

Questions from our consultation

This form sets out the questions we ask in a consultation on restoring and expanding open habitats from woods and forests in England that we launched on 12 March 2009. The consultation ends on 5 June 2009. You can find the consultation at www.forestry.gov.uk/england-openhabitats-consultation or contact Dominic Driver, Forestry Commission for further information (contact details below).

Comments on any aspect of the consultation are welcome, but we are particularly interested in your responses to the questions below. This form is available at www.forestry.gov.uk/england-openhabitats-consultation.

Your name:	Dr. Lesley Haskins
Your organisation (if any):	
Date:	04.06.09

No	Question.
The nature of the change	
1.	Does your aspiration for the scale of the policy fit within our calculated range of 5,600 to 30,000 ha of restoration or expansion of open habitats from woodland or forest over 10 to 15 years? This is 370 to 3,000 ha each year. What level of intervention would you prefer and how is this justified?
<p>This consultation document discussing the potential to restore open habitats is warmly welcomed and the Forestry Commission (FC) is to be congratulated for itself promoting the concept and the debate. After 30 years of working for nature conservation in Dorset, including 15 years representing the Dorset Wildlife Trust on development plans and public inquiries, I have no hesitation in saying that this is, or should be, the most significant of the hundreds of consultation documents upon which I have commented!</p> <p>In Dorset the main open habitat affected by coniferous afforestation is Lowland Heath (used here to include heathland and associated mires/bogs). The following comments are primarily directed at this habitat. There are however also other open habitats such as chalk downland which have also been inappropriately planted.</p> <p>It is estimated that the original natural extent of heathland in Dorset amounted to some 39,960 ha (Haskins 1978). Although some private plantations were planted from the late eighteenth century onwards, most of these failed or were burnt out, and it was not until the establishment of the FC that conifer planting of the heathland became a permanent and highly significant development. By 1978, which would have been around the peak of its afforestation programme in Dorset, the FC had planted up nearly 6000 ha of heath (Haskins 1978). Thus the FC was directly responsible for the loss of nearly 15% of the original area of the Dorset heaths.</p> <p>Most of this afforestation was undertaken in the 1920s and 30s with a further burst of activity in the 1950s & 60s. Although we do not have a precise figure for the area of heath remaining just before FC planting commenced, interpolating figures leads to the conclusion that broadly 1/3 of the heath remaining before planting commenced was then coniferised by the FC. Since the mid 1970s, some heathland has been released, largely through the very commendable Forests and Heaths Project, but even so, the area of coniferised heath remains very substantial - very broadly equivalent to the amount of heath which survives in total. In other words, restoration of all conifer plantations</p>	

No	Question.
	<p>controlled by the FC on former heathland could approximately double the area of Dorset heathland. This figure alone is not hugely different to the lower end of open habitat release being mooted in this document.</p> <p>These figures demonstrate the scale of heathland loss by the FC activities - and the scale of the redress which could, theoretically, be made.</p> <p>The MOD has additionally planted a much lesser but significant area of former heath. Some private plantations also exist - but the substantial majority of plantation on former heathland is directly controlled by the FC.</p> <p>Lowland Heath is now recognised as being of international significance to wildlife and is a priority habitat for restoration. A full account of the ecology, importance and history of the Dorset heaths has been provided to you in Haskins (2003). This consultation document somewhat underplays the huge importance of this (and other) open habitats to this country's biodiversity, possibly because it seems to be taken as read, and somewhat overplays so called 'balancing' issues, possibly because they are constantly discussed and drawn attention to. It is important that the reader, and the Minister in particular, is given critical information in respect of agreed national and local habitat and species targets to better appreciate the enormous importance of this document - and the critical role that it should have in fulfilling those targets.</p> <p>There is very little scope for such restoration from agriculture due to widespread heavy and repeated improvement of the soil. Coniferous plantations offer the main opportunity for ready and meaningful restoration. The relative ease with which conifer plantation can be restored to heath has already been demonstrated in Dorset via the Heaths and Forests Strategy whereby a most welcome, albeit limited, restoration programme was adopted. This ease is also recognised in your own in-house report (Spencer and Edward 2009).</p> <p>Against this background it is absolutely vital that this critical consultation document does lead to positive and substantial open habitat restoration. The Forestry Commission has itself, singlehandedly, been responsible for major loss of heathland. It now, almost uniquely, has the ability, and apparently the enlightenment, to 'make amends'. If this enterprise is to go any way to properly contributing to critical biodiversity targets for Dorset heath and other most important open habitats (together with all the associated landscape, cultural and recreational benefits as discussed below) it is essential that no less than the maximum figure should be adopted - indeed by the time even the maximum figure has been distributed amongst other deserving open habitats throughout the country, (including some others even in Dorset) it is unlikely that the figure allocated to Dorset heathland would meet the target for heathland expansion set in the Dorset Biodiversity Strategy (currently 1,000 ha for as soon as 2010 of which it is believed that barely more than 10% has yet been achieved.) A figure greater than the maximum suggested is most likely to be needed.</p> <p>Further there is, in many locations, no valid justification for not adopting at least the maximum figure. Certainly in respect of timber production in Dorset, failure of the FC earliest plantings of Scots and Maritime pine, led to the recognition that only substantial effort, particularly phosphate dressing, could promote remotely respectable tree growth - and even then only of Corsican pine (eventually 54% of total plantings) and Scots pine (eventually 25% of total plantings) (Haskins 1978) both of which generally are in a low yield class compared to other species. Follow up aerial phosphate treatments were required compounding damage to even unplanted habitat. Currently both pines, particularly Corsican pine, are suffering with serious fungal infections which further reduce their value as timber producers. FCs own report (Spencer and Edward 2009) admits "Some areas are of a yield class barely worth replanting if economic timber production were the primary objective." This must surely apply to the Dorset heathlands. Indeed apparently this is the case and for the Eastern section of the Dorset FC holding, it is only the income from the Moors Valley Country Park which allows the Forest to make</p>

No	Question.
	<p>a profit. The putting of so much effort into excluding internationally important habitat for such dubious gain should simply not be happening any more. Other issues of cost, carbon balance etc are commented upon in later sections.</p> <p>This document tells us that there are some 130,000 ha of former open habitat now occupied by woodland. Spencer and Edward (2009) state that within the Public Forest Estate alone the area "under plantation or woodland with potential for effective restoration to open habitat that would contribute both quantitatively and qualitatively to the UK BAP, amounts to some 54,474 ha." Thus the maximum potential amount has already been hugely reduced to the 30,000 ha presented as the 'maximum on offer' in this document. When such a substantial reduction from the original potential capacity has already been made, it is even more unacceptable that any further reduction from the 30,000 ha should be mooted.</p>
<p>Desired outcomes</p>	
2.	<p>Have we developed a reasonable list of desired outcomes of the policy? Do you wish to suggest any amendments?</p>
	<p>-Ecological communities able to cope with threats. This is indeed a key desired outcome. However it is an outcome whose achievement is difficult to confirm. An outcome based on national and local habitat and species targets needs to be incorporated. Any valid desired outcome is only going to be achieved if a bold strategy is adopted which embraces a multi faceted approach of - -extending heathland areas which lie just beyond the forest block into the forest block -extending heathland areas within the forest block -linking those areas together by more than just rides these approaches must be as AN ADDITIONAL STRATEGY to linking by rides and rotating heath with forest crops.</p> <p>-Financial viability. The need for cost efficiency in restoration is recognised. However it is important to look at the financial implications not just in the short term, but in the long term and for lowland heath, particularly Dorset heath, the overall financial implications of restoration are of the lowest order. Firstly, as described in question 1 above, the financial return from pine cropping on the Dorset heaths is marginal. Secondly, restoration of lowland heath is normally 'easy' or no more than 'moderate' (Spencer and Edward 2009 p 20) and the cost is therefore of the lowest order. Thirdly cost of ongoing management is again only 'moderate' (Spencer and Edward 2009 p 21) or in the longer term 'low' - (Spencer and Edward 2009 p 38 when describing management of established heathland in the New Forest). It should be noted that several forest blocks in Dorset already have some grazing units bounded by fences and other grazing units are already in the programme. Other forest blocks have fenced and grazed heathland adjoining. Therefore if heathland restoration is sensibly targeted to extend existing heathland blocks (as mooted above) there will be a need only to extend fencing rather than start from scratch - as has been assumed in the costings adopted by Spencer and Edward on page 41.</p> <p>Grazing also provides an additional, traditional, and beneficial economic function for the heaths and, very importantly, allows funding to be channelled through the grazier.</p> <p>The cost benefits of large grazing units embracing large heathland areas both within, and sometimes without, the FC holding, is but one reason for restoring substantial and linked areas of heath. It is the small 'amoebas' of heath slinking around and within the forest,</p>

No	Question.
	<p>which are currently much more the FC approach, which are more costly to maintain - and at the same time provide much less in terms of biodiversity, landscape, cultural or recreational advantage. (see also comments to question 4 regarding management.)</p> <p>- Keeping to Government commitments on woodland cover. A government commitment to maintain net native broadleaved woodland cover would be commendable and would in any event only rarely be in conflict with open habitat restoration. However a government commitment to maintain net alien coniferous plantation is not commendable - especially since it is coniferous plantation which is the main source of conflict with open habitat restoration. Therefore as argued below, using the generalised term 'woodland' to embrace both deciduous woodland and conifer plantation, and commit to maintaining combined cover, is inappropriate. In any event both deciduous woodland and conifer plantation location needs to be based on the 'right tree in the right place' approach so helpfully coined in this consultation - and the right place for coniferous afforestation is not on any important open habitat and certainly not on the Dorset Heathlands. A substantial proportion needs to be removed and if deemed necessary, redirected. The right tree in the right place approach will not be achieved by imposing rigid like for like deforestation with afforestation. It will need a national (ie UK) direction and flexible time spans.</p> <p>- Positive engagement by local and other users. This important outcome for maintaining and enhancing positive engagement with the landscape is entirely compatible with open habitat restoration. Indeed a recent survey in Dorset has indicated that open habitat is the key factor in attracting people to green space. In reporting to East Dorset Council members on the results of a study by Footprint Ecology into the public use of open greenspace, planning officer William Wallace observed "They (open greenspaces other than heathland) have been created for a variety of purposes, and do not necessarily provide the wide extent, semi-natural habitat, freedom to roam and open views that attract people to the heaths." FCs own visitor surveys in Dorset have shown that coniferous plantations are used primarily because of their proximity to home - and not for their landscape attraction.</p> <p>Pages 16, 17 and 18 list likely impacts upon various anthropogenic and landscape factors - which often seem to predict little impact due to the limited scale of the work anticipated or negative impact if the work should be progressed beyond limited thresholds. This does not seem to reflect the recent local evidence that having more open landscapes, and exposing views, will render the forest blocks more attractive to visitors - it transpires in fact that people do like open spaces and views which they find both attractive and uplifting. It is much to be hoped therefore that the changes which take place WILL take the landscape across the thresholds which will lead to a significant creation of open space and thus to a significant IMPROVEMENT in quality of life and landscape. It is also to be hoped that this will be combined with the release of views. The FC controls some of the most stunning views in Dorset - yet it currently denies visitors the enjoyment of them other than through occasional 'windows' defined by a wooden seat or picnic table. For two prime examples walking along the Cannon Hill Ridge (in Cannon Hill Forest Block) and from Culpeppers Dish (Moreton & Affpuddle Forest Block) one is aware that views to Cranborne Chase and the Purbecks could be upliftingly extensive, but are actually depressingly limited. This consultation must lead to a change in this approach and a release of views as a happy and natural partner to the creation of open spaces.</p> <p>Similarly these pages comment on restoration of historic landscapes and learning about landscape history- but again with a rather downbeat cautionary tone. The restoration of open habitats offers critical opportunities to release the historic landscape, reset heritage features (usually the Bronze Age barrows associated with the cultures which created the heaths) within that historic landscape and give the public direct experience and</p>

No	Question.
	<p>knowledge of them. It is much to be hoped that the changes WILL be of such a scale as to allow the public to have that essential direct experience of heritage features within their historic landscapes - and not have to merely be told about them by interpretation panels within the setting of modern forests from which the woodland has not been removed. Puddletown Forest now occupies the heath which once stretched from Thomas Hardy's birthplace to Rainbarrow - which featured in his classical novel about the Dorset Heaths - Return of the Native. This is but the most obvious educational experience denied to the public by conifer plantation. This project offers the chance for a strongly positive and permanent historical and educational impact - which carries little risk of any negative impact provided basic guidelines of care during operations are followed - damage to historic features (which include soil profiles) is actually much more likely to result from ongoing forest cropping and replanting than from the one off restoration of open habitats.</p> <p>Although created by man, the heathlands date at least to the Bronze Age and are arguably every bit as important historically as ancient woodland. There is an inconsistency in the FC accepting an argument for total restoration of ancient woodland, while adopting such a cautionary approach to restoration of heathland.</p> <p>Open landscapes also have a great natural beauty. It is interesting that in Dorset Rempstone Forest lies within an AONB. The agreed management plan for this AONB includes the removal of conifers - clear indication that they are regarded as detrimental to this designation.</p> <p>RESTORATION OF NATURAL BEAUTY AND HISTORIC OPEN LANDSCAPES INCLUDING HISTORIC FEATURES AND SUBSTANTIAL VIEWS SHOULD ALL BE SPECIFIED AS DESIRED OUTCOMES.</p> <p>This is not to say that there is not an element of the public who will resist creation of more open habitat, but this is normally based on a strong element of misconception including</p> <ul style="list-style-type: none"> -that the trees are old and will not be felled otherwise -that the trees will protect the site from development or mineral winning - that the trees are essential to carbon retention - that the FC has some undisclosed ulterior motive in tree felling <p>It is important that the FC should point out that actually open space (ie heathland) restoration is what actually offers much stronger inherent protection against development and mineral winning, permanent carbon retention and the opportunity to allow some associated truly permanent woodland.</p> <p>There may also be a simple resistance to change in principle which some people find unsettling - but quickly become used to.</p> <p>It is very important that a vocal minority should not unduly thwart the benefit to the majority.</p> <p>-</p>
<p>Measuring the success of the policy</p>	
<p>3.</p>	<p>Have we developed a reasonable set of indicators for evaluation? Do you wish to suggest any amendments to this indicator list?</p>
	<p>Ecological communities able to cope with threats. It is helpful to see the rate of restoration included here. The financial return from the pines grown on Dorset heathland is so low that there is a stronger than usual argument for speeding heathland restoration by felling before normal maturity. It is very important that restoration should not be</p>

No	Question.
	<p>delayed and potentially jeopardised, by conifer maturation. Short term results are needed.</p> <p>Financial viability . Conversely it is important that financial aspects should be considered in the longer term, as the cost of management, including grazing costs, diminish significantly with time.</p> <p>Woodland cover - Again this is an aspect which requires long term consideration as it is neither necessary nor possible to achieve the right tree in the right place approach in the very short term - it is a longer term ambition which will require some time to achieve properly.</p> <p>Positive engagement - This indicator is ambiguous. Long term monitoring is required to take account of the fact that local users may resist initial change on principle but then become accustomed to, and welcoming of, the longer term result.</p> <p>Carbon balance - as indicated elsewhere this is a very complex issue and it is hard to see how these indicators are going to properly asses anything but a part of the matter - although adopting low emission techniques are of course simple and helpful.</p>
	<p>Policy proposals</p> <p>Elements present in the policy</p> <p>We will treat woodland and open habitats as potentially mutually beneficial</p>
4.	<p>Do you agree that woodland and open habitats are potentially mutually beneficial? Is promotion of this idea helpful in gaining support for open habitat restoration and expansion from woodland?</p>
	<p>It is certainly the case that some species of open habitat also use wooded habitats around them - perhaps most obviously the nightjar which, through radio tracking studies, is known to feed over woodlands adjoining heath. However even here deciduous woodlands, being more insect rich, are more useful than alien coniferous ones. As another example bats may feed over insect rich heath, but roost in adjacent trees - but again coniferous trees are unfavourable in this respect. So whilst there is validity in the concept of limited mutal benefit, it cannot be adopted as an argument for retaining extensive coniferous woodland.</p> <p>It should also be borne in mind that there are significant disbenefits in retaining woodland over and above the simple loss of potential open space habitat. Small areas of heath encased in woodland tend to have limited habitat diversity and limited species diversity. They become increasingly overshadowed as adjoining woodland matures loosing the essential ingredients of sunshine and warmth normally inherent to heathland habitat. Additionally they are much harder to maintain, being constantly invaded by self seeded trees. They offer the visitor very little in terms of open space, views, landscape type and historic or educational experience (see above). The current practice in south-east Dorset is to rely very heavily on small amoeba - like areas of heath snaking around within the Forest Blocks and with narrow linkages along forest rides. Larger, bolder, release of substantial areas of open habitats connected wherever possible by true habitat linkage should be the aim. Such schemes should aim to</p> <ul style="list-style-type: none"> extend heathland areas outside of the Forest Blocks to within them focus on areas which still support heathland flora and fauna maximse heathland habitat and species diversity release views absorb historic features such as barrows

No	Question.
A presumption against removal of 'mature native woodland'	
5.	Do you agree with the principle that there should be a presumption against removal of ancient and 'mature native woodland'?
<p>The presumption against removal of ancient woodland is strongly supported. It is understood that the FC also has a policy of restoring ancient woodland to its native condition by the removal of planted conifers. This is also strongly welcomed.</p> <p>However it has to be said that it is something of an inconsistency that the same level of commitment never to destroy and to fully restore this particular, albeit very important habitat, is not extended to other habitats of equal importance and high antiquity ie lowland heathlands which are always very old (at least dating back to early woodland clearance in the Bronze Age) and some of which, such as those in Dorset, have probably existed in a lightly treed state from much earlier times. (Haskins 1978). Lowland heath, should be as much revered for its biodiversity and historic significance as ancient woodland.</p>	
6.	What do you think of our proposed outline definition of 'mature native woodland'?
<p>Making a declared presumption against removal of a tightly defined woodland type (except ancient woodland) is not likely to be especially helpful. It is going to be relatively hard to re-establish open habitat from long established deciduous woodland in any event - and if anyone proposes it, it is likely to be because there is a very important open habitat to attempt to restore. For example in Dorset we may well have old beech plantations which might fit into these woodland definitions established on chalk downland and which should undoubtedly be removed in the best interests of important biodiversity. There could be instances when such woodland might stand in the way of a vital link between two areas of open habitat and at least partial removal of woodland would have disproportionate benefit.</p> <p>Again there is something of an inconsistency in offering protection to a comparatively modern habitat at the expense of very long established important open habitats.</p>	
We will expect practitioners to help local users to participate in development of the initial proposals	
7.	Do you agree that local participation in decision making is helpful? What is your preferred option for how we should apply this element?
<p>As indicated in the answer to question 2 above, recent local studies indicate that people are positively attracted to open spaces with open habitats and views. However it is also true that some people are suspicious of change in principle and some also carry a number of misconceptions about the value of forest over open habitats as listed above. This minority can be highly vocal and sometimes resistant to valid argument.</p> <p>In its local participation process therefore it is absolutely vital that the FC</p> <p>* does not encourage the public to perpetuate those misconceptions but sets out the truths quite openly. These should include</p> <ul style="list-style-type: none"> - conifer plantations are crops which will be felled in the normal course of events - conifer plantations will not protect a site from development or mineral winning 	

No	Question.
	<p>-conifer plantations do not necessarily substantially sequester more carbon than a mature undisturbed heathland ecosystem. Much further research need to be undertaken on this subject embracing many more aspects of the carbon cycle and indeed other potential causes of global warming.</p> <p>*points out the relatively short history of the conifer plantations and the comparative long term history of the heaths.</p> <p>* points out the benefits in terms of improving landscape diversity, release of views, and displaying historic and cultural heritage, equally or even more prominently than advantages to biodiversity.</p> <p>* does address valid issues and representations concerning visual and noise screening ect</p> <p>* does not allow a highly vocal minority who may remain intransigent and may be falling into the trap of objecting for objections sake, to override the majority good.</p> <p>In considering public participation it will be important to look at the long term reaction. It is anticipated that the objecting minority will come to accept the change once it has become established again as the norm. Short term reaction to the principle of change should not be regarded as a true indication of any lasting negative view.</p>
<p>We will promote mechanisms for prioritising woodland removal at a regional level</p>	
8.	<p>Do you agree that prioritisation at a regional level is appropriate for this policy?</p>
	<p>This important issue requires a national perspective.</p> <p>Conifer afforestation has absorbed many types of open habitat, but some are of greater biological, historical or landscape value than others and they occur without particular relevance to regions. Priority for release of open habitats should be based on this relative biodiversity importance, which can only be properly assessed from a national perspective. The situation should not be allowed to arise whereby different priority habitats end up competing against one another within one region, whilst low priority habitat is released in another region because that region has little or no high priority habitat to be released.</p> <p>Similarly planting of new sites should be prioritised on the basis of the most productive trees to be located in the least damaging and potentially most beneficial locations - ie the 'right tree in the right place'. The most suitable places for new plantings can also only be identified within a national (ie UK) perspective.</p>
<p>We will apply a framework for evaluation to projects</p>	
9.	<p>Do you agree with this framework for evaluation? What is your preferred option for how we should apply this element?</p>
	<p>The essential point here is that practitioners should not be deterred from putting forward schemes by the compulsory requirement of a complex framework for evaluation.</p> <p>If schemes are based on key guiding principles - for lowland heath those which have been listed above - the positive outcomes should be inevitable. It is not desirable to deter practitioners with compulsory or complicated frameworks. Use of a simple framework should be encouraged, but never imposed. Imposition will discourage some practitioners from coming forward.</p>

No	Question.
10.	How much and what kind of support do you think we should give to practitioners to help them evaluate their projects using this framework?
<p>Similarly the essential point is that practitioners should not be deterred from putting forward schemes by the cost implications. Funding should be offered to assist practitioners to operate their simple voluntary frameworks.</p> <p>Any system should be simple, supportive, and encouraging, not demanding and costly.</p>	
<p>To avoid net deforestation in England we will try not to go over a threshold rate of woodland removal due to restoring and expanding open habitats.</p>	
11.	Do you agree with the principle of an England scale threshold rate of woodland removal? What is your preferred mechanism by which such a threshold could be applied to policy?
<p>It is not accepted that a net reduction of woodland, including as it does here, a high proportion of alien conifer plantation, is unacceptable in principle since its biodiversity is limited, and its advantage in relation to the carbon balance remains to be fully studied. It is not therefore helpful to impose any threshold rate of woodland removal. If one is imposed, it should not be a parochial one, but should be on no less than a UK basis, so that the right tree in the right place should be as flexible as possible. It should also have flexibility in time, as finding the right place for the right tree will need time - and open habitat restoration should progress as a matter of urgency.</p>	
12.	Do you consider that the proposed threshold is about right, too high or too low?
<p>As stated above, it will not be helpful to have any threshold of tree removal.</p>	
<p>Key variables</p> <p>What is the balance between achieving biodiversity objectives and the need to reduce green house gas emissions?</p>	
13.	Is there a way, in the short term, we can better estimate the contribution to biodiversity objectives from different levels of restoration or expansion of open habitats?
<p>The title question here - how can we balance biodiversity objectives against green house gas emissions? - presupposes that there is a proven advantage to carbon retention in deep ploughing heathland to plant, crop and continuously recycle conifer crops (whose end product is not necessarily retained) in comparison with retaining and sustainably managing a mature above and below ground heathland ecosystem. It is not accepted that this is proven to be the case. We understand that the Environment Agency has recently questioned this assumption in relation to grassland habitat. There must be an even greater questionmark in relation to heathland habitat supporting as it does a very substantial biomass below ground in the form of peat or humus and a very substantial above ground biomass in the form of dwarf shrub vegetation. This report itself admits that no account of below ground biomass has been taken. There are also other aspects which have not been taken into account including the carbon emission of cropping, transporting and processing timber. In any event greenhouse gases are not the only issue involved in global warming. Different habitats effect climate in different ways, and temperate forest may not be the better habitat for climatic stability than heathland.</p>	

No	Question.
	<p>Certainly it does not behave in the same way as tropical forest. The FC of all organisations should be foremost in presenting an unbiased, comprehensive and frank appraisal of this now somewhat emotive issue. It should absolutely not be furthering what looks likely to be proved a popular myth amongst the public.</p> <p>In answer to question 13 the primary biodiversity objective is to restore substantial areas of permanent heathland in Dorset so as to fulfill national and local biodiversity targets. The extent of coniferous afforestation of Dorset heathland is such that substantial open habitat release, using the key principles listed above, could very easily lead to the full meeting of those biodiversity targets - whilst still retaining significant areas of forest. Spencer and Edwards (2009) seem to indicate that the exercise of looking at exactly where heathland could most easily be restored has already been done in-house - although it is not clear whether this has included leasehold as well as freehold land (which it should do). Such an exercise now needs to be amalgamated with the principles listed above. It will then be possible to see what level of contribution can be made.</p> <p>The matter of monitoring contribution should not be overcomplicated - with well planned permanent habitat restoration will automatically come heathland species recovery - although for some species this will inevitably involve the longer term.</p> <p>In considering levels of restoration it is important to remember that for heathland, species diversity in itself, is not necessarily a measure of success. A study on heathland fragmentation in relation to biodiversity (Webb & Hopkins 1984) showed that small heathland areas could be more diverse for invertebrates than large ones - but this was due to the 'edge' effect, with non heathland species invading from around the edge - but 'bumping up' the total species diversity. This emphasises the need to create boldly sized heathland areas and to evaluate their contribution by looking at occurrence of heathland species only.</p> <p>The contribution of 'rotated' heathland within a managed forest system cannot in the same way be regarded as surely contributing to biodiversity targets. It is worrying that currently the FC is placing a heavy reliance on rotated heath/conifer crop to maintain heathland and its dependent species -</p> <p>Firstly it is not known how many cycles of planting and cropping a heathland soil will withstand before it is irreversibly prevented from again readily supporting heathland. So far we only know that generally heathland can be restored after one cropping cycle - we should not assume that this can be repeated with equal ease or success.</p> <p>Secondly only a proportion of heathland species can readily exploit rotated heathland. Certainly some heathland birds, notably woodlark and nightjar are able to do so and Dartford warblers can utilise young conifers in place of gorse (but all when there is also permanent heath available) - but other species of flora and fauna are highly sedentary and cannot so take advantage of rotated heath - including many of the UK BAP heathland plant species. " Just 5 of the 32 plant Priority Species are capable of surviving well under a rotational, forestry regime (typically annuals with easily dispersed seeds), but the remaining 27 are resolutely confined to permanent heathland." (Byfield 2009). It is diversionary to claim meaningful contribution to biodiversity targets by this approach. Rotated heath can certainly contribute positively in certain respects, but it should not be exploited as an argument to validate a reluctance to restore maximum permanent heath.</p>
14.	Do you agree that management practices to minimise carbon emissions during restoration or expansion of open habitats should be adopted? Do you agree with the outline practices presented? How could we best ensure that such practices are adopted?

No	Question.
	<p>Of the methods listed, minimising soil disturbance and not removing stumps from the ground are linked and are, in any event, in the best interests of heathland restoration for reasons other than carbon retention. Allowing brash to decompose in situ is not ideal, but may be deemed to be acceptable if it does not result in significant soil enrichment (ie to the point where heathland restoration is prejudiced) and saves costs. In some cases, where the conifer crop is so advanced that the heathland habitat has already been lost, delaying crop removal for the relatively short period for it to reach maturity may not be hugely significant - not so much for carbon retention as for recouping some costs. However in many other cases, where the heathland habitat is still present or where key heathland extensions or linkages are more urgently needed, tree felling before economic maturity will be required. Page 35 states that softwood timber availability is currently increasing - and will do so until 2021. This will lead to a heightened expectation of availability from the timber industry which cannot in any event be sustained. A reduction in the rate of increase through felling before economic maturity will not be damaging to the timber industry - arguably leading to a more realistic and sustainable expectation of timber availability. The Yield Class of the pines on Dorset heath are such that it will have limited financial implication.</p> <p>Rhododendron is a major issue in respect of restoration management. The FC holding is already a vast inoculum for Rhododendron and it is spreading on a continuous front and by small outliers. It is currently only being tackled in association with programmed felling works (and on already restored permanent heathland). It is self evident that this approach will inevitably lead to an entire takeover of the forested area with only recently felled forest plots being temporarily cleared and a perpetual commitment to cutting, burning and follow up treatment - which is costly in terms of finance and carbon emission. It will mean that the potential task of further open habitat restoration is increased on heathland from 'easy' to 'moderate' or 'difficult' (Spencer and Edwards 2009 p 20) with consequent increase in costs and carbon emission. It is essential that Rhododendron is tackled systematically on its advancing front and outliers as a matter of urgency. The longer term cost of not doing so is truly alarming - in terms of cash, carbon emission, and potential loss of biodiversity. It is vital to apply the simple advise 'a stitch in time saves nine.'</p> <p>The same issues apply to Gaultheria shallon which is now dense and extensive in Ringwood Forest</p>
15.	Do you agree that it is appropriate to include impact on long-term average carbon store <i>and</i> loss of potential to substitute timber for higher carbon materials and fuel in the calculations on carbon balance?
	<p>Comments on carbon balance have already been made in answer to question 13. The carbon balance involves many issues only some of which are being considered at all in this document and there is a tendency to omit negative impacts of conifer growing (eg cropping, transport and processing) and positive impacts of maintaining heathland ecosystems (eg below ground biomass). It is not appropriate to pull out any two issues and put them into the total equation without all the others. And, as indicated earlier, carbon balance is not the only issue in climate change.</p> <p>At the end of the day open habitat restoration needs, for biodiversity and amenity (in its broadest sense), to be undertaken urgently. Certainly it should be done using methods to minimise carbon emissions, and certainly we should be working towards replanting trees on the basis of the right tree in the right place, (for many good reasons), but prevaricating on the basis of incomplete aspects of climate change is not helpful.</p>

No	Question.
16.	Where do you think the appropriate balance lies between achieving biodiversity objectives and the need to reduce carbon emissions? What processes might help to make this judgement?
	<p>The first process should be a more consistent presentation of the carbon implications in the present state of knowledge. The pages before this question make various statements including</p> <p>'the difference in carbon emissions during management operations in woodland or forests compared to open habitats after restoration is considered negligible.'</p> <p>'.....taking into account only above ground biomass'</p> <p>'removal of woods and forests to restore open habitats results in a (presumably only) one off reduction in the long term average carbon store on the site'</p> <p>'we assume that all the wood is mixed with coal for power generation' ie released back into the atmosphere, NOT retained. On what basis is it assumed that wood will REPLACE fossil fuels and not simply be added to them?</p> <p>Yet despite these statements which actually undermine a valid conclusion that continual cropping of a conifer plantation is significantly better for carbon retention, question 16 invites a debate on the certain advantage of this against achieving biodiversity objectives. As stated previously this is encouraging an as yet untested myth amongst the public.</p> <p>The intent stated on page 31 ie 'The figures for the impact on carbon balance are subject to review and we are working to upgrade them. We will use the most accurate figures available at each stage of the policy process.' is noted. It is to be hoped that by then the most glaring shortfalls in the studies, including consideration of below ground biomass, the ultimate fate of the carbon held in cropped conifers, and the emissions caused during felling, transport and processing will have been examined.</p> <p>Having said this, the comment made in relation to question 15 still applies - open habitat restoration needs to be undertaken as a matter of urgency and cannot await extensive deliberations which will almost certainly conclude that coniferisation is not the greatest friend of the planet in comparison with full open habitat ecosystems, especially heathland.</p> <p>Another important process to undergo would be to make a valid separation of woodland and forest in this debate. The two are used synonymously in this document. Woodland is generally understood to be composed of broadleaved trees, whereas forest is generally composed of coniferous, largely alien, trees. It is coniferous forest which is the predominant occupant of former open habitats. Restoration of open habitat will actually require negligible removal of 'woodland' as it is generally understood. Synonymous use of these two terms is misleading and plays upon the publics more natural affection for broadleaved woodland - there may even be an implication for the carbon balance.</p>
	<p>Should we be managing open habitats to keep them in 'favourable condition' or should we adopt a more dynamic approach to land management?</p>
17.	Outside SSSIs, do you agree that a more dynamic attitude to land management could deliver equivalent or greater gains for open habitats and species than one where success for all sites is based on assessments of condition as applied to SSSIs?
	<p>It is accepted that using a dynamic approach (presumably meaning rotating of heathland/conifer crop) within a Forest Block has a role to play. As stated before, some forms of flora and fauna are robust or mobile and can exploit opportunities which may be</p>

No	Question.
	<p>separated in time and space under favourable circumstances. It is agreed for example that woodlark and nightjars do utilise temporary heath resulting from felling - provided there is also permanent heathland available. However, as is also recognised in this document others may be fragile or highly sedentary and are fully dependent upon permanent habitat to survive in the long term. Tree regeneration from stored seed on rotated heath will be never-ending and grazing may be prejudiced. Further it is not yet known how many conifer cropping cycles can take place with heathland still successfully re-establishing - especially if brash is to be left in situ. At present there is an over-optimistic reliance on this approach. It cannot deliver equivalent gains let alone greater ones than the restoration of permanent open habitat. Permanent habitat is not just 'required', as an element in the system, it is the vital major player. Rotation can only play an additional contributory role.</p>
18.	<p>If so, how might such an approach be developed? Is there scope for modifying the conservation objectives on some SSSIs to incorporate a similar approach? If not, do you consider that the endpoint for all restoration proposals should be judged against favourable condition as defined for SSSI habitats?</p>
	<p>There can be absolutely no justification for modifying the objectives on any open habitats SSSI to incorporate a rotation open habitats/conifer crop rotation. All existing SSSIs should be permanent open habitat. Permanent open habitat should be substantially expanded and judged against favourable condition as defined for SSSI habitats. (more than 25% woodland cover on lowland heath would lead to perennial management challenges). Dynamic open habitat/conifer cropping should be considered as making an additional supplementary contribution to biodiversity and not seen as an alternative contributor ie any hectare put down to forest/heath rotation should not be counted into the open habitat restoration figure.</p> <p>The concept of allowing a proportion of what was once open habitat to change to permanent 'woodland' (which, as indicated above, implies at least a strong element of deciduous trees) is worrying in that such a change will make it difficult, if not impossible, to restore open habitat on such areas at any time in the more distant future. This is because permanent woodland (deciduous) will raise nutrients from below enriching the nutrient poor soils upon which open habitats - particularly heathlands, are dependent. Removal of deciduous trees for potential restoration is also more difficult and costly than removing conifers. Any allowance for 'permanent woodland' then needs to be very carefully considered and restricted to areas where restoration of open habitat is certain to be inappropriate in the future.</p>
<p>What level of woodland removal due to restoring or expanding open habitats could avoid a significant negative impact on the timber industry?</p>	
19.	<p>Can you provide any information on the likely links between any reduction in timber production and economic activity in the timber sector?</p>
	<p>Woodfuel. In Dorset potential heathland is occupied by conifer forest. This document states that the potential resource for woodfuel is woodland - generally native (deciduous) woodland. Therefore there will be no significant impact upon woodfuel provision from heathland restoration in Dorset.</p> <p>Softwood timber availability. Page 35 states that softwood timber availability is currently increasing - and will do so until 2021. This will lead to a heightened expectation of availability from the timber industry which cannot in any event be sustained. A reduction in the rate of increase through felling before economic maturity need not therefore be damaging to the timber industry - it will arguably provide to a more realistic and</p>

No	Question.
	<p>sustainable expectation of timber availability.</p> <p>Further the yield class of the pines grown on the Dorset heathlands is already low and is further threatened by fungal infection. The argument in timber terms for retaining this crop to maturity is therefore particularly low. Allowing it to mature will also displace internationally important habitat and species which, in many locations below young or sparse conifers, are still well represented. Allowing it to mature will long delay the vital biodiversity benefits of restoration.</p> <p>Employment. Restoration of open habitats will be a significant employer. Management of those open habitats and their wildlife (including by grazing), and the people who are attracted to them will also create long term employment. Open habitat conservation and enjoyment is already a significant employer in Dorset and clearly this has the potential to increase with increased restoration of open habitat.</p>
<p>Different approaches to applying policy</p>	
20.	<p>Which of the three approaches by which we make decisions about woodland removal is your preferred option? Can you see any alternative types of approach based either on a combination of these approaches or on new ideas?</p>
	<p>Because each of the options has a completely different format of presentation, it is actually difficult to make meaningful comparison. All the options have positive and negative phrases and conclusions. These, as previously pointed out, include the use of 'woodland' on a par with 'forest'. The use of the word 'expand' implies that more than simple restoration of what once was is to be attempted - which is actually not the case and is misleading.</p> <p>It is not immediately obvious why it has been deemed necessary to contrive a choice of word combinations in the first place - unless there is some political agenda in such an approach. A simple direct approach based on fundamental desires and cautions would seem much more understandable. For example -</p> <p>"Former open habitats now under non-native conifer plantations, and occasionally under broadleaved plantations, established in the 20th Century, often still retain significant wildlife potential. Removal of a proportion of these plantations is necessary to restore priority open habitats, which in turn is important for maintaining and enhancing wildlife, conserving historic landscapes and features and releasing views. Maximum benefits are achieved by extending existing open and sparsely treed areas, linking the same, and embracing special habitat and landscape features. Open habitats maintenance and sustainable management through the development of viable grazing units will be encouraged. The rate of tree removal in relation to any significant potential net deforestation or negative impact on the comprehensive carbon cycle will be monitored, and if necessary counterbalanced by appropriate compensatory planting."</p> <p>i</p>
<p>The role of compensatory planting</p>	
21.	<p>What is the appropriate role of compensatory planting in this policy?</p>
	<p>The appropriate role of compensatory planting will be to provide -</p> <p>High yield class timber</p> <p>Woodland and Forest which adds to biodiversity and does not diminish it</p> <p>(these two amount the right tree in the right place policy)</p>

No	Question.
	<p>variety of landscape</p> <p>public ammenity</p> <p>more robust open space to deflect intense pressure on more vulnerable open habitats</p> <p>It does NOT have to provide immediate like for like planting within the local area.</p> <p>It is possible that there may be some agricultural units within the FC holding which might themselves provide any of these roles, if they are not required as holding areas for open habitat grazing stock - although it is not believed that such areas exist in Dorset.</p>
Factors to consider when deciding which policy is likely to work best	
22.	<p>Have we developed a reasonable set of questions for informing the decision on which policy is best? Do you wish to suggest any changes to the list of questions?</p>
	<p>Ecological Communities. The critical question here should be what contribution will the devised policy make to agreed national and local biodiversity targets? The critical missing question is, how will the government ensure that any shortfall in contribution to those targets is made up if not by restoration of open habitats from forestry?</p> <p>Public Benefit - Does the devised policy adequately restore natural beauty, historic landscape and features and important views? At present there is no question relating to this important aspect at all.</p> <p>Carbon balance - This question put here presupposes a negative balance and is thus inappropriate.</p>
Implications for delivery mechanisms	
23.	<p>Have we missed any major implications for delivery mechanisms? Would any be particularly welcome or unwelcome to you?</p>
	<p>There is relatively little conifer plantation on former open habitat in Dorset which is NOT part of the FC Public Forest Estate. (The MOD has some and some is in private ownership). Clearly then it is the FCs own Forest Estate which really holds the key to meeting heathland biodiversity targets in the county and it is absolutely vital that it recognises and addresses this critical responsibility.</p> <p>As much as 40% of the FC Estate in Dorset is believed on long term lease. The case has been put that the FC is tied by these leases to the growing of trees and a failure to grow enough trees could be grounds for breaking of the lease. The relevance of this general statement to actual proposals warrants investigation. Even taking into account the (modest) planned heathland restoration programme up to 2029 for east Dorset, the proportion of open habitat will still be well below the sustainability management requirement. In part of Wareham Forest, around Morden Bog NNR, the landlord has apparently not thwarted most helpful gains in heathland restoration and this positive example needs to be pursued more widely. In the unlikely event that a landlord were to suggest a breach of lease the possibility of amending the lease should be explored - leases drawn up in a previous era, (and usually with a family member now deceased) should not be seen as an insurmountable barrier to enlightened thinking.</p> <p>As a last resolve, if the FC were deemed in breach of a lease is it likely that the owner would actually terminate it? And even if the owner did so, is it actually likely that any</p>

No	Question.
	<p>private landowner would wish to itself pursue conifer production on heathland unsupported by the FC? The answer to both is most probably no. The owner might wish to enter a different lease with a conservation body, and this could be deemed to be in the national interest.</p> <p>Some conifer plantation on former open habitat is under the control of the Defence Estates and much of it has nothing to do with its prime objective - even in relation to screening activities, and most of it is contrary to its other objectives of conservation and protection of the historic environment. A Strategy for open habitat restoration with the Defence Estates is also needed.</p> <p>Both the FC and the MOD suffer from the conundrum that they cannot, unlike other heathland managers, support their vital work by direct grant claims. This is most unhelpful and leads to a reluctance to fulfill the enormous potential which they have to contribute to national and local biodiversity targets.</p> <p>Whilst the figure of conifer plantation in private ownership is comparatively low compared with the combined FC and MOD holding, where it does exist, owners should receive every encouragement towards appropriate restoration. There are locations, eg south of Moreton Forest, where private and FC estates are so closely connected, that the FC should embrace them within their own Strategy and encourage their implementation concurrently.</p>
	<p>Other comments</p> <p>We welcome your input on any other aspect of this consultation.</p>
	<p>The Dorset heaths are internationally important for their rare and restricted wildlife (Haskins 2003). Their soils are so poor that they can grow only low yielding pines whose productivity is further threatened by their susceptibility to fungal infection. The comment by Spencer and Edwards (2009 p 31) must inevitably apply - "Some areas are of a yield class barely worth replanting if economic timber production were the primary objective."</p> <p>Restoration costs are relatively low as are ongoing management costs. In discussing regional variation Spencer and Edwards (2009 p. 31) make the following observation "For example in Dorset, heathland is both readily restored and subsequently occupied by rare wildlife of restricted range."</p> <p>These in-house observations put the case for maximum restoration of this so highly valued open habitat in a nutshell.</p> <p>References</p> <p>Byfield 2009 Heathland, plantation and the Forestry Commission - a botanical perspective. British Wildlife vol 20.</p> <p>Haskins 1978 The Vegetational History of South-east Dorset. PhD Thesis University of Southampton.</p> <p>Haskins (2003) Discover Dorset - Heathlands. Dovecot Press (copy supplied to Dominic Driver)</p> <p>Spencer and Edward (2009) Open Habitats and Open Habitats potential on the FC Public Forest Estate in England. Forestry Commission.</p> <p>Webb & Hopkins (1984) Invertebrate diversity on fragmented Calluna heath J. App. Ecol 21</p>

No	Question.

Please include the "information about you" form with your response.¹

Please send your completed forms to:

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By 17.00hrs, Friday 5 June 2009.

¹ See www.forestry.gov.uk/england-openhabitats-consultation for a copy.