ENGLISH NATURE

Research information note

English Nature Research Report 621

A judgement-based method to identify overgrazing in English upland native woodland

Report Authors : Thompson, R, Peace, A, & Poulsom, E 2005
Keywords: Upland woodland, overgrazing, sheep, survey, oakwoods, ashwoods, England

Introduction

There is a long tradition of using woods for shelter and stock-grazing, but at times this conflicts with maintaining the distinctive plant and animal communities associated with upland oakwoods and ashwoods. This lead to concerns that the woods are being over-grazed, in ecological, if not agricultural terms. However a light level of grazing in woods can be beneficial in terms of promoting diversity in the structure and composition of these woods. The Forestry Commission, Defra (formerly MAFF) and English Nature share a common interest in developing an approach to assessing when the impact of stock grazing within woods is becoming a threat to the interest of the woodland.

What was done

Fifty woods spread across Dartmoor, Exmoor, the Yorkshire Dales and the Lake District were visited during 2004. Their condition was scored at ten points in each wood against a series of possible indicators of over-grazing (type of browse line, damage to saplings, occurrence of browse sensitive species etc). These data were combined to give an overall score (from A - grazing is not causing a problem in the wood, to D - woodland habitat is severely impacted and this level of grazing is not sustainable).

Level	Description of typical characteristics	Implication
A	Frequent saplings, well developed ground and field layer vegetation. Branches in understorey well within reach of grazing animals	Grazing / browsing is not c ausing any problems within this woodland.
B	The sward is not being heavily grazed but woody plants are being moderately to heavily browsed	Not a grazing management issue. May become necessary to control browsing animals in the long -term.
B/C	There are moderate to heavy levels of grazing and browsing under a full canopy	Survival of the woodland is not threatened in the short -term but there is limited structural diversity. May become unsustainable in the medium-term
C	There are moderate to heavy levels of grazing and browsing under a fragmented canopy or animal disturbance under a full canopy	Grazing or browsing at this level would be unsustainable in the short -term (i.e. c.10 -15 years).
D	The woodland habitat is under serious threat from this level of grazing/browsing pressure (e.g. heavy poaching and/or bark stripping together with an absence of tree seedlings and heavily grazed sward), under an open canopy	Such management is currently unsustainable.

continued >>>

Results and conclusions

The woods in different areas showed different levels of grazing, with, for example, sheep, roe and red deer being important in the Lake District, rabbits being more common in the Dales, and ponies more common in Exmoor and Dartmoor.

The survey did not pick up as many severely over-grazed woods as might have been expected: however this was in part because the initial selection was biased towards sites that were already within some sort of management scheme. The system was however subsequently tested on severely over-grazed small woods to ensure that it was able to detect such impacts.

The survey approach was generally considered to have worked and to have produced results in line with the surveyors' subjective impressions. Various refinements were made to the proposed methodology to make it more robust for future surveys.

English Nature's viewpoint

Over-grazing by stock has been identified as a major cause of upland woodland SSSIs being in unfavourable condition; it is also noted as one of the issues to be addressed if the upland woodland Habitat Action Plan targets are to be delivered. Ensuring that there is a common, agreed system for identifying and assessing the impacts of high numbers of stock is a first step towards improved quantification of the problem and of its solution. We hope that further surveys using this method will be undertaken in the near future.

Selected references

HESTER, A.J. and others. 1998. Ungulates and forest management use in Great Britain and Ireland. *Grazing as a management tool in European Forest Systems,* 24-35. Edinburgh: Forestry Commission Technical Paper 25.

KIRBY, K.J., MITCHELL, F.J. & HESTER, A.J. 1994. A role for large herbivores (deer and domestic stock) in nature conservation management in British semi-natural woods. *Arboricultural Journal*, 18, 381-399.

MAYLE, B. 1999. *Domestic stock grazing to enhance biodiversity*. Edinburgh: Forestry Commission Research Information Note FCIN28.

MITCHELL, F.J.G. & KIRBY, K.J. 1990. The impact of large herbivores on the conservation of semi-natural woods in the British uplands. *Forestry*, 63, 333-354.

Further information

For the full report or other publications on this subject, please contact the Enquiry Service on 01733 455100/101/102 or email enquiries@english-nature.org.uk

For further information about the work of English Nature, please visit our website at: www.english-nature.org.uk