

Cutting down trees is not always bad for the environment

7 Mitigation: Managing our woodlands

Sustainable woodland management practices balance the wide range of benefits that woodlands provide, including biodiversity, recreation and effects on the carbon cycle.

Sustainable forest management means an ongoing cycle of trees growing and being harvested for timber products. It covers a range of approaches from 'energy forests' that are felled and replanted over rotations as short as seven years, to continuous cover stands that are never clear-felled, but from which timber trees are removed on a regular basis and allowed to regenerate naturally. However all approaches are characterised by maintenance of the amount of carbon stored in the long term, and continued growth.

Woods that are sustainably managed generally have higher rates of carbon storage (sequestration) than woodlands that are not managed. This is because when woodlands that are not managed approach the 'old growth' phase, the amount of carbon dioxide that they absorb from the atmosphere through photosynthesis, approaches the point where it is balanced by emissions through respiration, litterfall and decay.

They may even start to emit more carbon dioxide through respiration and decay than they take in through photosynthesis.

Woods where trees are periodically thinned are generally also better for associated woodland wildlife. More light is able to reach the forest floor – leading to an increase in diversity of woodland flowers, insects and animals. Careful management also helps to protect woodlands against hazards such as pests, diseases, storms and fire.

Deforestation on the other hand implies a change in land use to non-forested land. In many parts of the world, achieving a transition from deforestation to forest conservation and management is a challenge. The economic pressure for deforestation is greatest in developing countries, but every country in the world benefits from maintaining forest resources where trees are replanted when cut, absorbing more carbon.

But doesn't cutting down trees release more carbon dioxide to the atmosphere?

In well-managed forests, felling trees is part of the sustainable management cycle. Felled trees are replaced by young trees, by natural seeding or coppice regrowth. Fast-growing young trees absorb more carbon dioxide from the atmosphere than older trees. Trees that are felled can be used to produce wood products including woodfuel.

Independent forest certification

Certification provides a useful mechanism to demonstrate that forests are sustainably managed. The UK Forestry Standard and Guidelines (see Further reading and useful sources of

information) have an important function as the basis of sustainable forestry practice in the UK and for the independent UK Woodland Assurance Standard (UKWAS) which is used for voluntary independent certification.

There are two global forest certification schemes which demonstrate that timber and wood products come from legal and sustainable sources. These are:

- **FSC – Forest Stewardship Council**
- **PEFC – Programme for Endorsement of Forest Certification schemes**

These labels are currently found on a large number of product lines in the UK – from garden furniture, to bird boxes, brushes, wallpaper, doors, toilet tissue, paper books and pencils. In addition to timber, other forest products can also potentially be certified. Venison from Forestry Commission land is one such

non-timber product that is certified in the UK.

In the UK, the UK Woodland Assurance Standard is an independent certification standard for verifying sustainable woodland management. It is not a certification scheme but is designed to provide a single common standard for use within those forest certification programmes that operate in the UK.

Since 1999 every Forestry Commission woodland in England, Scotland and Wales (around 40% of British forests) has been assessed annually against the UK Woodland Assurance Standard (UKWAS) by an independent auditor and awarded independent certification.



Summary

- Wood products that come from well managed forests have the most benefits in terms of combating climate change, as more trees are planted in place of those cut down
- Well managed woodlands generally store more carbon than stands that are not harvested
- Certification provides a useful independent mechanism to demonstrate that forests are sustainably managed.
- All Forestry Commission woodlands are now independently certified