

# **Consultation on restoring and expanding open habitats from woods and forests in England**

## **RESPONSE FROM THE WILDLIFE TRUSTS**

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# Consultation on restoring and expanding open habitats from woods and forests in England

## *RESPONSE FROM THE WILDLIFE TRUSTS*

### INTRODUCTION

1. The Wildlife Trusts welcome the opportunity to respond to the consultation on restoring and expanding open habitats from woods and forests in England.
2. There are 47 Wildlife Trusts across the whole of the UK, the Isle of Man and Alderney. We are working for an environment rich in wildlife for everyone. With 765,000 members, we are the largest UK voluntary organisation dedicated to conserving the full range of the UK's habitats and species whether they be in the countryside, in cities or at sea. 135,000 of our members belong to our junior branch, Wildlife Watch. We manage 2,256 nature reserves covering more than 84,000 hectares; we stand up for wildlife; we inspire people about the natural world and we foster sustainable living.
3. The Wildlife Trusts collectively have considerable experience of working with the forestry sector to promote the protection of irreplaceable habitats and the positive creation of habitats and green spaces for wildlife and people.
4. The Wildlife Trusts have a collective vision of A Living Landscape for the whole UK, which promotes that habitats are restored, reconnected and new habitats are recreated on a large scale to secure ecologically functioning landscapes for the benefit of people and wildlife.
5. We would be pleased to provide further information to support statements made in this response if required.

### GENERAL COMMENTS

6. The Wildlife Trusts welcome the Forestry Commission's endeavours to develop policy to restore and expand open habitats. We do not oppose plantation forestry in principle, indeed sensitively designed plantations can add greatly to landscape and wildlife. However, some forestry decisions in the past have resulted in significant loss of high quality open habitat, so the objective of working on the principle of "the right tree in the right place" is supported by the Wildlife Trusts.
7. This response is an amalgamation of information sent from several individual Wildlife Trusts around the country (including Hampshire, Staffordshire, Shropshire, Cumbria, Dorset, Sussex and Surrey). We also append (in **Appendix 1**) a summary of work done by Neil Sanderson based on his extensive experience of open habitat, especially in the New Forest.
8. We do have some concerns regarding the background in the consultation document. Some of the evidence is partial and appears to prejudice conclusions, often appearing to be an outline as to why restoration of open habitats should not occur. This impression seems to be based on a view within the forestry sector (and elsewhere) that open habitats are merely degraded forests and that dense tree cover is the natural and desirable state for a landscape. The consultation document is, perhaps, not the place for such a flawed ecological viewpoint to be

corrected but the continual reiteration of such views often holds back sensible discussion on the management of these valued assets.

9. We consider that there are three broad areas where the evidence-base needs further development (some of these points will be picked up below in answer to specific points):

### **8.1 Economics**

At present there appears to be a bias emphasising economically beneficial forestry versus the costs of open habitat restoration (both direct costs and the loss of subsequent income). Perhaps it is helpful to understand what a maximal cost might be but if exaggerated this unreasonably militates against any consideration of open habitat restoration. Thus the economic benefits of forestry seem over-emphasised whilst any likely benefit from open habitat is largely ignored.

### **8.2 Carbon budgets**

There may be open habitats that sequester less carbon than some forest habitats but it is unclear if realistic scenarios have been adequately compared. It is now recognised that some open habitats (grazed pastures for instance) sequester carbon more effectively than plantation forestry, whilst in others (peatland) restoration could prevent wider degradation of the habitat type in the landscape and hence prevent turning this carbon sink into a carbon source.

### **8.3 Public perception**

The popularist, but flawed, view that the natural state for the English landscape is one of dense woodland has resulted in a backlash against individual cases of open habitat restoration. There is therefore a need to consider evidence beyond immediate public perception and consider the value the public put on various land-uses. For instance, the public tend to value open habitats very highly when they are a long-established feature of the landscape (such as the heathland of the New forest and the chalk grassland on the South Downs) and this might be a better measure than an immediate reaction to tree felling.

10. There is a problem with terms used in conversations around the consultation resulting in possible mixing up of comparisons. "Woodland cover" is used as a general term as the alternative to open habitat. However, ancient woodland, semi-natural secondary woodland, commercial plantations, self sown conifer stands, and so on, all have very different repercussions in terms of any comparison made. So, for example a 'non intervention' woodland will have a different economic and carbon budget than a conifer plantation established, cropped, milled, transported and manufactured through mechanical processes.

## **POLICY BACKGROUND**

11. In 1988 the then Secretary of State made a statement in Parliament referring to open habitats and forestry. The relevant extract from Hansard is reproduced in **Appendix 2**.
12. The 1988 statement refers both to ancient woodlands and open habitats. This was expressed as "*We therefore attach a high value to conserving, and where*

*necessary restoring, the habitats which the remaining unimproved land provides, including the uplands and ancient woodlands.”*

13. The government position on ancient woodlands was most recently stated in the policy document “Keepers of Time” (2005) and some 21 years later we are now seeing the policy position relating to the restoration of open habitats being reviewed. In the meantime the momentum to restore open habitats from plantations has grown. These restorations have occurred in the private sector, such as parts of Brighstone Forest on the Isle of Wight, by Conservation NGOs including the Wildlife Trusts, the RSPB and the National Trust together with laudable examples on the FC estate such as Ennerdale in the Lake District and Longdown Inclosure in the New Forest.
14. Whilst there are examples of restoration schemes there are also examples where plantations on open habitats have been restocked following felling on maturity. Where this has happened within a Natura 2000 site the restoration of the habitats and species for which the site has been designated have been treated as a ‘risk’. This has been expressed as “*All sites will be restocked within 2 years of clear-fell so that SAC habitat is not established*” and in relation to qualifying bird populations within an SPA “*All sites will be restocked within 2 years of clear-fell so that habitat is not established enough to support species<sup>1</sup>*”. This position does not appear to be consistent with obligations under the Habitats and Birds Directives. The current review brings with it an opportunity to reconsider that position.

## LANDSCAPE ISSUES

15. The ‘Evidence’ paper prepared by FC to accompany the consultation on open habitats includes a section on Landscape. This is quite philosophical in approach and exposes the difficulties in making policy decisions based on differing perceptions.
16. There is a statutory framework for addressing landscape issues within England’s finest landscapes. As Wildlife Trusts we wish to see this reflected in the formulation of the Forestry Commission’s policy on open habitats.
17. Within statutorily designated landscapes in England (National Parks and Area of Outstanding Natural Beauty) there is a statutory framework for making judgements on landscape issues. The relevant legislation is Part III of the 1995 Environment Act for National Parks and Part IV of the 2000 Countryside and Right of Way Act for AONBs. These Acts make provisions for the relevant authorities to prepare management plans within which they identify the ‘special qualities’ for which those landscapes have been designated. There are then statutory provisions which establish a general duty on all public bodies to have regard to the conservation and enhancement of that natural beauty when exercising their functions.
18. These provisions provide a structure for assisting decisions on the relative landscape merits of future land uses be that open habitat, plantation forestry or woodland. These provisions are material in determining landscape issues.

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<sup>1</sup> Both quotations taken from FC Habitats Regulations Assessment for New Forest Inclosures, Forest Design Plan Review. Undated, probably 2007.

19. In non-statutorily designated landscapes there are parallel processes adopted by some local authorities as a matter of policy. Whilst these processes are equally helpful in guiding landscape change they do not carry the same weight in law and national policy.
20. Given this statutory framework it seems reasonable and appropriate for National Park and AONB management plans to inform the landscape debate when considering changes to and from tree cover and open habitats in those protected landscapes.

## **RESPONSES TO QUESTIONS RAISED IN THE CONSULTATION DOCUMENT**

### **Q1: The nature of change**

21. The position of the Wildlife Trusts is that open habitat creation should be in line with the delivery of BAP targets. This was the original purpose of BAP targets in that they give a minimal target level for habitats. Indeed it is difficult to see how government might meet its biodiversity targets (the UK being a formal signatory of the Convention on Biological Diversity) if this major plank of government policy sets targets that are inconsistent with national biodiversity strategy.
22. The Wildlife Trusts therefore support the “higher” scenario (30,000ha over 10 to 15 years which is between 2000 and 3000ha per year). We note that the “middle” scenario (16,000ha) barely covers the restoration needed just to deliver SSSIs in favourable condition (11,000ha).
23. Much emphasis is placed on the cost of restoration and loss of income from timber but there appears to be little consideration of the potential income from long term management of open habitat through extensive grazing (probably utilising a low input-low output system). Similarly there is little allowance for possible novel sources of income (for example significant income to the Forestry Commission in the south east comes from use of an open habitat area in a FC wood for TV filming.)
24. In short the costs of heathland restoration appear exaggerated against the experience of the Wildlife Trusts, whilst the income from open habitats is underplayed.
25. Some examples from the Hampshire Wildlife Trust help to illustrate the point. Costs of heathland restoration of a 50ha and a 400ha site have been calculated and are considerably less expensive than the figure provided in the consultation document. The cost for mid stage restoration at the 400ha site was approximately £60/ha/annum and for late stage restoration at the smaller site was £110/ha/annum. This compares with the estimation of £600/ha/annum in the UK Biodiversity Action Plan and £1,164/ha/annum according to Forest Enterprise and Tomorrow’s Heathland Heritage estimations. The main capital costs are for fences/grids/water while revenue costs relate to management, maintenance of capital assets and support to establish a livestock enterprise. This evidence is further detailed in **Appendix 3**. Another example for ongoing management of a small site in Shropshire is about £88/ha/annum for grazing and even allowing for some extra staff time this is far less than the costs given in the consultation.
26. In practice, comparisons of costs become extremely complex and are often skewed because of past and current grants and incentives. Establishment and

management of conifer crops may have been done using various grants over the past decades so may not have been economically viable in the absence of support. Similarly heathland restoration and management may also attract grants and incentives from HLS and the SFP, as well as occasional special incentives such as from the Heritage Lottery Fund.

27. Some of the evidence on costs in the consultation document might be based on examples that include small sites, probably isolated, with a non-viable grazing regime in a non-functioning pastoral economy. This may be the reality of some heathland restoration schemes (as they try to recover heathland from a very low base); however, this need not be the case when restoration is strategically applied to larger areas of greater opportunity.

### **Q2 & Q3: Desired outcomes and measures of success of the policy**

28. Desired outcomes list one generic positive environmental outcome likely from open habitat creation and six other more detailed outcomes that could be damaged by open habitat creation. This provides an unbalanced list of outcomes with a built-in likelihood of a negative measure of success for open habitat creation. This trivialises ecological benefits of landscape restoration. Desired outcomes should not appear as a tick list and in any case more elements of environmental outcomes should be listed. These could include, for example:
- Delivery of BAP targets
  - Development of ecological communities that are able to cope with threat
  - Development of an environment adaptable to unknown climate change
  - Delivery of landscape diversity
  - Public enjoyment of species and habitats not represented in secondary woodland.
29. Measures of positive engagement by local users can be open to interpretation. One measure could be the number of people who object to a scheme that suddenly appears in an area. Alternatively a measure could be the amount spent on a consultation exercise to explain the nature of a proposal (for example Surrey Wildlife Trust spent c £35,000 on consultation for one major open habitat creation scheme). Still other measures might be an examination of the engagement of people in existing open habitat areas with measures of how much they value open habitat once well-established.
30. Even the stated indicator for biodiversity is biased against open habitat. This sets up a measure where loss of woodland key species would be recorded but improvement in populations of open habitat key species would not. It also pays little regard to survivability in the wider landscape – key woodland species may be lost from the particular compartment when cleared of trees but population levels could be maintained in the wider landscape. Heathland species, by contrast, are more likely to be limited to key heathland habitats and restoration areas.

### **POLICY PROPOSALS: ELEMENTS PRESENT IN THE POLICY**

#### **Q4: Treating woodland and open habitat as potentially mutually beneficial**

31. We disagree with point 6 in “Elements present in the policy”. This appears to close-off options for open habitat creation if woodland creation is low. This gives government an opt-out clause. If government does not invest in woodland

creation then it also would not have to invest in open habitat creation. The emphasis should be reversed. The aim should be to meet BAP targets, and to encourage and increase new native woodland planting in appropriate places such that long term targets for expansion of native woodland are met.

32. Woodland and open habitat should both be considered as valued natural assets to be managed appropriately. Whilst some categorisation is inevitable, management of various forms of woodland cover along with various forms of open habitat should be considered part of the same unified whole. Thus, at any scale of organisation, some areas will retain long term woodland cover, some will retain long term open habitat and others will be in transition between the two.
33. This will be mutually beneficial from an ecological perspective. Some species are characteristic of woodland, some of open habitat, but others either require conditions in ecotones between woodland and open habitat or require different conditions (sometimes wooded, sometimes open) at different stages in the life-cycle.
34. Nevertheless, open habitats provided by forest rides are only a substitute for more substantive and long-term patches of open habitat. They allow some species to cling on, and provide a tantalising view of what could be achieved if greater areas of open habitat were restored. There will be many cases where ecological space for open habitat species can be provided within forests and woodland but this is not an alternative to larger scale open habitat creation.
35. A vision of open habitats which are not totally treeless provides a realistic picture in terms of landscape-scale conservation aspirations. However, in order to add to biodiversity, and other benefits of open habitat restoration, these are more likely to have characteristics of pasture woodland rather than being remnants of plantation forestry which offer little biodiversity benefit and fragment and isolate other habitats.
36. Woodland and open habitat should also be managed to be mutually beneficial in terms of perception and public understanding, so that both are seen as legitimate parts of the landscape.

**Q5: A presumption against the removal of mature native woodland**

37. As a basic presumption this is broadly supported. There could, however, be situations that are more complex so will require flexibility.
38. For example the degree of woodland cover in heathy woodland (for example in the High Weald of Sussex and Kent) varies with space and time making it difficult to categorise any particular area as long term woodland or long term open habitat. There could be a general presumption against the large scale opening up of such mature woodlands but some degree of opening, which varies with time, would be beneficial.
39. Wet woodland presents a similar case. When functioning well these are inherently dynamic habitats, varying in woodland cover with time and disturbance. Too tight a definition of “wooded” or “open” would work against this dynamic, sealing open or wooded habitats in particular locations rather than allowing fluidity between the two.

40. This could be covered in a definition of what degree of cover is required in order for an area to be categorised as woodland. For instance, a definition for woodland as being more than 20% tree cover over more than 20% of the site would give the flexibility to allow variations of woodland cover with time.
41. The definition for “mature native woodland” is again perhaps a good principle. Areas that have been closed canopy for a significant period may have lost their open habitat components whilst they might have gained some woodland species. Nevertheless there will be need for flexibility if a good case is made. Beech plantations on chalk grassland, for instance, may be older than 80 years and yet still be poor in woodland species. Grassland interest may remain in rides that could re-establish in newly created openings. Returning to open habitat could well be an appropriate option.

#### **Q7: Local participation in decision making**

42. A rigid prescription for consultation will not be helpful – the appropriate methods depend on local circumstances. Guidance (option 4) would be helpful. The question arises as to how to resolve conflict when this arises between local aspirations and the delivery of BAP targets (or even Habitats Regulations objectives). In some cases opposition to tree removal has resulted from misinformation (e.g. ‘tree removal will increase flooding’), conspiracy theory (e.g. ‘FC want to remove those trees so they can sell the land for houses’) or simply not being told about it before the work starts. All these issues require local sensitivity and the right information being prepared and circulated at the right time.

#### **Q8: Mechanisms for woodland removal promoted at the regional level**

43. Generally a good principle but the regional level suggested still seems too large an area for prioritisation. Within one region there will be many variations of BAP priorities and existing habitat extent. We need to look at sub-regions which relate better to local communities or natural areas – such as at the scale of a District, like South East Dorset or the Dorset AONB.

#### **Q9 & Q10: Framework for evaluation of projects**

44. This framework seems hardly likely to successfully encourage private landowners to restore open habitats. The Forestry Commission should set up a programme to enable them to carry out monitoring and evaluation to inform the future development of the policy.

#### **Q11 & Q12: Rate of woodland removal**

45. It is misleading for the term ‘deforestation’ or ‘woodland removal’ to apply equally to removal of non-native monocultures with little biodiversity value as it does to fully functioning biodiverse ecosystems. However, even if this is technically the case, it is negative to suggest that such plantations should be retained at the expense of meeting biodiversity targets. Instead we should be trying to meet both biodiversity and woodland cover targets with expansion of planting of native

woodlands in appropriate places. There should therefore be no threshold for woodland removal – instead positive targets should be set.

## **KEY VARIABLES**

### **Q14, Q15 & Q16: Balance between biodiversity objectives and the need to reduce greenhouse gas emissions**

- 46.** Information in the consultation document is helpful in articulating the concerns regarding carbon balance. It may be that there are circumstances where the carbon balance is more positive for tree-covered habitats than open habitats but nevertheless the carbon benefits of forestry seem over-emphasised in comparison to open habitats. Many lowland heaths, for example, contain significant peat deposits and restoration of heathland can give opportunities for peat-formation and hence carbon sequestration. Similarly, grassland habitats have been found to sequester carbon even more effectively than forest creation. There are also differences between forest types that would alter comparisons. Old-growth forests lock up carbon more effectively and for a longer term (in soil as well as in biomass) than plantation forestry so an argument against open habitats on the basis of carbon sequestration is also an argument in favour of old-growth, unmanaged forest rather than productive forestry.
- 47.** There is a problem regarding what is being compared when examining carbon balance. Even if productive, managed forests temporarily lock-up more carbon on the forest site, the balance changes considerably when the carbon balance of the associated timber industry is taken into account (including planting, maintenance of the crop, harvesting, transport, conversion, end product and marketing). When the life-cycle is compared, open grazed heathland probably compares well with a forestry crop in terms of carbon balance.
- 48.** There is also a question of whether open habitat creation from forests is being looked at more harshly than other aspects of land-use management from the perspective of carbon balance. Other changes in land use have a negative effect on carbon balance. The conversion of long-established grassland into cultivated land, for instance, results in the oxidation of significant amounts of carbon stored in soils yet there seems little consideration of the effects of farmland rotation on carbon sequestration in other government policy documents.
- 49.** One factor has not been considered in the consultation document regarding the value of open habitat in relation to climate change. Climate change is certain, but the details, nature, extent and even the direction of change are uncertain. We are moving from a situation of a relatively well-known climate to a rather more uncertain one. Instead of trying to predict the future and then build a landscape that we think might fit the new conditions, we should instead be developing an adaptable landscape that is likely to be resilient to unknown changes. The amount of carbon locked up in a habitat, whilst important, is only one aspect of the climate change agenda in relation to habitat management. A diverse and varied landscape with effective quantities of its component habitats will be more able to adapt to change.
- 50.** One manifestation of this might be in the way we view future habitats. It may seem logical to establish plantations of species more able to thrive in warmer

climates, providing timber and possibly locking up more carbon, even allowing for changes to soil structures in the process of establishment. However, if that plantation then succumbs to a pest or disease as a result of climate change, then most of the objectives for the site (including carbon sequestration) will have failed. Instead an objective for land-use management in relation to climate change should be the development of a structurally diverse landscape ensuring that options are left open (rather than closed-off after dubious predictions about the future). Open habitat should be seen in this light. It is currently at a low level and can only present a minor example of a future possible land-use type. If open habitat is retained in the landscape, with its entire range of constituent species, then it at least remains an option for future plant community development against an unknown future. It may be, for example, that a future warm, dry climate may make forestry difficult but make low-intensity grazing systems on open habitat more viable.

**Q17 & Q18: Managing open habitats to keep them in favourable condition or as part of a dynamic approach to land management**

- 51.** An analysis of RDB vascular plants characteristic of open habitats in the New Forest shows that less than 10% are associated with plantations or rotationally cleared woodlands. Rotational clearing is therefore unlikely to deliver conditions suitable for the more demanding species of open habitat. Experience shows that high quality open habitat can best express itself as permanent open habitat. Many of the qualities of open habitat are therefore not present in rotationally cleared woodlands. This is further detailed in **Appendix 4**.
- 52.** There will therefore be areas where open habitat, perhaps on a large scale, will be the priority (for SSSIs, and to achieve BAP targets), but around these could be a more dynamic matrix in which open habitat is adequately represented. The dynamic matrix would include areas where the species most demanding of open habitat are less well represented. This matrix could however, hold a diversity of less demanding species that require a diversity of conditions. The problem at present is that this dynamic environment does not realistically exist. When left with the choice of either open habitat or wooded habitat, this drives unnecessary polarisation and so false conflict. If we achieve a dynamic environment then the choice of either open or wooded can be limited to sites where this is a real choice.
- 53.** Achieving such a dynamic landscape consisting of areas of long term woodland, areas of long term open habitat, and other areas in dynamic matrix would therefore be the desirable outcome. However this could be difficult to achieve in practice as many of the mechanisms that are put in place tend to drive the outcome in one direction or the other. Below, therefore, are some proposed solutions:
- Instead of an approach based on favourable condition take an approach based on limits of acceptable change. So, for a given area, instead of measuring the area of open or wooded habitat, set limits within which the entire area should sit in terms of overall proportion of habitat (say, no less than 20% wooded but no more than 60% wooded).
  - Instead of focussing on the pattern (i.e. the area of each constituent habitat), focus on the processes by which the different constituent habitats are delivered. This will probably involve viable grazing management alongside viable woodland management in the same location rather than compartmentalised into different areas.

54. The most desirable outcome, however, is probably also the one that is most difficult to measure. A true matrix would probably be defined as both open and wooded on the same location.
55. Applying a rigid approach that requires maintaining habitats in “favourable condition” can militate against the creation of open habitats in the first place as well as against the development of a dynamic environment once they are established. There is an example in Staffordshire where a PSA target has focussed on woodland birds so forming an argument to continue woodland cover and against peatland formation (this in spite of the fact that new open habitat created so far seems to have resulted in an increase in some woodland birds).
56. **The conclusion our evidence leads towards is identifying priority areas for open habitat restoration from plantations to be:**
- **Large sites, (at least 50ha +) but especially where hundreds of hectares can be delivered together;**
  - **Sites with an established grazing economy/open habitat management infrastructure;**
  - **Sites within or adjacent to designated landscapes where open habitats/landscapes are one of the statutory ‘special qualities’;**
  - **Sites within or adjacent to designated habitats (SSSI, SPA, SAC, Ramsar) where the open habitats and dependent species are the qualifying features.**

**Q19: Effect of open habitat restoration on the timber industry**

57. Wood-fuel is presented as another excuse to retain conifer plantations, which in practice are rarely used for wood fuel. In reality the removal of inappropriate woodland can and should increase the supply to the wood fuel market over a timescale when the supply from sustainable woodland management will be built up to fill any gap. Restoration of open habitat has therefore often resulted in a boost to the local timber industry as an area that had simply been left starts to yield timber products (birch and pine) for wood fuel. Furthermore, once restored, and even if grazed, these areas rapidly start to grow birch trees again, so growing a future timber crop.
58. Impact on businesses – over what timescale is this assessment made? It seems to assume that none of the timber felled to restore open habitats will get into the market. The 4<sup>th</sup> bullet point mentions impact on jobs, however if managing open habitats is indeed as expensive as claimed then surely this money is being spent on labour-intensive activity hence creating more jobs than are lost.

**Q20: Different approaches to applying policy**

59. It is not clear that the options given are really comparable alternatives. In practice they could all be elements of the same policy.
60. Open habitat creation should be prioritised around existing open habitat areas as this is where it is more likely that BAP targets could be delivered and more likely to deliver sustainable long term management through low-intensity grazing.

Maintaining viable grazing units is important in maintaining large-scale open habitats; however, once such grazing infrastructure is established it may then be possible for smaller more isolated heathland sites to be restored in the general area.

**Q21: Compensatory planting**

**61.** This seems reasonable as a principle, applied widely on a regional or national scale. However, it would be better to keep woodland creation and open habitat creation as separate issues – an equivalent policy document for woodland expansion, targeted in the right places, is needed. Insisting on compensatory planting for every removal project, or on each individual landholding, will result in trees being planted in the wrong place (e.g. on other important open habitats) just because the applicant cannot find any suitable site at the time.

**PUBLIC FUNDING**

**62.** A grant mechanism to allow removal of trees which were planted on priority habitats with public money is needed. There are a number of plantations which serve no biodiversity or landscape value, being dense conifer, planted on chalk grassland Sites of Nature Conservation Interest or other habitats using either FC grants or local council grants. It would be helpful to be able to acknowledge that these trees are in the wrong place and use HLS or other grants to remove them before they get to maturity. There may also be other funding streams to enable open habitat restoration. For example green infrastructure many well be funded privately in some areas – for example through developer contributions – thus reducing the costs to government.

**The Wildlife Trusts  
June 2009**

# Appendices

## Appendix 1

### **NOTES ON THE FORESTRY COMMISSION'S CONSULTATION ON RESTORATION OF OPEN HABITATS FROM WOODLANDS AND FORESTS IN ENGLAND 2008-9**

**N. A. Sanderson.** Botanical Survey and Assessment. SO40 7HU. May 2009

#### **1.0 INTRODUCTION**

This note assesses issues raised by the Forestry Commission's consultation on the restoration of open habitats from woods and forests from the viewpoint of sustainable open habitat restoration for biodiversity conservation. Particular reference is made to the author's experience in the New Forest and Hampshire.

This consultation is to be welcomed. The loss of semi-natural open habitats over the last few centuries, especially in the lowlands, has been massive and greatly outstrips that of woodland loss in the same period. For vascular plant species, a major cause of local extinctions and declines in the lowlands is the disappearance of open habitats. This has been exacerbated by the associated decline of extensive management within the relics of surviving open habitat (Preston *et al.* 2002 & Braithwaite *et al.* 2006). This pattern is repeated for other groups.

If the biodiversity of Britain is to be maintained, then there clearly must be a halt to the continuing decline in open habitat area and condition and a shift to expand the area. This must also be accompanied by the ability to sustainably manage the surviving and restored open habitats. As described by Byfield (2009) wooded and afforested former open habitats provide a unique opportunity for open habitat restoration, due to the little disturbed soils and surviving seed banks. For this reason Forest Enterprise's estate, and other recent woodlands, provides an important resource in planning open habitat restoration.

#### **2.0 RESTORATION SCALE AND QUALITY**

##### **2.1 Landscape Scale Restoration**

The key to halting the loss of biodiversity is the restoration of functional extensive farming systems in areas where these have declined or have been lost totally. What is required is high quality restoration schemes that are recovering entire landscapes. I am sympathetic to a view that managed silvicultural plantations should not be lost to piecemeal and poorly implemented open habitat restoration but rather to well-planned nationally significant large-scale schemes (as partly expressed in 6.3.1 in the main consultation document). Restored landscapes could be innovative, incorporating features acquired since the loss of open land including new habitats not present in the original. Open habitat restoration does need to be linked to the restoration of ecological functionality, which in nearly all habitats means significant levels of grazing by livestock, be that farmed or feral. This in turn requires a wider approach than simply felling patches of trees; to succeed, there will need to be support for extensive livestock farming enterprises in some key areas. This goes beyond the FC's traditional remit but does need to be considered within the consultation.

## **2.2 Quality and Decreasing Expectations**

As Byfield & Pearman (1996) demonstrate, even in habitats as infertile as the Dorset heathlands, simply preserving open habitats as open land will fail to conserve the original rich diversity of this landscape. The restoration of the complex ecosystem developed under the extensive agricultural systems need much more than simply an absence of trees. With restoration planning, especially in areas where the surviving habitat is particularly degraded, there is a danger of reducing expectations. This is amply illustrated by the Dorset Heaths. Here, without the detailed surveys carried out by Prof. Good in the 1930s, the scale of the plant diversity lost from the heaths since then could not have been appreciated. This data, and the nearby surviving intact landscape of the New Forest, showed that, by the 1980s, many plants that had been widespread on heathlands in the 1930s were no longer regarded as typical heathland plants. These species tended to occur in small more fertile niches within the larger spread of dry heaths. These species had not only been physically lost but had been lost from the memory of those planning the management of these important heathlands. This sort of generational shifting of expectations downwards has been well documented for marine fisheries but also appears to be occurring within biodiversity conservation.

The consultation document often appears to be regarding grazing restoration as something of an added-on extra. In reality it is an essential and integral part of restoring even that most infertile of landscapes, the Dorset heaths. In other more fertile areas, it is even more crucial.

In a study of the potential open habitat complexes within the statutory Inclosures of the New Forest, Sanderson (2007a) identified 15 Annex 1 Habitat Directive habitats as present at enclosure. The former open landscapes would have included the following Biodiversity Action Plan habitats: Wood Pasture and Parkland, Wet Woodland, Lowland Heathland, Lowland Acid Grassland, Purple Moor Grass and Rush Pastures and Fens. In comparison to the adjacent surviving unenclosed open habitats, it is clear that grazing is essential in maintaining these habitats in good quality.

## **2.3 Shifting Mosaics**

The potential for shifting mosaics of woodland and open habitat is raised by the consultation as an alternative to restoring open habitat with quality determined by Common Standards Monitoring. By this, Forest Enterprise appears to be envisaging timber plantations and open habitat rotated on time scales of decades. In principle, they are correct. Shifting mosaics of woodland and open habitat are very valuable; the New Forest is a prime example. The New Forest, however, is a grazed mosaic of native species with shifts occurring over centuries. It does not compare with an ungrazed heathland site with non-native conifers. This concept has also been raised as "wooded heath", for instance at the New Forest Design Plan consultations.

In the author's opinion the concept of shifting mosaics as promoted in the consultation is simply an example of diminishing expectations; the few species understood as being heathland species in the consultation are those that survive in degraded, collapsing heathland ecosystems. These are also the adaptable species, mainly larger animals, which can also survive in temporary open space within plantations. There are far more plants and invertebrates that will not benefit from such management. Such a system may have value in the conservation of some species with managed plantations but it is not at all clear what role it has in the restoration of open habitats. Far better would be a separation between efficiently managed plantations, with rotations planned to aid those species that can use them,

and high quality open habitat restorations. These two land uses could be adjacent or intermingled but grazed open habitat is at the core issue of this consultation.

## **2.4 Innovation within Restored Landscapes**

Although there is a need to restore examples of traditional open landscapes where this is practically possible, including largely treeless habitats, there is also a role for innovation. This could include mosaics of woodland and open habitat, where historically only open habitat was present. If open habitat restorations are to be effective, and of high quality, then woodland mosaics will need to consist of native woodland. The Forestry Commission appears to be excluding pasture woodland from open habitats, but by its nature, it is an integral part of open land ecosystems where it occurs. Given some of the definitions, for instance, the Kyoto definition of woodland must have more than 20% canopy cover; the whole of the New Forest grazing unit could be regarded as woodland, not open land! There is a need to bring in the potential for pasture woodland restoration and creation within open habitat restoration, especially in the utilisation of recent native woodland patches. A separation within the consultation between enclosed woodland and woodland that is part of open land would help us understand the issues. In addition, fuel wood coppice could also be a potential method of integrating woodland into restored landscapes. Temporary enclosed coppices within open land are an ancient tradition within English common lands that could be revived with restoration schemes. It is not at all clear that growing plantations of conifers within restored open habitat is the most appropriate way forward.

## **3.0 OTHER ISSUES**

### **3.1 Broadleaved Woodland**

While it is clear that there needs to be good justification for total removal of recent native woodland on former open habitats, the suggested presumption against the removal of woodland older than 80 years old is unacceptable. Forest Enterprise itself has cleared woodland older than this from valuable and rare habitats on the New Forest (Sanderson, 2006). It is acceptable that there should be a requirement for strong justification for the removal of stands older than this. However, many productive habitats on extensive grazing systems were lost relatively early on to the cessation of grazing. A complete ban on such removal would bias against what are usually the most species rich and threatened habitats within open habitat complexes.

### **3.2 Wet Woodland**

This is a critical issue, on which the strong presumption against removal in this consultation is worrying. Recent wet woodland (probably well over 90% of the habitat) is among the most valuable resource for mire fen, meadow and rhôs pasture restoration (Sanderson, 2006 & 2007b).

The issue of why recent wet woodland would be regarded as being of being of high conservation interest at all needs discussion. There are exceptionally interesting ancient floodplain woodlands and bog woodlands (Sanderson, 2004) but much recent wet woodland (easily well over 90% of the habitat) has few or no characteristic rare associated species, other than relic open habitat species (Sanderson, 2007b). The situation of the wet woodland Biodiversity Action Plan is odd; it is a habitat that has probably expanded by well over 900% in the last 200 years. This expansion has been mostly at the expense of open wet habitats which are currently regarded as far more important in terms of rare and declining species. Whilst the historic low extent

in wet woodlands in the early modern period was certain something that needed correcting, this has largely righted itself. As with the recent Pond Biodiversity Action Plan, the Wet Woodland Biodiversity Action Plan needs to be more restricted to exclude low quality wet woodlands. Policy towards Wet Woodland on restorable mire, fen and fen meadow habitats should be set primarily by the needs of the rare and declining open habitats of high nature conservation value. There is a need to ensure Wet Woodland retention but as an expanding habitat of generally low nature conservation value this is not a critical issue.

It is also important to remember that much wet woodland is actually unstable successional vegetation and much will develop into damp ordinary woodland communities within 150 to 200 years (Sanderson, 2007b). Maintaining Wet Woodland as a shifting component of restored open wetland landscapes, rather than strictly protection large areas, may be a more appropriate way forward.

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## Appendix 2:

### Forestry (Grants)

*HC Deb 16 March 1988 vol 129 cc595-6W* [595W](#)

[§ Mr. Gow](#)

To ask the Secretary of State for the Environment what environmental guidance the Government propose to give to the Forestry Commission about the approval of grant applications for afforestation in England.

[596W](#)

[§ Mr. Ridley](#)

My right hon. Friend the Secretary of State for Scotland is making a general statement about forestry policy in Great Britain in the light of the Budget changes. Both in its own forestry operations and in considering applications for planting grants, the Forestry Commission has statutory duty to endeavour to achieve a reasonable balance between forestry and environmental considerations. In cases where the appropriate balance is in doubt, because an objection has been made by the relevant public or local authority and has not been resolved by the commission's regional advisory committee, the commission has since 1974 been directed by forestry Ministers to seek their views before approving the application, or proceeding with the scheme, as the case may be. In England, I am consulted in appropriate cases.

My right hon. Friend the Minister of Agriculture, Fisheries and Food and I have decided that it would be helpful for the Forestry Commission also to have general guidance from the Government about fulfilling its statutory duties in relation to the environment in England. This guidance will be contained in a letter which the Minister of Agriculture, Fisheries and Food will be sending to the chairman of the Forestry Commission. The main features of the guidance will be as follows: A large proportion of the land in England has been used for agriculture as either arable or improved grassland. We therefore attach a high value to conserving, and where necessary restoring, the habitats which the remaining unimproved land provides, including the uplands and ancient woodlands. While we see some scope for broadleaved and mixed woodlands, approval should not normally be given in the uplands of England for new planting which consists predominantly of conifers. The only exception would be small areas where it is clear that such planting would be environmentally acceptable. The main potential for afforestation in England lies on arable land and improved grassland which may no longer be needed for food production. It has already been decided that the farm woodland scheme should be targeted on land previously in agricultural use. This concept is incorporated in the [Farm Land and Rural Development Bill](#) currently before Parliament. The new grant rates will provide additional incentives for the planting of broadleaved trees and for planting on improved land. In existing forested areas, the granting of felling licences by the Forestry Commission to private owners is normally subject to the condition that replanting should be carried out. In future, however, the Forestry Commission will be expected to follow policies which will convert forests of an even age into attractive and more varied landscapes with a mixture of types and ages of trees.

## Appendix 3

### **Note from Hampshire and Isle of Wight Wildlife Trust regarding the costs of managing open habitats restored from heaths that had been subject to colonisation by trees.**

#### **Case study 1: Bartley Heath, North Hampshire**

This compartment of the much larger Hook Common and Bartley Heath complex lies adjacent to Junction 5 of the M3 and is bordered by 'A' class roads together with a major employment and residential area linked both to the motorway and to the mainline railway station at Hook. The site is a SSSI, a registered common and therefore is statutory access land, it is an important public amenity with many points of entry and public rights of way cross the site, there is a car park and the site hosts a range of formal and informal events to assist people to understand and enjoy what makes it special. This is a freehold property of the Hampshire and Isle of Wight Wildlife Trust.

The grazing of the common declined to minimal levels after the common was fragmented by the construction of junction 5 of the M3 in the 1970s. After acquisition of the land the Wildlife Trust has sought to support the practice of common grazing as this maintains the special landscape, cultural, wildlife and access qualities of the site. Through the 1980s the 50ha unit subject to this case example was fenced, substantial areas of semi-natural tree cover were removed and one of the commoners has taken advantage of the restored grazing land. The landscape of the common in the early twentieth century was predominantly open with little tree or shrub cover. Throughout the twentieth century tree cover spread as commoning declined. The tree cover includes a high proportion of oak as the soils here are relatively productive clays. For a variety of practical and amenity reasons the vegetation cover has been managed in recent years so it is approximately 60% wood pasture with 40% heath and associated grasslands within a single grazing unit. The Trust is currently investing heavily in bringing other large fragments of this complex into a grazed condition.

This example is therefore of a reasonably mature restoration project where capital works are substantially completed.

The costs to the Trust, by order of magnitude, to manage this site are as follows.

Staff costs to monitor the site, manage contracts, manage consent and compliance procedures, manage relationships with the commoners, local authorities and visitors are in the order of £2k although some of these costs are shared with the much larger complex managed by the Trust.

The combination of semi-natural tree growth adjacent to a motorway, motorway junction and other major roads together with public access within the site raises significant liabilities for safety. A recent safety survey generated £2k worth of tree surgery. This expenditure should decline in future years as the most hazardous trees are progressively removed.

We are fortunate in having at least one active commoner at any one time wishing to exercise their grazing rights. These rights, if exercised to the full, could become challenging to integrate with the many other uses of the site. We therefore have an agreement with our practising commoner that enables us to influence how, when and

where he exercises his rights. In acknowledgement of this agreement we support his grazing enterprise to the order of £1k/annum.

Grazing pressures, particularly relating to the presence of both ponies and cattle, have yet to reach a satisfactory equilibrium. It is therefore necessary to undertake some management of birch re-growth at the cost of some £400/annum. With improved stocking levels of cattle this should be a declining expenditure in future years.

The boundary fence is, in law, the responsibility of neighbouring properties to fence against the common. In practice it falls to the Trust to monitor and maintain the stock-proof boundaries. This liability runs to around £100/annum.

The provision of water to stock was a part of our capital works. The annual water bill runs to c. £30/annum.

Taking all these costs, and averaging them across the whole of the grazed section of the common, this gives a figure of maintaining the restored open habitats at £110/ha/annum.

### **Case study 2: Longmoor Inclosure, East Hampshire**

This is a 400ha heathland unit within a single fence-line that is bounded to the north by the A3 Portsmouth-London main road but is otherwise not fragmented by highways. The site is a SSSI and forms part of the Wealden Heaths Special Protection Area. The site falls within the South Downs National Park Designation Order. The site forms part of a much larger Ministry of Defence training area based at Bordon. Live firing and other hazardous training generally occurs elsewhere in the training area and thus Longmoor Inclosure is also an important local amenity with a limited number of points of access associated with localised car parking arrangements. Under statutory access provisions the land is mapped as "Military Danger Area managed access". The site is Ministry of Defence property and is subject to a grazing licence whereby the Hampshire and Isle of Wight Wildlife Trust assist the Ministry of Defence estates team to bring the SSSI into favourable condition.

Historically, Longmoor Inclosure was part of the extensive network of open heathland commons that comprised Woolmer Forest. The commons were enclosed under Act of Parliament in the mid nineteenth century and soon after taken on by the then War Department for military training. As far as we are aware, grazing on any significant scale has been absent from this landscape for well over a century. Over that period tree cover became established over substantial tracts of the land. Due to the highly impoverished nature of the sandy soils the predominant trees were birch and self sown Scot's pine on the dry areas together with willow and alder in the wetter areas.

The project to restore the open habitats from the tree cover is still at a stage with capital works being undertaken. The restoration of grazing is in an early stage of establishment, with livestock being introduced in 2009. Tree clearance started in this

area in 2001 as a part of a 5 year Heritage Lottery Funded project managed by Hampshire County Council

The costs to the Trust, by order of magnitude, to manage this site are as follows.

Vegetation management is still within the phase of capital works. These works are clearing trees and managing associated re-growth and bracken spread to re-instate conditions suitable for livestock to graze. In recent years vegetation management has cost in the order of £13k/annum.

Restoration has reached a stage where this year livestock are being introduced into the site. These are cattle from a local grazier. The challenges of managing a herd in such a large and complex landscape are manifold. The Trust therefore supports the grazier turning out the cattle at £20/head/month. We see this expenditure as a part of the establishment phase of the restoration. As the herd grows in size and both grazier and stock become accustomed to the site we envisage the level of support declining. The initial herd is only 17 head and the support costs the Trust just over £4k/annum. This cost is expected to increase whilst the herd builds to about 50 head, representing a theoretical maximum exposure of some £12,000/annum, and then decrease as the enterprise becomes established.

Whilst the installation of the boundary fence was the responsibility of the Ministry of Defence, the Wildlife Trust monitors and maintains the fence line to ensure its stock proof qualities. This currently requires regular monitoring and maintenance at the cost of some £2200/annum, mostly in staff costs.

Staff costs to manage contracts, manage consent and compliance procedures, to manage relationships with the Ministry of Defence's estates and training requirements are in the order of £1k/annum. This cost is a component part of a much larger project with the MoD and so enjoys economies of scale.

The installation of the boundary fence is the responsibility of the Ministry of Defence. Existing fencing along much of the boundary was made stock proof and the entire fence completed in 2008. This fence serves many purposes including securing the boundary of a training area and providing a stock proof fence. The capital costs of erecting the current fence were in the order of £35k. Three cattle grids were also required at £3.5k, together with water troughs and water supply at £2k. This physical infrastructure therefore represents a capital cost in the order of £120/ha. As capital works the fence and water supply may be, pessimistically, costed as requiring replacement after 10 years.

Taking all the current costs and averaging them across the site, this gives a figure of a mid-phase capital project to restore open habitats on a relatively large site at just over £20k/annum otherwise expressed as £50/ha/annum. To this may be added a proportion of the capital costs which will bring the figure to the order of just over £60/ha/annum.

## Appendix 4:

### An illustration of the relationship of scarce, rare and Red List plants with woodland cover and plantation forestry.

#### C. Chatters, 14 May 2009

The New Forest National Park comprises extensive areas of semi-natural vegetation including large areas of semi-natural woodland together with open habitats such as heathlands, wetlands, grasslands and a range of coastal features. The New Forest also contains extensive areas of plantation forestry established on a range of semi-natural habitats, mostly since the mid nineteenth century. It is therefore a valuable area within which to consider the contribution of woodland and plantation forestry to biodiversity.

Within the New Forest National Park there are 108 species of vascular plants that are recognised as being rare, scarce or of concern in the Red List<sup>2</sup> as determined by the JNCC<sup>3</sup>. Of this list of 108 species there are ten species that are associated with habitats with a high degree of tree cover. These species and their habitat associations are as follows.

English Name	Scientific name	Habitat Associations. <sup>4</sup>	
Soft-leaved Sedge	<i>Carex montana</i>	Grows in a range of open habitats within heathlands, scrublands, semi-natural woodland glades and grasslands. This species is persistent within the ride edges of closed canopy woodland and forestry plantations if sufficiently well illuminated and undisturbed.	
Bowman's horsetail	<i>Equisetum x bowmanii</i>	Grows in a range of open habitats and scrublands including along the margins of semi-natural woodland.	
Copse Bindweed	<i>Fallopia dumetorum</i>	Grows in shady sandy places that are subject to occasional clearance and disturbance. Absent from plantations and closed canopy woodlands.	
Common Cudweed	<i>Filago vulgaris</i>	A plant predominantly of broken well-illuminated ground in a variety of habitats. This species can also be found in disturbed ground following woodland and plantation felling together with ground preparation for planting.	
Heath Cudweed	<i>Gnaphalium sylvaticum</i>	A plant of broken well-illuminated ground in a variety of habitats. This species can be found in disturbed ground following woodland and	

<sup>2</sup> JNCC 2005 Red List categories vulnerable, near threatened, endangered and critically endangered.

<sup>3</sup> JNCC 1994. JNCC 1999. JNCC 2005.

<sup>4</sup> Brewis et.al. 1996 Flora of Hampshire

		plantation felling together with ground preparation for planting.
Summer Snowflake	<i>Leucojum aestivum subsp aestivum</i>	A species of swamps including semi-natural swampy woodlands. This plant thrives during periods of occasional rotational tree clearance but will tolerate shaded riverbanks. Absent from plantations.
Bastard Balm	<i>Melittis melissophyllum</i>	A woodland species requiring rotational clearance. Present within semi-natural worked coppice together with well-illuminated plantations on semi-natural woodland sites.
Narrow-leaved Lungwort	<i>Pulmonaria longifolia</i>	Grows in a range of open habitats within heathlands, scrublands, semi-natural woodland glades and grasslands. This species is persistent within the ride edges of closed canopy woodland and forestry plantations if sufficiently well illuminated and undisturbed.
Marsh Fern	<i>Thelypteris palustris</i>	A highly localised species of marshland including semi-natural wooded marshes. This species has persisted where a semi-natural wooded marsh has been incorporated within a forestry plantation. The species thrives in open fen conditions.
Ivy-leaved bellflower	<i>Wahlenbergia hederacea</i>	A plant of high humidity and open habitats within glades of semi-natural woodlands. This species may persist in rides within closed canopy woodlands and forestry plantations if those rides are sufficiently well-illuminated are undisturbed and remain permanently moist and humid.

Of these ten species there is one species, Bastard Balm, which is dependant upon tree cover that is regularly cleared to create well-illuminated bare ground.

There are three species, Soft-leaved sedge, Narrow-leaved Lungwort and Ivy-leaved Bellflower, that are persistent within the rides of forestry plantations and closed canopy woodlands but are not dependant on those habitats. Ride edges are sub-optimal habitats for these species.

There are two species, Common Cudweed and Heath Cudweed, which take advantage of soil disturbance created by tree felling together with ground disturbance prior to planting. These are predominantly species of open habitats.

These data indicate that with notable exceptions the scarce, rare and Red List vascular plants of the New Forest are not dependant upon, nor tolerant of, closed canopy woodlands and timber plantations, including rotationally managed

plantations. Vascular plants however may not be a sound proxy for a broader range of biodiversity and thus need to be considered in that wider context.

The 2007 Conference held by the University of Bournemouth and the British Ecological Society<sup>5</sup> considered the breadth of biodiversity in the New Forest. The high biodiversity value of a range of species associated with the woodlands and plantations of the New Forest were considered. The conference concluded that these biodiversity interests were concentrated into two groups of habitats. These groups of habitats were those associated with old growth wood-pastures and those associated with high biomass field-layer habitats such as those created by coppicing in the absence of grazing and browsing. The former category is a particular feature of the New Forest, reflecting the legacy of woodland management that has retained a high number of ancient trees across a large landscape. The latter category is a circumstance found throughout lowland England where relatively short-term rotational coppicing has declined and where grazing and browsing pressure from wild and feral deer has increased. These habitats are not associated with plantations under conventional forestry management.

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<sup>5</sup> Newton A. (ed.) Conference proceedings in press