

Sustainable forestry in England: principles and processes for conflict resolution

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Introduction

The previous paper ended with a description of some of the options for developing our forest cover and with a recognition that a wide range of bodies would need to take part in the debate about them. The range of environmental and countryside objectives expected of forestry in England by non-governmental organisations is as wide as the components of sustainable forest management.

However, they could be said to want the following:

“More people, enjoying more woodland and other parts of the countryside, comfortable in the knowledge that the most important woods are protected and appropriately managed; that our genetic resource and historic and cultural heritage is safeguarded; that all forests are managed and are being expanded to enhance the landscape without harming the biodiversity of other land; that woodland and forests provide wildlife with improved habitats and are accessible to people who, as consumers, are pleased to buy more timber from these well-managed forests and wood from other sustainable managed forests in the world and, as interested individuals and communities, give their support to UK forestry because it is well regulated, well financed and willing to build their views into its future policies and practices. In short, we want significant components of sustainable forest management.”

With this summary, I hope that you will understand why I will not attempt to further describe what targets NGOs want for extent, composition and location of future forestry in England. If I did, I would face legitimate challenges on three grounds: that I have missed or inadequately represented certain interests; that I have no idea about the acceptable or reasonable balance between the interests; and who am I to attempt to describe environmental demands?

Nevertheless these multifarious interests and objectives do need to be considered somehow.

A national forestry framework

So I shall focus upon a demand of environmental NGOs that is widely shared, though not included in the above. We want processes that will lead to an adequate and respected description of what we want - a framework that embraces and supports our international commitments for the conservation of biodiversity, to the implementation of the Habitats and Birds Directive, the Climate Change Convention and the EU Forestry Programme. At the same time:

- it should reflect and acknowledge local sensitivities and priorities;
- identify targets, priorities and balances to be applied to the policies promoted in *Sustainable forestry: the UK programme*;
- give meaning to the aspiration to double the area of woodland in England contained in the *Rural England* White Paper;
- unify the work of the Government’s Biodiversity Action Plan Steering Group with the desires of authorities, the public and their organisations, at regional/local level;
- steer the allocation of EU, Government and private funds to forestry; and
- relate sustainable consumption of forest products to the supply of those products.

Such a framework could add to *Sustainable forestry: the UK programme* a significant missing component - balance. This would include the balance between outputs and objectives of forestry, geographical balances, balance between economic, social and ecological objectives, balance between national and local sensitivities and a balance of inputs. Presently this document describes policies to expand timber production and supply to our mills, protect our ancient semi-natural woodland, encourage new community woods but there is no description of priorities, targets or balances.

To fashion a national framework, we need a collection of coordinated processes not a single process. It is not the case that some of us will go to a smoke-filled room and settle a framework over the next year, as perhaps may have appeared the case with the Biodiversity Action Plans, etc. Nor should it be viewed only as some 'Centralist Plan' imposed from above but rather as the outcome of many different processes and plans that are already underway or have been produced at regional/local level. The wider the range of contributions and involvement the better and more acceptable is likely to be the result.

A national framework is an opportunity to amalgamate the extensive work that has already been done in many local forums up and down Britain - the Buckinghamshire Woodland Forum (and the many equivalents in other counties), the Chilterns Standing Conference and resulting Plan and Woodland Policy, the New Forest Strategies and the FE/English Nature agreement, woodland projects from Cornwall to Cumbria, the new land use strategies of the new National Forest, Great North Forest and the other community forests, and the Ullswater Accord for extending the area of native woods in National Parks.

Principles to framework

Principles of sustainable forestry management have been negotiated from Rio de Janeiro through Helsinki (Appendices 2, 3), Montreal, Santiago, Geneva, Oaxaca and Edinburgh. Indeed the Forestry Commission - or more precisely the FC's Home Grown Timber Advisory Committee (HGTAC) Environment Sub-Committee - were already heading down this route when the Rio Statement of Forestry Principles was being negotiated.

One of the developments of recent years is the agreement of industry and environmental representatives to work together to determine common ground and agree if possible a common direction. The Wildlife and Countryside Links Forestry Group established during the Review of Forest Enterprise that there was a need for a National Forestry Strategy, and that if the Forestry Authority was unable to move forward upon this agenda, then the NGOs of all interests should develop such a framework and then offer the process or products to Government. Hence representatives of the Wildlife and Countryside Links and of the Forestry industry under the Chairmanship of the Institute of Chartered Foresters have produced a National Forestry Accord (Annex 1 to this paper). The process of exchange of views, and the next steps of extending the participants to embrace a considerable number of interests both government and non-government, is potentially exciting. Furthermore the Principles at least should take some of the potential distrust out of dialogue between foresters and environmentalists.

To be useful, however, Principles have to be capable of consistent and appropriate interpretation and application to individual forests. If not, they do not remove conflict, rather they remove the focus of debate, of disagreement, to one of interpretation, not substance. As an example, we can all readily agree that forestry that has a harmful impact upon soil conservation is bad, unacceptable and cannot be considered sustainable. However what forests and which silvicultural practices are harmful to soil conservation; and when and how might one ameliorate it - by avoiding establishing any forests, or just some species of trees, or by applying fertiliser, lime etc?

Table 1. Processes and plans operating at different levels

a. UK/GB level processes and plans

- *Sustainable forestry: the UK programme*
- ICF Brokered UK Forestry Accord
- FC Advisory Committee - case for a national framework for multi-purpose forestry
- FA forest design and management guidelines
Being converted into Forest Design Standards
- Biodiversity Challenge (NGOs) and Biodiversity Action Plans
- FE framework document and Corporate Plan

b. Country level processes and plans

- Rural White Papers
- Ullswater accord for National Parks
- Welsh Office report on the way ahead for Welsh Forestry

Principles have to be capable of consistent application by regulators and forest owners and so indicators, guidelines or standards are developed, for example those for broadleaved woodland (Forestry Commission 1985). Since then, there have been produced Forest and Water guidelines, Forest Nature Conservation guidelines etc. Not all of these are applicable in all forests at all stages, so forest owners, managers, some FA staff and HM Treasury wish for clearer, more precise more targeted Guidelines, although often for different purposes. The guidelines are therefore being turned into standards, and these are out for consultation by the Forestry Authority (as at 1.8.96).

As the guidelines have developed, as the standards are drafted, as the Woodland Grant Scheme has been introduced, extended, reviewed and re-launched, at least two components of a framework have emerged - geographical and temporal targeting. Such targeting is both positive and constraining. Ministers positive preferences are:

- for woodland establishment on arable and improved grasslands;
- for native woods in national parks;
- for planting on the edges of settlements, especially the designated community forests.

Negative indications include, for example:

- the presumption against large scale planting of productive forests in upland England; and
- legislation against conversion of existing woodland to agricultural or other use.

Aspirations, intentions or targets have been built into the allocation of forestry grants.

Why a framework for sustainable forestry is needed

Several political and governance reasons support the need for a national forestry framework. Financial and management reform in Government since the Financial Management Initiative White Paper in 1982 have placed several pertinent demands upon Government departments and agencies, including requirements to set out objectives, performance measures and targets to be achieved, and strategies for their achievement. These also include requirements for such departments/agencies to describe trends, monitor and transparently represent their achievements against these measures. The White Paper *Better accounting for tax payers' money: the Government's proposals - Resource accounting and budgeting in Government* published in July 1995 will apply this to all parts of Government by the year 2000 and to the Forestry Commission in particular in 1997.

If this influence sounds remote, it is given effect, for example, by the Forest Enterprise Framework Document and Corporate Plan which contain several environmental and biodiversity objectives, performance measures and targets (Table 2).

Secondly, such a framework is needed because many of the targets on the location, extent and composition of forests, set at a variety of levels have not been well defined or justified. They have often been produced with inadequate consultation and occasionally with inadequate knowledge or respect for other objectives.

Some of the locational targets in forestry have already been referred to. Targets for the extent of new woodland are not new or unacceptable to government either - the annual target for planting new woods of 33,000 ha has been included in many policy statements. More recently this target has been joined - or is it replaced by - in the English Rural White Paper an aspiration to double the area of trees in England in 50 years - but on what basis, where, why, how?

Targets for composition are less frequently expressed although the requirements for a minimum of 5% of new planting in sparsely wooded areas to be of broadleaves, and the commitment to native pinewood expansion in its former range in Scotland are examples.

However, there are a number of targets beyond these overtly forestry ones that impact upon forestry. The Government has agreed with the Newspaper Publishers Association a target of 40% of recycled furnish to be included in British-produced newsprint by 2000. The DoE Timber Research and Innovation Strategy - *Timber 2005* - will have targets to increase the consumption and value of British timber and UK-produced panels in the construction sector. How are they to be integrated with the forest expansion and forest-related Biodiversity targets? At the same time there are a number of other aspects that have no, or inadequate, direction in forestry policy.

Fortunately progress in defining the priorities and direction of sustainable forestry has not been confined to the UK level (Table 3). Indeed it is because there are a variety of plans/strategies/processes at the sub-UK level that it is important to ensure that they inform and are informed by a National Framework. To these lists could be added: plans of operations; forest design plans; woodland projects such as Anglian, Chilterns and Sylvanus with their focus upon restoring management to usually neglected small broadleaved woods; and various urban forestry initiatives. Many of the projects and regional initiatives have different principal funders and the social, economic, regeneration objectives of these national and EU funds, are often reflected in the principal objectives and activities of the projects.

Table 2. Environmental targets and monitoring requirements from the Forest Enterprise Framework Document published in March 1996

The objectives of the agency include:

- “● to develop the recreational and educational potential of the Estate;
- to enhance the environmental, conservation and amenity value of the estate, including biodiversity and landscape, and to seek and realise opportunities to further the government’s environmental policies;
- to conserve and manage sympathetically areas of special natural and heritage interest”.

The Corporate Plan will contain ‘costed options for recreational, environmental, conservation and heritage outcomes. The financial implications of such options will be shown’

“The Agency will be subject to an overall review no later than the year 2000”. This evaluation will cover:

- “● changes in the recreational value of the estate
- changes in the environmental value of the estate.”

The legal duties and powers of the Agency remain those of the Forestry Acts, the Wildlife and Countryside Amendment Act (1985) and the Countryside Acts (1967, 1968).

Performance measures for the Agency will include (along with financial and administrative ones):

- % of the estate covered by Forest Design Plans;
- % of SSSIs managed in accordance with plans endorsed by statutory conservation agencies;
- % of land comprising endangered habitats managed in accordance with plans endorsed by relevant authorities.”

As part of the review in the year 2000 “sample condition reports will be prepared on SSSIs, endangered habitats . . . and the extent to which Forest Design, SSSI [and] endangered habitat management plans have been reviewed in the last five years”. The review will cover “changes in the environmental value of the estate”.

Table 3. Regional/local level processes and plans

- Indicative Forestry Strategies, eg Lancashire, Staffordshire
- Other Forestry Strategies, eg National Forest;
Great Northern Forest;
New Forest;
Chilterns Standing Conference
- Other Local Agreements, eg FE/EN New Forest Declaration of Intent
- FE Forest Design Plans
- Regional *Biodiversity Challenges* and Biodiversity Audits

These projects and initiatives pose several key questions. How far do they reflect the international and national species, habitats and ecosystems priorities determined, for example, in the recently published Biodiversity Action Plans? How does one relate and prioritise the protection and restoration of heathlands in, say, the Sherwood Forest Initiative, or the New Forest Strategy with the management and restoration of Dorset Heathlands being covered in the joint agreement between English Nature and FE and greatly helped by our Heathland team?

These are not theoretical questions nor academic plans. When the FE Agency in the future comes to allocate its conservation budget, how will it identify its priorities - by a national officer informed perhaps by national Habitat Action Plans and deciding, whether they are willing or not, to require the FDM in Wareham Forest to undertake more heathland management; by the relative negotiating skills of one FDM versus another; or by the Declaration of Intent in the New Forest signed by EN and FE?

When the Forestry Authority in the future allocate its WGS locational supplement to assist planting in the sparsely wooded areas, what will inform their decisions? Will it be allocated to the Aylesbury Vale in Buckinghamshire, for example, because several years ago the Buckinghamshire Woodland Forum identified this part of their country as needing more woods, or to the Bowland Fringes area of Lancashire because that county's IFS identifies this area as preferred for new planting, or to poplar planting in East Anglia? How will the 'discretionary' money within the Woodland Improvement Grant be targeted?

When another county decides that it needs a woodland project and tries to draw EN, FA, MAFF, Countryside Commission etc to support it, will the project boundaries and focus be determined by whose idea it originally was and what jurisdiction they hold, or by higher level signals that the lime woods of Lincolnshire or the hornbeam woods of Essex hold something precious that is facing decline and a reduction in range?

Process of development of a framework

So how does one draw together the different focuses of several of these processes into a comprehensive whole, and retain the central role of conservation of biodiversity in sustainable forest management? The various processes that we have at present (Table 1, 3) place different emphasis on different issues, for example on:

- locational aspects of new planting;
- forestry's place in relation to other land uses;
- non-forested habitats of conservation importance; and
- the restructuring of existing commercial forest.

The process of developing a national framework for multi-purpose forestry in the UK should allow full participation at different levels, which indeed is one of the Rio Forest Principles. At the UK level the initiative for such a framework may come from the ICF-brokered Accord Group or the advisory committees of the Forestry Commission. Perhaps the Woodland Forums and the Countryside Strategies with their ability to focus upon all aspects of the countryside policies, priorities and practices are the way forward at the sub-UK level. However there must be interaction between these levels, with each informing the others to feed into national forum and framework.

Conclusion

I have given only a broad indication of the directions that forestry should go in England, concentrating more upon the processes by which all interest groups can establish the appropriate scale, composition and balance of objectives for English Forestry. Part of this direction is being provided through a variety of forums operating at UK, country and regional/county level. Because of their different origins and objectives not all display the level of commitment to biodiversity that we would expect or like. Moreover many of the national level targets and guidance that would ensure that they can form a cohesive and long term strategy for UK forestry are missing.

A national framework or strategy for multi-purpose forestry in the UK is needed with county woodland forums and strategies feeding into negotiations between the UK forestry and environmental organisations, suitably enhanced by public forestry and conservation agencies.

Postscript: Since the meeting at which this paper was presented, a call for a national forestry strategy has come from the Government's Panel on Sustainability (Annex 2).

Annex 1. UK Forestry Accord (draft as at 1.7.96)

Objectives

The signatories to the Accord share the following aims for the future management and development of forestry in the United Kingdom:

- to establish a consensus about the future values and directions for UK forestry and to forge a wide-ranging partnership for developing the Accord;
- to increase appreciation of the importance and many benefits of forestry, at both the global and the domestic level;
- to integrate and harmonise the various perspectives from which forestry is viewed in the UK;
- to enhance the quality of our forest resource in order to optimise its full value to the nation;
- to pass on to future generations a robust and diverse stock of well-managed forests offering the best combination of economic, social and environmental benefits;
- to help give effect to the Statement of Forestry Principles adopted at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992; the Guidelines for the Sustainable Management of European Forests adopted in Helsinki in 1993 and the UK Government's Sustainable Forestry Programme.

Principles

The following principles have been agreed by the signatories to the Accord in order to achieve the above objectives; these principles form a package and should be pursued jointly.

- **A renewable sustainable land use**

Forestry is a uniquely sustainable natural land use which can be renewable and economically viable. Investment in forestry - both public and private - can produce a substantial return for present and future generations, both in the form of raw materials and other forestry products and in the form of many environmental and community benefits.

Investment in sustainable forestry of all types should be strongly encouraged.

- **Conserving natural resources**

The sustainability of forest productivity and environmental values depends crucially on the conservation of biodiversity and of natural resources such as soil, water and air quality.

Conservation of biodiversity and natural resources should lie at the heart of forest management.

- **Safeguarding heritage and landscape resources**

The importance of key heritage and landscape resources is increasingly appreciated and appropriate management will sustain and enhance their long-term value.

Forest management should safeguard and enhance landscape and heritage resources.

- **Encouraging productive forestry**

Productive forests managed to provide a sustained supply of wood can contribute to meet the demand for timber in the UK, provide the economic base for continuing forest management, reduce pressure on vulnerable forests world-wide, and reduce energy requirements.

Sustainable productive forestry to provide timber benefits should be encouraged.

- **Supporting research, education and training**

The robustness and viability of the forestry resource can be enhanced by improved research, education and training in sustainable forestry and the efficient use of timber.

Research, education and training should cover all aspects of sustainable forestry.

- **Public consultation and involvement**

The benefits to the public of forestry will be conveyed and maximised through the involvement of and consultation with those local communities, interest groups and individuals who may benefit from or be affected by forestry proposals or operations.

The public should be widely involved in and consulted on forestry matters.

Implementation of the Accord

Forestry in the UK covers a very diverse range of forest types, from young plantations to ancient semi-natural woodland, reflecting a wide variety of management objectives and local considerations. This complexity of forest types and changing circumstances means that there can be no unique solution to specific issues but application of the above principles will ensure a solution which is consistent with the aims of this Accord.

The environmental and economic backgrounds to forestry are constantly changing, as are people's attitudes. Forestry will be required to respond to these changing needs of society. Silvicultural practice will evolve in line with continuing research and improved knowledge. The above principles are therefore intended to guide what is an essentially dynamic process.

This Accord is an important initial step in an ongoing process in which future discussion and cooperative action will lead to further developments in the above principles and the way in which they can be implemented.

Annex 2. Government panel on sustainable development: second report

This report published early in 1996 covered four topics and included a forestry section which follows.

Forestry section

“The United Kingdom’s forestry policy is based on the . . . fundamental tenet that forests and forest lands should be sustainably managed to meet the social, economic, ecological, cultural and spiritual human needs of present and future generations.” [para 5.1]

Extract from Government White Paper, *Sustainable Forestry: The UK Programme*. (Cm 2429). January 1994.

“The Government is committed to a policy of setting multiple objectives for forestry. This means that the UK’s forests are valued not only for their commercial potential but also for recreation, nature conservation and landscape enhancement. Forestry also has a part to play as a significant carbon sink.” [para 16.2]

Extract from Government White Paper, *Sustainable Development: The UK Strategy* 2426). January 1994

35. The Panel welcomes the general recognition that forestry is a vital natural resource significant in economic, environmental and social terms. More clearly than in many other sectors of the economy, forestry can demonstrate what is meant by sustainable development. But these values and the commitment to sustainable development cannot be translated into practice except within a strategic framework.
36. A national strategy would give a geographical dimension to multiple policy objectives and help to integrate forestry with other land uses. In many ways the distinction between forestry and agriculture products is becoming blurred. Just as subsidies for agriculture should take better account of environmental considerations, so also should grants and other encouragement for forestry. A broad strategy would serve as a framework for, and in turn be informed by, more detailed regional strategies. It would need to take account of international developments and could promote such international initiatives as the introduction of certification for timber products.
37. **The Panel recommends that, in consultation with the many interests involved, the Government should draw up a national forestry strategy, supported by regional strategies, containing targets related to the main economic, environmental and social benefits that forestry could provide and identifying incentives needed to meet those targets.** The formulation of this strategy should include reconsideration of the existing grant system. Points for examination should include how grants should be matched to targets, whether grants should vary according to different circumstances, and how continuity of funding could be maintained over different time horizons. The Panel has some suggestions, outlined below, for particular issues that should be included in the national and regional strategies.
38. The 10% of Britain’s land area under forestry is low historically and in comparison with many other countries. The Panel supports the broad aim of the Government stated in the recent Rural White Papers to expand forest cover, possibly leading to a doubling in England over the next century. In view of the diversity of forestry and its multi-purpose role, the

Panel favours the development of a series of targets to meet specific policy objectives, rather than a single national planting target.

39. The Panel consider that the national strategy should identify the main areas where forestry expansion could take place, including, for example, the Community and National Forests, set-aside land, and urban areas. Local communities should be as closely associated as possible. The Panel notes the recent proposals of the Scottish Secretary on local community participation at Laggan, which could set an important precedent.
40. Strategies for different regions should contain more precise opportunities for afforestation and the purposes these newly wooded areas would serve. They should also identify those areas where afforestation should be restricted to protect water supplies, biodiversity and valuable wildlife habitats, and some areas such as heathlands where forests should be cleared to restore open habitats, and enhance biodiversity. They could also give a lead on the types of plantation forest suited to each area.
41. While new plantings are important and in the long term may begin to offer a wide range of benefits, they cannot substitute for ancient and semi-natural woodlands which, despite statutory protection, have suffered erosion in quantity, particularly from roads, development and replanting with conifers, and in quality, through unsympathetic practice and pollution. Ancient woodlands are one of the richest habitats in Britain. They deserve full protection because of their scarcity, their biodiversity and their fragility. The Panel considers that the national and regional strategies should strengthen the protection afforded to ancient and semi-natural woodlands introducing additional safeguards to minimise their further decline.
42. The Panel notes concern in the forestry industry and in environmental organisations that woodland management is declining, particularly in farm woodland. The national and regional strategies should explore, through the use of targets and incentives, ways in which woodland management could be improved. Specific targets, for example, to increase the annual timber harvest, to increase the structural diversity of woodlands, to promote biodiversity and to improve access for recreation, should be considered.
43. Responsibility for forestry is currently divided between several Government Departments and the Forestry Commission. The strategies proposed would require a greater measure of coordination at central, regional and local levels.

Managing and expanding broadleaf woods in Wales: the policy context

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Introduction

There are differences in the way that forestry and woodland issues need to be treated in Wales and Scotland compared to in England because of differences in the resource, in the relationship between forestry and agriculture, forestry and other land uses. However any programme for sustainable forestry in England must be set within a GB/UK framework; there must be some consistency in the treatment of forestry and nature conservation issues at the country borders; and there are lessons that can be usefully shared between countries. The Welsh experience explored in this paper may be very relevant to developing sustainable forestry in south-west England, along the Marches and in Cumbria.

The broadleaved resource in Wales

There are about 70,000 ha of broadleaf woodland in Wales, of which approximately 30,000 ha is ancient semi-natural woodland (Spencer & Kirby 1992). As elsewhere in Britain, the decline in natural woodland cover began early, although extensive tracts still remained at the time of the Roman invasion in the 1st century AD. By the medieval period much of this had been cleared. However, woodland remained a key element of the rural economy until home grown timber was displaced by imports in the nineteenth century, after which many Welsh woods were neglected and then devastated by two World wars and their aftermath. The remaining broadleaf woodland is highly fragmented, much being under 10 ha, with a very large number of woods under 2 ha.

In the early 1980s surveys showed that natural regeneration was absent from many broadleaf woods, due to the intensity of livestock grazing. Since then considerable effort has been put into bringing woodland into management. The expansion of broadleaf woodland is increasingly seen as a priority, to consolidate the existing resource and to increase the potential habitat area for woodland species.

However, bringing existing broadleaf woodland into management is a slow process and woodland expansion is proceeding even more slowly. The reasons for this lie in the overall landownership and land use pattern of Wales and in conflicting messages and demands.

Farm woods

Between 50 and 80% (estimates vary) of the broadleaf woodland resource is part of a farm holding (Woods 1985). A recent survey suggests that over 70% of Welsh farms include broadleaf woodland, usually less than 10 ha in extent, and on over 50% of these farms the woodland is in two or more blocks (Day & Thomas 1995).

This means that for a significant proportion of broadleaf woodland, agricultural policies are the dominant factor in land use decisions. As land use policies in Britain are implemented largely through incentives, the expectations and perceptions of farmers and landowners in relation to these incentives can have a major impact on what they do.

Until recently, most farmers in Wales would have assessed the value of woodland mainly in terms of the shelter it afforded livestock and to have assumed that the woodland was a permanent feature of the landscape, requiring little or no attention. Woodland decline is a slow process, often taking decades to register change - a very long time in agricultural terms. However, a small but increasing

number of farmers are beginning to take an active involvement in woodland management and to produce timber for their own use or to market.

The conditions influencing woodland processes in most Welsh woods are highly artificial, the woods are very small, isolated from other wooded habitat and often subject to high grazing pressure. In the majority of cases, management intervention is necessary to ensure the long term future of the wood and associated woodland species.

The impact of the Agricultural Support System

The key to whether or not woodland management or expansion is implemented in much of Wales is the agricultural grants and subsidy system. In 1992 56% of the net farm product of Welsh hill farms was accounted for by subsidies, compared to 14% for the UK as a whole.

In terms of the farm economy, woodland management must pay its way, otherwise it will be seen as a luxury that a low income farm cannot afford. In a survey of farmers' attitudes to farm woodlands carried out this year (Day & Thomas 1995) farmers' perception was of the low 'earning power' of woodland compared to agricultural grants and subsidies. In addition, evidence from Coed Cymru officers shows that farmers are wary of committing themselves to 5 or 10 year agreements for woodland management when the livestock subsidies have the potential to change rapidly.

The effect of the 1992 CAP reform was to introduce IACS and alter livestock subsidies, bringing stocking levels more sharply into focus. An overall stocking rate of 1.4 livestock unit (lu) per hectare is the critical factor. Stocking under this rate is eligible for Extensification payments on beef and suckler cow premia, and it is the upper limit for Sheep Annual Premium and HLCAs. Extensification payments are sensitive to any reduction of the forage area of the holding, such as the exclusion of livestock from woodland. Once the overall stocking rate rises above 1.4 lu/ha Extensification payments are lost on all eligible animals.

As part of a study for CCW, Bangor University have analysed stocking rates in the Wales LFA and shown that 20% of beef and sheep farms in the Disadvantaged Area and one third of those in the Severely Disadvantaged Area are already over the stocking limit. Those figures are based on area calculations which include woodland in the forage area. The farmers' attitude survey, and Coed Cymru officers experience, suggest that many more farmers are very wary of breaching the 1.4 lu/ha limit, and thus losing their total Extensification payment. This, and the 5 or 10 year agreements for WGS or the habitat scheme are a very real constraint to woodland management.

Approximately 80% of the land area of Wales is designated as Less Favoured Area, and the better grades of agricultural land are very limited in extent. The scarcity of better land means that any new woodland planting will be on poorer land, and will not attract higher payments from WGS or the Farm Woodland Premium Scheme. Farmers suggest that the areas they are most likely to consider planting up are the rougher, wetter areas of the farm - those areas with the higher wildlife potential. Although the current forestry incentive system is intended to help bring planting on to the more productive land, the reality in much of Wales, particularly the uplands, is that better land is not available to woodland. Only about 12% of agricultural land is arable, with Set-aside accounting for about 2,000 ha in 1994. Little, if any, arable land is likely to be converted to woodland. The target for woodland expansion, therefore, has to be improved grassland on land of moderate agricultural quality and species-poor upland grassland without special wildlife interest.

Initiatives

CCW and its predecessors have supported Coed Cymru throughout its development and we believe that it offers the most effective means of bringing broadleaf woodland into management. But it is a

long and slow process and funding an advisory service is a perennial problem. Coed Cymru has recently been successful in attracting EU funding under the Rural Wales Objective 5b programme up to 1999, though the EU funds are dependent on locally matched funding.

The incompatibility of CAP livestock subsidies with GB forestry incentives has to be addressed via the Agriculture Departments, and ultimately with Brussels. Further CAP reform is inevitable, and there is an increasing ideological shift from production support to income support. Recent research on agricultural incomes by Cardiff University (Bristow 1995) has shown that despite higher rates of agricultural support in Wales, farm incomes have declined, pointing to the inefficiency of production support subsidies, particularly for Welsh hill farms and the need for a fundamental re-think of the objectives of support systems and of land use priorities.

A revised system of support must take a fully integrated view of land use to achieve a balance between agriculture and woodland, and contribute to a long term sustainable land use strategy.

CCW have commissioned a study of Upland Woodland in Wales (Good *et al* 1995) to illustrate the scope for woodland expansion in the uplands. The study takes special note of the potential impacts of such expansion on the landscape and ecology of the selected areas and the impacts on farming practices and incomes. The initial phase consisted of a desk study, followed up by case studies of three areas representative of different landscapes, habitats and farm types. We intend to take this work forward, within CCW and working with other organisations, with the aim of developing a more strategic approach to woodland expansion in Wales.

The management of woodland to maintain and enhance biodiversity is complex, often without clear cut solutions. However, the science is only half the problem. Most woodland is in private ownership and decisions on its management are taken in the context of wider land use decisions. Unfortunately, agriculture and forestry policies have developed effectively in isolation from one another since 1920. The result is that despite considerable advances in forestry policy in the last decade, progress towards better managed and expanded broadleaf woodland in Wales is slow. It isn't likely to improve significantly until a much greater level of integration is achieved.

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