# Sustainability of forests in Britain: is it a consensus, or still contentious?

Pryor, Simon Oxford Forestry Institute South Parks Road Oxford OX1 3RB

BIBLID [1137-8603 (2000), 15; 23-29]

Britainia Handiko basogintza-politika hiru oinarriren gainean eraiki da, eta horiei buruzko adostasuna handia da bertan: gestio eramangarria, burubide anitzeko etekinak eta baso-eremuaren babesa eta hedapena. Dena den, alderdi guztiek ez dute erabateko adostasunik agertzen kontzeptu zabal horietariko batzuen esanahi zehatzari dagokionez. Britainia Handian, azken bi hamarraldiotako eztabaida gehienak ingurugiroari buruzkoak izan dira, nahiz eta gizarte mailakoak gero eta garrantzi handiagoa hartzen ari diren. Britainia Handian egun eramangarritasunari buruz gertatzen den eztabaidan pizturiko gizarte eta ingurugiro-arazoek moldatzen dute txosten honen gaia.

Giltz-Hitzak: Basogintza Britainia Handian. Gizarte eta ingurugiro arazoak.

La política forestal de Gran Bretaña se sustenta en tres pilares, sobre los que hay un consenso considerable: la gestión sostenible, beneficios de múltiples propósitos y protección y expansión del área forestal. Sin embargo, no hay unanimidad cuando se trata de decidir sobre el significado detallado de algunos de estos conceptos amplios. La mayor parte de la discusión en las dos últimas décadas en Gran Bretaña han sido sobre cuestiones medioambientales, si bien las cuestiones de índole social están creciendo en protagonismo. Este informe se centra en las cuestiones sociales y medioambientales suscitadas en el marco del debate sobre sostenibilidad que se está llevando a cabo en Gran Bretaña.

Palabras Clave: Silvicultura en Gran Bretaña. Cuestiones sociales y medioambientales.

La politique forestière de la Grande Bretagne repose sur trois piliers, sur lesquels existe un consensus considérable: La gestion soutenable, les bénéfices de multiples sujets et protection et expansion du domaine forestier. Pourtant, l'unanimité ne se fait pas lorsqu'il s'agit de concrétiser la signification détaillée de quelques-uns de ces grands concepts. La majeure partie de la polémique au cours des deux dernières décennies en Grande Bretagne traitait de questions d'environnement, bien que les questions d'ordre social prennent plus en plus d'importance. Ce rapport est axé sur les questions sociales et de l'environnement soulevées dans le cadre du débat sur la soutenabilité qui eut lieu en Grande Bretagne.

Mots Clés: Sylviculture en Grande Bretagne. Questions sociales et de l'environnement.

Pryor, Simon

# INTRODUCTION

There are three main pillars of UK forest policy (Forestry Commission 1994), all of which are now commonplace in forest policies around the world:

- Sustainable management of existing forests
- The provision of multi-purpose benefits
- Expansion of the area under forestry.

Sustained yield as a concept was developed and applied in forestry at least a century before the Brundtland Commission in 1985, but foresters are gradually realising that sustainability now has a much wider meaning. It is generally recognised that there are three main strands: environmental, economic and cultural/social. However, it is easy to forget that the application of this concept to forestry has not always been straightforward. I clearly remember trying - unsuccessfully - to persuade the British Government only 7 years ago that the environmental and social aspects should not be secondary 'add-ons' to the primary economic aspects (Pryor, 1992).

Following the publication of the current policy in 1992 there has been a remarkable degree of agreement over the key elements of forest policy in Britain. This consensus is particularly striking given the fierce debates of the 1970's and 1980's over coniferous afforestation of the British uplands. Multi-purpose, sustainable forestry seemed to be supported by everyone. Then the issue of certification came along, whereby forests would have to be shown to be sustainably managed in order to gain consumer confidence. The happy consensus was rent asunder again by bitter controversy. Certification involves the setting of standards for sustainability, and this has led to much discussion of the wider meaning of sustainability and how it can be assessed on the ground. It does appear to me that sustainability (and multipurpose forestry for that matter) are very acceptable concepts providing you do not have to agree on definitions nor demonstrate them in practice.

The drawing up of standards of forest management by the Forest Stewardship Council and subsequently the UK Woodland Assurance Scheme (FSC 1998 and UKWAS 1999) has focused attention on various issues which are critical in defining sustainable (or even just 'good') forest management in Britain. This paper reviews those issues that are predominantly environmental or social in nature, and concludes with some observations on the current reality of private forestry in Britain, and its ability to meet these aspirations. Those issues that are primarily silvicultural will be covered in the paper by Savill.

# ENVIRONMENTAL ISSUES

## Natural Reserves

WWF have focused the debate on natural reserves by calling through their 'Forests for Life 'campaign for each country to set aside 10% of their forest as 'natural reserves'. We have various levels of protection for different types of woodland in Britain: National Nature Reserves, SSSI's, National Parks, and Ancient Woodland. However, virtually all our woodland has been actively managed at some stage in the past, and we have no genuinely natural woodland. Therefore none of our protected woodland can really be called 'natural reserves'. Given this situation, some argue that the concept is not appropriate to Britain, whereas others feel that it is it all the more important to set aside areas now that will become our natural reserves of the future. There are also calls for 'minimum intervention' areas to be set aside in each woodland, to provide areas of low disturbance where natural processes dominate. The Government's Forestry Standard (Forestry Commission 1988) currently proposes 1% is set aside for 'long term retention', largely in order to provide some over-mature forest habitat. However, the new certification standards require these to be as high as 15% of the forest.

There is consequential debate on what operations are permissible in minimum intervention areas: fencing, deer control, control of invasive and exotic plant species generally being allowed, but not timber harvesting or tree planting. But should operations to encourage natural regeneration of poorly regenerating native species - such as oak (*Quercus petraea and Q. pedunculata*) - be allowed? Finally, are natural reserves and non-intervention areas within managed woodland really a priority when around half of our semi-natural woodland is not actively managed anyway?

## **Native Seed Sources**

The seed sources used for three of our main native broadleaved species (*Quercus petraea, Q. robur* and *Fagus sylvatica*) are controlled by European Commission Regulations on Forest Reproductive Material (Forestry Commission 1998). However, there has been increasing concern that the seed source for all the other native broadleaves planted is totally unregulated, and sources as distant as Eastern European are often used. This not only means that from the point of view of timber production the genetic quality is unknown, it also means that our local gene pools are being contaminated by continental stock. The counter argument is that seed has been imported for several generations from continental Europe, and that our gene pools are probably more European than we are. Until 'genetic fingerprinting ' of our native species has been carried out this debate will continue on a rather ill-informed basis. Certainly imposing local seed requirements is causing consternation amongst the UK nursery trade.

## Monitoring of Biodiversity

We are now expected to conserve the full range of biodiversity in forests, and to take particular care of the rare or notable species. However, is also recognised that it is impossible to carry out a full inventory of all species, from mammals to soil invertebrates. But how can a forest manager be sure he is doing the former without needing to do the latter?

It is at present common to focus on changes in populations of certain high profile species - raptors, butterflies, unusual birds and slowly colonising plants species being most commonly observed and noted. This is not surprising since there will always be greatest public interest in large and attractive species and it is also much easier to find amateur naturalists willing to monitor such species, thereby providing low-cost data which can be used by foresters. But are these actually the most important, and are they good indicators of the 'sustainability' of all the other populations? It is clear that we need much more research on the correlation between biodiversity and readily observable indicators of it - such as key-stone species or critical habitat features.

Monitoring is unpopular with forest managers because it is time consuming, but it is also unpopular because it represents a fundamental change of management philosophy. Traditional foresters tend to manage woodland as plantations, focusing on achieving pre-determined states using well-understood prescriptions and techniques. In contrast, managers of woodland nature reserves take a more experimental approach, implementing a prescription and monitoring response to see if it is achieving what was expected. Monitoring is thus a critical component of a more empirical and responsive style of forest management.

# Brash and Whole Tree Harvesting

At present there are various options for dealing with the brash (or lop and top) left after felling in order to facilitate replanting or regeneration: cultivation (using scarifiers) to expose mineral soil; fragmentation by chipping or manual cutting; heaping up into swathes or windrows; burning; or complete removal (i.e. whole tree harvesting). Basic ecological principles would suggest that the last of these two would be the most damaging. However, it is ironic that these are the practices associated with traditional coppicing, and this is one of the few management practices with documented evidence over 500 years demonstrating that it is sustainable.

The social aspects of sustainability also feature here, since one of the primary objections from the public to any harvesting operations - even thinning - in woodland used for recreation is the 'mess' of lop and top left behind. They too would like it harvested, used or neatly piled up - although burning is usually only popular with those who start the fires themselves!

Whole tree harvesting is also a dilemma in commercial plantations. With higher labour costs the diameter and quality thresholds below which it is not worth harvesting timber are rising, and yet wider concern for sustainability is generating interest in using forest residues as a renewable energy source. There is understandable concern over the impact of whole tree harvesting on soil nutrient levels, particularly on infertile upland sites, and our knowledge of these aspects is incomplete. However, the few trial sites have also shown that there may be physical impacts in the form of much greater compaction due to the absence of a brash mat for the harvesting machinery to drive on.

# Deadwood

There is growing awareness in British forestry of the value for biodiversity of overmature trees and deadwood, both standing and fallen. The debate now is how much, and of what type should be left? Some current suggestions are as follows:

- some large diameter trunks are more valuable than larger quantities of smaller diameter branches;
- fallen deadwood should be shaded under the canopy;
- pockets of deadwood in a living tree may be more valuable than whole trees that are dead or dying since they are much longer lasting;
- a range of species should be left, and it may be that non-native species are more valuable than too much of one native species - especially if that native species is a hard resistant timber such as oak;
- damaging trees (eg through wrenching branches from them) may thus be a more desirable means of creating deadwood than deliberate killing of trees through ring-barking;

The quantity of deadwood which is needed is an unknown, and the Forest Stewardship Council's Standards have taken a stab in the dark by specifying that there should be at least three cubic metres of fallen deadwood per hectare. There is another possible conflict between biodiversity and social issues here, since standing deadwood is inherently dangerous, and the creation of deadwood particularly through a treatment as violent as wrenching, is an anathema to many visitors.

#### Deforestation

The creation of non-woodland habitats has become a standard part of both forest creation and the restructuring of monocultural plantations, with up to 20% of the gross forest area being converted or left as 'open ground' (Forestry Commission 1998). Often these areas are of higher biodiversity and amenity value than the forest itself, particularly where they are remnants of semi-natural vegetation that occupied the area before it was afforested. However, this partial removal of forest will reduce the national area of productive forest and is a form of fragmentary deforestation - which may be perceived as forest attrition by some observers.

More controversial is the move to entirely clear some plantations which have proved unsuccessful. This lack of success is sometimes due to commercial factors - such as inadequate access - or due to silvicultural failings - such as growth rates being too low or exposure too high. Other plantations are undesirable due to environmental factors - most commonly because they are isolated and unnaturally shaped plantations that are a visual intrusion in a landscape, or because they are having adverse ecological impacts.

There is general agreement that removal of such forests and restoration to alternative habitat - heathland and moorland being the most common - is the most sensible solution. However, there is the difficulty of whether the timber derived from such deforestation could be labelled under a certification scheme as 'coming from a sustainable forest'!

# SOCIAL ISSUES

#### **Public Access to Private Forests**

Unlike other northern European countries there is no general right of access to land in Britain, and this includes to forest. However, in practice the public have a permissive access to virtually all the forest owned by the state - which is about 40% of the total area - but unfortunately most of this is located far from the centres of population. There is considerable pressure to increase access to private forest, especially in the lowlands. The Government has recently announced that it will enforce a general presumption in favour of public access to open and uncultivated land - effectively moorland and heathland (DETR 1998). It has initiated a review of public access to forest, and has said that if this reveals that there is a need for more access then it will extend this legislative right of access to some or all types of forest.

In the meantime, the certification standard being prepared for British forests by the Forest Stewardship Council requires that participating owners need to provide 'some form of public access to at least part of each forest' (FSC 1998). This may take the form of specific open days, or seasonally restricted use of particular routes, and there are also exemptions for example for small forests or those near dwellings.

#### **Stakeholder Participation**

Consultation has been a well accepted part of forest management in Britain for many years, whereby the Forestry Commission sought the views of local authorities and some other interested organisations on any schemes involving significant amounts of felling or new planting. This is now being widened to encourage applicants to grant schemes to have established direct contact with interested local people and other stakeholders (Forestry Commission 1998, UKWAS 1998). There is concern that this will be an onerous undertaking for managers and lead to unfruitful and ill-informed discussion. Others believe it is vital in order to achieve the public support for forestry which was lacking in previous decades.

There have also been experimental moves towards more active involvement of local people in the management of state owned forests (Slee et al 1996). The focus here is not so much on the local environment but more on increasing potential for local enterprise and the creation of employment.

# Local Employment

Forests are often seized upon as one of the rural industries which is most likely to be able to fulfil the criteria for sustainable rural development. Agenda 21 promotes local employment and provision of local services - although it has to be said that this is a brave attempt to counter the dominant market trend of globalisation. It is therefore not surprising that standards for sustainable or certified forest include requirements to promote local employment. The ironic fact is that under EU employment law equal opportunity must be shown to any European resident and this thereby constrains any favouring of local people.

## THE HARSH REALITY OF SUSTAINABILITY

Despite this catalogue of issues over which there has been controversy, it does appear that most of these have, or will be, satisfactorily resolved. It also appears that the Forest Stewardship Council's standards will eventually be accepted by both Government and industry albeit with some refinements, restructuring and a few compromises by both sides. We will then have a system by which sustainable forest management can be pursued by any forest owner in the UK, this will be independently audited and the products will be appropriately labelled.

Unfortunately, the resolution of these disputes could not have come at a worse time for British forestry. The market prices for conifer round timber has suffered a 20-30% decline in real terms over the last two years. This appears to be due to the strength of the pound, the increase in imports from the Baltic states and the growth of recycling and re-use of wood. This has devastated the revenue for both private and public forest owners. The fall in the Forestry Commission's income makes compensatory increases in grants unlikely - and it may even result in limits being placed on grant availability.

It thus appears that just as we have agreed what should comprise sustainable forest management, many private forest owners will be forced to suspend or even abandon management. We may be faced with the paradox that they may be able to achieve environmental and social sustainability, but not economic viability.

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