <del>sites and</del> 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 consultation with statutory historic environment agencies, local authority archaeology services, and other relevant organisations.</li> </ul>	<p>mapped and <del>or</del> documented</p> <ul style="list-style-type: none"> <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>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</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> <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 <del>walkover</del> survey or consultation <del>may</del> might be required to inform decisions and provide baseline evidence.</p> <p>Sites of potential historical importance discovered during the course of <del>forest</del> woodland management should be reported to the local authority and relevant statutory historic environment agency agencies.</p> <p>The areas included in this requirement contribute to the conservation area network.</p>
--	--	--	---

			See also section 2.3.1 in relation to consultation. 
4.9 4.10	Game-rearing, shooting and fisheries management		
4.9.4 (part) 4.10.1	<p>a) Game-rearing and release, <del>shooting and fishing</del> are carried out <b>sustainably and</b> in accordance with the spirit of codes of practice produced by relevant organisations.</p> <p>b) <b>New game-release pens are located outside areas of high conservation value.</b></p> <p>c) <b>Within 24 months of the effective date of this standard, existing game-release pens in areas of high conservation value are taken out of use.</b></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><b>Areas identified within the WMU as of high conservation value should not be used for game release.</b></p> <p>Release and feeding areas should be located in areas where there will be low impact on ground flora, <b>arboreal lichens and priority species.</b></p> <p><b>Redundant game-release pens and associated infrastructure should be removed in accordance with section 3.7.1.</b></p> 
4.9.4 (part) 4.10.2	<p><del>Game rearing and release, shooting and fishing</del> <b>Shooting is carried out sustainably and</b> in accordance with the spirit of codes of practice produced by relevant organisations.</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> </ul>	<p><del>Consider</del> Impacts on priority habitats and species and other native species <b>should be considered. Where appropriate, issues should be discussed with neighbouring land managers.</b></p> <p><del>Release and feeding areas should be located in areas where there will be low impact on ground flora.</del></p> <p><b>Pest and predator control, where necessary, should be carried out in line with <del>best</del> good practice using methods that meet all regulatory requirements.</b></p>

N.B. Collation from several source documents means that this document will contain some errors so always use the definitive Version 5.0 document for any use other than to get an idea of where changes have been made.

		<ul style="list-style-type: none"> <li>• Permissions from statutory bodies where these are required</li> <li>• Membership of a sporting and conservation organisation.</li> </ul>	<p><del>The use of lead shot over wetland is restricted by regulations.</del></p> 
4.9.4 (part) 4.10.3	Non-toxic ammunition is used in all shooting activities with the exception that lead-based 0.22 calibre sub-sonic ammunition and air rifle pellets may be used for grey squirrel control until alternatives are readily available.	<ul style="list-style-type: none"> <li>• Sporting leases, agreements and licences stipulate the use of non-toxic ammunition.</li> </ul>	<p>The intent of this requirement is to 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> <p>The transition period for lead-based 0.22 sub-sonic ammunition and air rifle pellets is to allow for technical innovation and improved availability of alternative ammunition and/or adoption of alternative control techniques.</p> <p>The steering group will conduct an evidence-based review every two years from the effective date of this standard to determine whether there is objective evidence for not transitioning to non-toxic alternatives to lead-based 0.22 sub-sonic ammunition and air rifle pellets taking into account efficacy and commercial availability.</p>
4.9.4 (part) 4.10.4	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> </ul>	<p>Associated activities include bankside vegetation management, infrastructure such as permanent shelters and huts, parking locations and waste disposal locations.</p> <p>Leases and fisheries management practice should require appropriate biosecurity measures to be taken to prevent accidental importation of invasive non-native species or diseases.</p>



		<ul style="list-style-type: none"><li>• Membership of a sporting and conservation organisation.</li></ul>	
--	--	---	--


UKWAS 5.0 (tracked changes)

## 5. People, communities and workers

UKWAS 5.0 (tracked changes)

## 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.	<ul style="list-style-type: none"> <li>• Maps show public rights of way and/or core paths through or beside the wood</li> <li>• Field observation to confirm that access is available and paths maintained.</li> </ul>	<p>Across the UK, 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 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> <del>By voluntarily dedicating woodland for public access under the</del> In addition to public rights of way, the Countryside and Rights of Way Act 2000 (CROW) provides for the voluntary dedication of woodland for public access.</p>
<del>5.1.1</del> 5.1.2	<del>a) Existing permissive or traditional uses of the woodland</del> Permissive uses authorised by the owner/manager and traditional rights are identified and sustained, except when	<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> </ul>	<p>Permissive <del>and traditional</del> 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> </ul>


	<p>such uses can be shown to threaten the integrity of the woodland or the achievement of the objectives of management.</p> <p><del>b) A precautionary approach is adopted in relation to water supplies.</del></p>	<ul style="list-style-type: none"> <li>Field observation <del>of public rights of way to confirm that permissive uses and traditional rights are respected</del></li> <li>Evidence presented to justify any restriction of permissive or traditional uses.</li> </ul>	<ul style="list-style-type: none"> <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><del>Permissive routes can be closed annually to maintain their permissive status.</del></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 biodiversity objectives (having regard to codes of good practice)</li> <li>Water supplies.</li> </ul> <p>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 providing appropriate access infrastructure.</p> <p>Traditional uses that exploit the woodland resource (e.g. peat cutting) should be carried out at a traditional scale in order to minimise negative impacts on the biodiversity or carbon balance of the WMU.</p> <p>'Integrity' refers principally to maintaining the ecological integrity maintenance of the woodland.</p> 
<p><del>5.1.2</del> 5.1.3</p>	<p>a) There is provision for some public access subject only to limited exemptions.</p> <p>b) Where there is a special demand for further public access, specific types of access provision or community use for the</p>	<ul style="list-style-type: none"> <li>Field observation to confirm that access is available</li> <li>Maps show public rights of way and/or core paths through or beside the wood</li> </ul>	<p>Woodlands containing or adjoining notable historic environment or ecological features or in urban areas may might attract large numbers of visitors even to small properties. This presents an opportunity to promote public and community access and/or educate visitors about the multiple benefits of forestry.</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>purpose of environmental education, the owner/manager makes reasonable efforts to meet this demand.</p>	<ul style="list-style-type: none"> <li>• Evidence of publicised annual open days or guided walks</li> <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>The owner/manager should take into account, and should seek professional advice on, necessary safety and insurance provisions.</p> <p>Support and advice might be available for sustainable access and community use including educational visits and studies.</p> <p>Unlike in 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 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>  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.</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> </ul>
--	--	--	---


UKWAS 5.0 (track changes)

			<ul style="list-style-type: none"> <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> 
5.1.4	<p>a) Private water supplies are identified and recorded through engagement with local people.</p> <p>b) Management to protect the identified private water supplies is agreed in consultation with downstream users.</p>	<ul style="list-style-type: none"> <li>• All known private water supplies mapped</li> <li>• Field observation</li> <li>• Workers are aware of water supplies and of plans for their management</li> <li>• Maps</li> <li>• Discussion with the owner/manager demonstrates how water supplies will be protected</li> <li>• Planning documentation shows how water supplies will be protected.</li> </ul>	<p>Private water supplies include those for individual households and for communities.</p> <p>Identifying and recording of private water supplies 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>The protection of private water supplies in the context of this requirement encompasses:</p> <ul style="list-style-type: none"> <li>• Legal obligations of the relevant parties</li> <li>• Infrastructure (developed legally or on a permissive basis)</li> <li>• Potential impacts of operations</li> <li>• Management of the water source area.</li> </ul> <p>Where the boundaries of the water source area or infrastructure extend beyond the boundary of the WMU, it might not be possible for the owner/manager acting alone to fully protect the water supply. However, the owner/manager should respond positively to requests to collaborate with other interested parties to protect the overall water supply.</p> <p>The areas included in this requirement contribute to the conservation area network.</p>
5.2	Minimising adverse impacts		
5.2.1	The owner/manager mitigates the risks to public	<ul style="list-style-type: none"> <li>• No evidence of legal non-compliance</li> </ul>	<p>Examples of impacts include:</p> <ul style="list-style-type: none"> <li>• Public safety and access implications of woodland operations</li> </ul>


	health and safety and other negative impacts of woodland operations on local people and visitors.	<ul style="list-style-type: none"> <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> <li>Timber transport management plan.</li> </ul>	<ul style="list-style-type: none"> <li>Timber traffic, particularly in and around the woodland</li> <li>Natural hazards identified as posing risks to workers and the public, e.g. for example, hazardous trees 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 responds 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 promotes the integration of woodlands into the local economy by:	<p>Evidence of:</p> <ul style="list-style-type: none"> <li>Agreements with local people or communities</li> </ul>	Promotion of integration into the local economy may be achieved by:



	<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> <p>a) Consistent with their other objectives, the owner/manager makes the best use of the woodland's potential products and services.</p> <p>b) Consistent with their other objectives, the owner/manager is receptive to requests from local people or communities to make use of woodland products and services.</p> <p>c) The owner/manager provides local people with equitable opportunities for employment and to supply goods and services.</p>	<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>	<p>The intent of this requirement is to strengthen and diversify the local economy. Examples of how this can be achieved include:</p> <ul style="list-style-type: none"> <li>• Entering agreements with local people or communities to make use of products or services</li> <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 are identified in section 2.2.1(b) and include non-wood forest products <del>non-timber woodland products</del> and recreational activities.</p> <p>An example of how the owner/manager <del>might</del> can 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 <del>may</del> might highlight opportunities to fulfil this requirement.</p>
5.4	Health and safety		

5.4.1	<p>a) There <b>is</b>:</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 <b>are</b> contingency plans for any accidents.</p> <p>c) There <b>is</b> appropriate competency.</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 <b>guidance and</b> codes of practice</li> <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</li> </ul>	<p>This requirement relates to <b>anyone everyone</b> on the work site, including <b>all categories of</b> workers 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 <b>References reference documents</b>.</p> 
-------	--	--	--

		<p>where safety requirements are not met</p> <ul style="list-style-type: none"> <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	<p>All workers, <b>including volunteers</b>, have appropriate <b>supervision</b>, qualifications, training and/or experience to carry out their roles in conformance to the requirements of this standard, <del>unless working under proper supervision if they are currently undergoing training.</del></p>	<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 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 should be treated equitably with employees in relation to this requirement.</b></p> <p><b>Supervision is especially important for those workers, including volunteers, undergoing training.</b></p>

5.5.2	<p><del>The owner/manager of</del> Large enterprises promote training and encourage and support new recruits to the industry.</p>	<ul style="list-style-type: none"> <li>• Documented policy</li> <li>• Involvement with industry bodies promoting training, including FISA</li> <li>• Records of training sessions, provision of sites for training, <del>subsidies funding</del> for training courses.</li> </ul>	<p>Promotion of training <del>may can</del> be achieved through:</p> <ul style="list-style-type: none"> <li>• Providing sites for training courses</li> <li>• Offering <del>subsidies funding</del> for training courses</li> <li>• Graduate training opportunities, apprenticeships or sponsorships.</li> </ul> <p>Owners/managers of small-medium enterprises should also consider promoting training and development opportunities.</p>
5.6	Workers' rights		
5.6.1	<p>a) There <del>is</del> compliance with <del>workers' rights legislation, including</del> 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>c) There is no use of child labour except as permitted under employment legislation.</p> <p>d) There is compliance with modern slavery legislation.</p> <p><del>b</del> e) Workers <del>are</del> not deterred from joining a trade union or employee association.</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>Owners/managers should promote flexible working practices.</p> <p>The statutory national living wage is defined in national minimum wage regulations. The owner/manager <del>may choose</del> is 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> 

	<p>e f) Direct employees <b>are</b> permitted to negotiate terms and conditions, including grievance procedures, collectively should they so wish.</p> <p>d g) Workers have recourse to mechanisms for resolving grievances which <b>are developed through culturally appropriate engagement and</b> meet the requirements of statutory codes of practice.</p> <p>e h) Wages paid to workers meet or exceed the statutory national living wage.</p>		
5.7	Insurance		
5.7.1	The owner/manager and workers <b>are</b> 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>	
5.7.2	<b>For authorised events and licensed activities held in the WMU by third parties, the owner/manager requires that adequate insurance is held by the responsible party.</b>	<ul style="list-style-type: none"> <li>• Insurance documents</li> <li>• Licence agreements.</li> </ul>	

UKWAS 5.0 (tracked changes)

# Glossary of terms

UKWAS 5.0 (tracked changes)

## Glossary of terms

Access (for public)	Refers Access 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.
ASNW	Ancient semi-natural woodland.  See <i>Woodland</i> .
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 or woodland)	<p>Broadleaved trees are characterised by their broad leaves and most are deciduous. They produce 'hardwood' timber.</p> <p><i>Also see Conifers (trees).</i></p>
Buffer (buffering)	<p><del>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.</del></p> <p>An area of land where use and/or management is restricted to conserve or enhance the value of adjacent environmental, social or cultural values or heritage assets.</p> <p>Examples of buffering include 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.</p>
Carbon balance	<p>The carbon balance is an expression of whether over time the store of carbon in an ecosystem is increasing, decreasing or in equilibrium.</p> <p>A positive carbon balance indicates that carbon is being accrued whilst a negative carbon balance indicates that carbon is being lost.</p>
Certification body	<p>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.</p> <p><i>Also see Accreditation service.</i></p>
Certification scheme	<p>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.</p> <p><i>Also see Chain-of-custody certification.</i></p>
Chain-of-custody certification	<p>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.</p>

Circular economy	The circular economy is a model of production and consumption which involves sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products for as long as possible. In this way, the life cycle of products is extended. In practice, it implies reducing waste to a minimum. When a product reaches the end of its life, its materials are kept within the economy wherever possible. These can be productively used again and again, thereby creating further value.
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). <del>Sometimes a</del> A scatter or small clumps of trees may be left standing within the felled area.
Commercially exploited	An activity or operation which results in a financial transaction or benefit and is detrimental to a priority species.
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 (trees or woodland)	Coniferous trees are characterised by their needle or scale-like leaves and most are evergreen. They produce 'softwood' timber.  <i>Also see Broadleaved (trees).</i>
Conservation	Management activities designed to maintain or enhance the identified environmental or cultural values in the long-term. Management activities may range from zero or minimal intervention to a specified range of appropriate interventions and activities designed to maintain or enhance, or be compatible with maintaining, or enhancing these identified values.
Conservation area network	Those areas of the WMU for which the primary and in some circumstances the exclusive objective is the conservation of environmental and biodiversity values, ecosystem services and community needs, or cultural and heritage values as listed below: <ul style="list-style-type: none"> <li>• Environment and biodiversity values <ul style="list-style-type: none"> <li>- Statutory nature conservation sites (section 4.1)</li> <li>- Ancient semi-natural woodland (ASNW) (section 4.2)</li> <li>- Plantations on ancient woodland sites (PAWS) (section 4.3)</li> <li>- Other priority habitats (section 4.4)</li> <li>- Other woodlands and semi-natural habitats with identified areas, species or features of conservation value (section 4.5)</li> </ul> </li> </ul>

- Ecosystem services and community needs
  - Areas and features of critical importance for watershed management and erosion control (section 4.6) as they provide important ecosystem services
  - Private water supplies (section 5.1.4)
- Cultural and heritage values
  - Cultural and historic environment sites (section 4.9).

Conversion

A lasting change induced by human activity.

Conversion includes gradual degradation as well as rapid transformation. This may be characterised by changes that significantly and negatively affect an area's species composition and/or diversity, structure and/or function, reduces the capacity to supply products, biodiversity or deliver ecosystem services, and/or significantly impacts its cultural or historical values. The point at which conversion occurs is where an area's recovery of its structure or function has proved to be or is likely to be unachievable.

Note: The establishment of ancillary infrastructure necessary to implement the objectives of responsible forest management (e.g. forest roads, timber stacks, fire protection) is not considered conversion.

Coppice

Management based on regeneration by regrowth from cut stumps (coppice stools). The same stool is used through several cycles of cutting and regrowth.

The term 'coppice with standards' describes 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.

*Also see Short rotation coppice.*

~~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 **heritage assets**, and landscapes including ancient woodlands **and veteran trees**.

Culturally appropriate	Adopting ways of engaging or consulting target groups that are sensitive to their customs, values and ways of life.
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 sources, 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	The benefits people obtain from ecosystems. These include: <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 <a href="#">Environmental Impact Assessment Regulations</a> <a href="#">the EU Environmental Assessment Directive</a> .

Environmental values	<p>The following set of elements of the biophysical and human environment:</p> <ul style="list-style-type: none"> <li>• Ecosystem functions (including carbon sequestration and storage)</li> <li>• Biological diversity</li> <li>• Water resources</li> <li>• Soils</li> <li>• Atmosphere</li> <li>• Landscape values (including cultural and spiritual values).</li> </ul> <p>The actual worth attributed to these elements depends on human and societal perceptions.</p>
Felling <del>permission</del> <del>licence</del>	A <del>permission</del> or 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.
<del>FEPA</del>	<del>Food and Environment Protection Act 1985.</del>
FISA	Forest Industry Safety Accord.
Forest	Synonymous with woodland.
	<i>See Woodland.</i>
<del>Forest management unit (FMU)</del>	<del>Synonymous with woodland management unit.</del>
	<del><i>See Woodland management unit (WMU).</i></del>
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, <del>Environment</del> and Rural <del>Development Affairs</del> /Northern Ireland Forest Service, <del>Scottish</del> Forestry <del>Commission Scotland</del> 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 Licence	General Licences are permissive licences, meaning that users do not need to apply for them, but they must comply with their terms and conditions.

	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.
Genotype	The genetic constitution of an organism, as contrasted with its expressed characteristics which are known as the phenotype.
Genetically modified organism (GMO)	Organisms in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination. This includes gene editing.
Glade	Small area of open ground which forms an integral part of the woodland.
Greenhouse gas	Gases that trap heat in 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 asset	A building, monument, site, place, area or landscape having a heritage interest. Heritage assets can 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	Ecologically important woodland and non-woodland areas and features of ecological and biodiversity interest or critical ecosystem services identified in sections 4.1-4.3 4.1-4.4 and 4.5 4.6.
Historic environment	<del>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.</del> All tangible evidence of past interactions between humans and their environment, incorporating heritage assets, archaeological sites, historic landscapes and natural heritage.
Horticultural	<del>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.</del>
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 & Development Office's 'UK Treaties Online' (UKTO) database on <a href="http://foe.gov.uk">foe.gov.uk</a> <a href="http://Gov.uk">Gov.uk</a> lists those involving the UK.
Invasive <b>non-native</b> (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.  <i>Also see Landscape unit.</i>
Landscape unit	An area of broadly homogeneous landscape character.
Large enterprise	An organisation with at least 250 employees.
<b>LISS</b>	'Lower-impact silvicultural systems' including group selection, shelterwood or under-planting, small coupe felling, coppice or coppice with standards, minimum intervention and single tree selection systems which are suitable for windfirm conifer woodlands and most broadleaved woodlands.  <i>Also see Broadleaved, Conifer, Coppice, Group selection, Minimum intervention, Shelterwood, Single tree selection, Small coupe felling, and Under-planting.</i>
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.
<a href="#">Long-term retention</a>	<del>Individual, stable stands and clumps of trees retained for environmental benefit significantly beyond the age or size generally adopted by the woodland enterprise.</del>
Lop and top	Woody debris from cutting operations, sometimes converted into chippings.
Low-intensity managed woodland	Woodland management units (WMUs) are classed as being managed in a low-intensity manner when a) the rate of timber harvesting is less than 20% of the mean annual increment (MAI) within the total production woodland area of the <del>unit</del> WMU, and <del>AND</del> either:

- ~~b)~~ The annual harvest from the total production woodland area is less than 5,000 cubic metres, ~~or~~ ~~OR~~
- ~~e)~~ 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~~ ~~WMU~~-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)

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

Management planning  
documentation

See *Woodland management plan*.

Mineral extraction site

Sites used for extraction of surface or subsurface mineral products or other natural resources, including but not limited to quarries, borrow pits, sand and gravel operations, oil and gas extraction and mining operations.

Minimum intervention

Management with no systematic felling or planting of trees. Operations normally ~~permitted~~ ~~accepted~~ are fencing, control of ~~exotic~~ ~~non-native~~ 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 ~~can~~ 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.

*Also see Minimum intervention.*

Non-native species

Species which are not classified as native species.

*Also see Native (species) and Invasive non-native (species).*

~~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 product (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 genetic)

The original natural genetic source of ~~these the trees which are native to the site.~~

*Also see Provenance.*

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.

*Also see Forestry leaseholder.*

Parkland

*See Wood pasture.*

PAWS

Plantation on ancient woodland site.

*See Woodland.*

Peatland

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.

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	<i>See Woodland.</i>
Plantation on ancient woodland site (PAWS)	<i>See Woodland.</i>
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 <b>as required</b> under Section 41 (England) <del>and Section 42 (Wales)</del> of the Natural Environment and Rural Communities (NERC) Act 2006, <b>Section 7 of the Environment (Wales) Act 2016</b> , Section 2(4) of the Nature Conservation (Scotland) Act 2004, and Section 3(1) of the Wildlife and Natural Environment Act (Northern Ireland) 2011. <b>Lists of habitats identified by statutory agencies are published differently in each country; see the appendix of references.</b>  <i>Also see Statutory body.</i>
Priority habitats and/or species	<i>See Priority habitats and Priority species</i>
Priority species	Protected, rare, <b>threatened</b> and endangered species which are: <ul style="list-style-type: none"> <li>• Identified by statutory nature conservation and countryside agencies <b>as required</b> under Section 41 (England) <del>and Section 42 (Wales)</del> of the Natural Environment and Rural Communities (NERC) Act 2006, <b>Section 7 of the Environment (Wales) Act 2016</b>, <b>Section 7 of the Environment (Wales) Act 2016</b>, Section 2(4) of the Nature Conservation (Scotland) Act 2004, and Section 3(1) of the Wildlife and Natural Environment Act (Northern Ireland) 2011. <b>Lists of species identified by statutory agencies are published differently in each country; see the appendix of reference documents</b></li> <li>• Protected under the Wildlife and Countryside Act 1981</li> <li>• Protected under <b>the Habitats Regulations</b> <del>European law</del> (European Protected Species), and/or</li> <li>• Categorised as Near Threatened, Vulnerable, Endangered or Critically Endangered in the IUCN Red List</li> <li>• <b>Categorised as red or amber in the UK Red Lists</b></li> <li>• <b>Listed in Appendix I, II or III under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)</b></li> </ul>

- Endemic species.

For UKWAS, IUCN Red List and CITES species will qualify as priority species only if they are within or geographically close to their natural range.

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

Private water supplies

Any locally sourced water supply where the water is consumed for domestic and/or agricultural purposes or as part of a public or commercial activity. Private water supplies may come from a range of sources including wells, boreholes, rivers and streams.

A water supply includes any or all of the following: the abstraction point, distribution network, and associated buffer areas as outlined in the UK Forestry Standard and/or in any legal documents or obligations.

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

In England and Wales, Public Rights of Way are statutory rights of way ~~in England and Wales~~ and are recorded on Definitive Maps held by local authorities showing whether the right of way is by foot, horse or vehicle.

In Northern Ireland, records of Public Rights of Way are held by local authorities ~~district councils~~. There are three types: footpaths (walkers only), bridleways (walkers and horse riders), carriageways (walkers, cyclists, horse riders, horse-drawn and motor vehicles).

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.

Ramsar ~~Site 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 <del>may</del> <b>might</b> sometimes be provided and charges levied for their use.)  <i>Also see Access.</i>
Regeneration	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: <ul style="list-style-type: none"> <li>• Woodland specialist flora. These are species with a strong affinity for ancient woodland but <del>may</del> <b>can</b> vary in relation to geographic region</li> <li>• Trees originating from the pre-plantation stand. They can be maidens, standards, coppice stools or pollards and <del>may</del> <b>might</b> include ancient or veteran trees</li> <li>• <b>Natural regeneration of site-appropriate native trees</b></li> <li>• Deadwood originating from the pre-plantation stand, coarse woody debris and associated decomposer communities</li> <li>• Undisturbed woodland soil profile.</li> </ul> <p>These features provide the continuity of habitat with the pre-plantation phase.</p>
<b>Representative sample area</b>	<b>An area or areas of the WMU in which viable examples of semi-natural habitats occurring within their natural range are conserved or restored.</b>
Restocking	Replacing felled <del>areas</del> <b>trees</b> by sowing seed, planting or natural regeneration.
Retentions	<b>Individual trees, stable stands or clumps of trees retained, usually for environmental benefit, significantly beyond the age or size <del>for felling</del> generally adopted by the owner <del>for felling</del>.</b>
Ride	Permanent unsurfaced access route through woodland.
<b>Root zone</b>	<b>Root zones extend as a minimum to the area below the drip line or extent of the tree's crown.</b>
<b>Semi-natural habitat</b>	<b>Semi-natural habitats have ecological assemblages that are comprised mainly of locally native species and have retained some structural characteristics of the natural ecosystem. They might have evolved through traditional agricultural, pastoral or other human activities, and might depend on the continuation of</b>

these practices to retain their characteristic composition, structure and function. These habitats and ecosystems often have high value in terms of biodiversity and the services they provide.

Semi-natural habitats can include semi-natural woodland.

*Also see Native (species), and Woodland.*

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 can 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~~ 2 to 6 years.

*Also see Coppice.*

~~Short rotation forestry (SRF)~~

~~Short rotation forestry crops are typically harvested at between 8 and 20 years.~~

Significantly high carbon stock

In the context of this certification standard, this term refers to those woodlands which store a particularly high volume of carbon, whether in veteran or other living trees, deadwood or soils, and where conversion of the woodland to non-forested land would result in significant carbon loss over the long term.

~~Silviculture (silvicultural)~~

Silvicultural (silviculture)

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 <del>EU Habitats Directive</del> <b>Habitats Regulations (previously under the EU Habitats Directive)</b> .
Special Protection Area (SPA)	Area designated under the <del>Habitats Regulations (previously under the EU Birds Directive)</del> .
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, <del>NatureScot</del> <b>Scottish Natural Heritage</b>, 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, <del>and</del> <b>planning and archaeology services</b>.</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 ( <b>UKWAS</b> )	'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.  <i>Also see Group selection.</i>
<b>UK General Data Protection Regulation (GDPR)</b>	<b>The GDPR controls how personal information is used by organisations, businesses or the government.</b>

## UK Red Lists

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).

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).

## 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

~~Streams and rivers.~~ Any directly connected 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 ~~or above and below ground.~~

## Windthrow

Uprooting of trees by the wind.

## Windthrow risk

A technical assessment of risk based on local climate, topography, site conditions and tree height.

## WMU

*See Woodland management unit.*

## Wood pasture

Areas of historical, cultural and ecological interest including parkland, where grazing is managed in combination with a proportion of open-grown tree canopy cover.

## Woodland

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). The following woodland types are recognised:

- Those woodlands which are comprised mainly of locally native trees and shrubs, and have some structural characteristics of natural woodland are referred to as semi-natural woodland.
- 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 **plantations** or **woodlands of planted origin**. They often include a proportion of naturally regenerated trees and are often managed to become more like natural woodlands over time.
- Woodland is referred to as **ancient woodland** when it has been in continuous existence since before AD 1600 in England, Wales and Northern Ireland or since before AD 1750 in Scotland.
- The term **ancient semi-natural woodland (ASNW)** 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.
- The term **ancient woodland site** 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 **plantation on ancient woodland site (PAWS)**.

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.

Woodland type

*See Woodland.*

Workers

All employed persons including public employees as well as self-employed persons and volunteers. This includes **owners/managers**, part-time and seasonal employees, of all ranks and categories, including labourers, administrators, supervisors, executives, contractor's employees, self-employed contractors and sub-contractors, and other licensed operators.



# Reference documents

UKWAS 5.0 (tracked changes)

## Reference documents

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

#### The UK Forestry Standard (Fifth edition) (2023)

The UK Forestry Standard (UKFS) is the key reference document for UK forest and woodland management.

The UKFS is a technical standard for sustainable forest management developed by the four governments of the UK. It defines the requirements and provides guidance for foresters on how to practise sustainable forest management in the UK. In this way, it provides a basis for operating grant schemes and official controls and support for regulatory processes.

It also provides the foundation for voluntary certification and quality assurance schemes, and for assessing compliance with environmental management standards.

At the heart of the UKFS are two categories of requirements:

- Legal Requirements (LR) are the statutory requirements relevant to legislation in England, Scotland, Wales and Northern Ireland that have the most direct bearing on the management of forests. Adhering to these Legal Requirements supports legal compliance, while contravening them could lead directly to prosecution.
- Good Practice Requirements (GPR) are important forestry practices that help deliver sustainable forest management. Although they are not legal requirements, appropriate action will usually be necessary in order to deliver sustainable forest management.

The UKFS Guidelines (GL) set out how the Requirements can be met.

#### Other main reference documents

##### UKWAS Appendix of Reference Documents

Other key 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 listed under the five section headings of the certification standard.

## Further information sources

Information on the UK Forestry Standard - [gov.uk/government/publications/the-uk-forestry-standard](http://gov.uk/government/publications/the-uk-forestry-standard)

Information on forestry grant schemes and regulations may be obtained from the relevant forestry authorities: Forestry Commission (in England), Department of Agriculture, Environment and Rural Affairs/Northern Ireland Forest Service, Scottish Forestry, and Welsh Government/Natural Resources Wales or their successor bodies.

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.org.uk/](http://netregs.org.uk/)

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

~~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)

UKWAS 5.0 (tracked changes)

*This page has been left blank*

UKWAS 5.0 (tracked changes)

**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)