
Forestry Commission
Trees are Company
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Social Science Research into Woodlands and the Natural Environment
Edited by
Liz O'Brien and Jenny Claridge
Forest Research
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TREES ARE COMPANY - SOCIAL SCIENCE RESEARCH

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Proceedings of the Forestry Research Co-ordination Committee Conference convened by Forest Research on 19–20 June 2001 at Glamorgan Building, Cardiff University, Cardiff

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Plates: Front cover: Parkhurst Forest, Isle of Wight; community group involvement; common yew [Forest Life Picture Library]; children enjoying forest activity [The Mersey Forest].

Back cover: Mountain lake walk, Beddgelert Forest; walking in Delamere Forest, Cheshire [Forest Life Picture Library]; chair sculpture in Forest of Dean [Liz O'Brien].

Colour section: Family and couple in Ariundle oak woodland forest reserve, Lochaber Forest District; children's play area, Thetford Forest Park [Forest Life Picture Library]; multi-purpose woodlands in the West Midlands [Forest Research Photo Library].

Text borders: Leaves of smooth Japanese maple [Forest Research Photo Library]; sessile oak and common yew [Forest Life Picture Library].

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Foreword

In June 2001 we saw people from all over Britain gathering in Cardiff to discuss the contribution that the social sciences are making to forest management. The issues covered by speakers at the Social Science Research into Woodlands and the Natural Environment conference were directly linked to contemporary rural policy in the UK and Europe, and are an integral part of the Forestry Commission's core interests.

Such a conference would not have been possible ten or perhaps even five years ago. Today, however, there is a better understanding that the countryside is not simply a place of production, albeit a beautiful one. It is, as well, a place where people work and live, and a place that people visit and enjoy in many different ways and for many different reasons.

It is becoming more popular, within society, to speak of public interest, values and public engagement, than to focus solely on economic production. The forests we have established over the last century, and the woodlands we inherited from previous times are a physical and tangible resource that has a comforting reality. It is a reality that visitors, forest workers and local people all share in their own particular ways.

Our aim is to achieve a balance, that is acceptable today, between competing demands on our forests and woodlands and to understand that the balance might be different tomorrow. We also need to be aware that there are many voices that are never heard. To find that balance we need knowledge. The Forestry Commission is happy to take that knowledge from wherever we can find it, and the social sciences provide a rich seam of information and understanding that is invaluable.

Two years ago the Forestry Commission occasionally commissioned social science researchers to assist with particular issues. Today we have a comprehensive programme of links between our in-house social research unit and many other universities and institutes. We have moved on. The conference is helping us all to share knowledge and information and to develop a common understanding in this important area of research.

Tim Rollinson
Head of Policy and Practice Division
Forestry Commission
March 2002

EXECUTIVE SUMMARY

Current and future directions for social forestry research

Liz O'Brien

Purpose of Cardiff conference

This publication provides the presentation papers, workshop discussions, questions and answers and plenary discussion from a two-day conference held at Cardiff University in June 2001. The main aim of the conference was to outline the future direction for social forestry research and develop a broader perspective on issues connected with people and the environment. The conference provided the opportunity for a broad cross-section of government bodies, non-governmental organisations, academics, practitioners and researchers to exchange knowledge, experience and ideas in this important subject area.

The need to understand and respond to the social context of forestry has given rise to the Social Forestry Programme of Forest Research and in turn led to this conference. Paper presentations outlining current and on-going research were followed by workshop groups in which delegates debated issues of importance and made recommendations for future research. The participants all contributed to the success of the conference.

Paper presentations

The first day and a half of the conference were taken up with presentations which illustrated some of the social issues that the forestry industry is already dealing with or will have to deal with in the near future. These concern participation, the cultural importance of woodlands and trees and the interactions between people and woodlands. The conference provided a forum for debate about people, society and woodlands from a social science perspective that would not have taken place a few years ago. The research includes different methodological approaches from cultural geography to anthropology and ethnography. As we enter more deeply into this new discourse of social forestry or socially engaged forestry there is greater awareness that forests, woods and trees are significant within the wider landscape and can be important in the impact they have on people's everyday lives. The title of this publication, Trees are Company, can be viewed on different levels. Trees help to connect us to nature by providing links between gardens, parks, cities and wilderness. They can symbolise continuity between the past and the future. They can be a source of wonder and spiritual renewal. And they are part of our culture and heritage. Woodlands and forests can also be perceived as threatening and lonely spaces. How people relate to trees and woods is important and needs to be more widely considered.

Themes

Each of the presentations has been placed into one of the following categories: discussion paper, completed or ongoing research and practical or planned research. In addition, presentations covered a wide range of issues and for the purposes of this publication, and to afford readers with a cohesive record of the studies and views provided, they have been grouped together into three themes. These themes illustrate the main areas of importance covered by the presentations and discussions that took place throughout the conference:

- Culture, values and meanings of woodlands and trees
- Monitoring and modelling approaches to forest management and sustainability
- Community involvement in decision-making and management.

Culture, values and meanings of woodlands and trees

The papers in the first theme focus on the cultural, aesthetic, moral and ethical dimensions of values, which can provide the motives and reasons for people's actions. Two discussion papers explore personal and collective values and the importance of forestry and the social sciences coming together for mutual benefit at a significant time for both. Completed and ongoing research focuses on areas such as the examination of the Millennium Forest at Borgie in the light of its popular significance, emphasised by the numbers who participated in the forest open day. A study assessing community, forestry and land in the South Wales Valleys focuses on phase one of this three year project. It illustrates the social construction of community life and its relationship with the surrounding forests in the area. The meanings and importance of woods, forests and trees to the life and culture of people in Wales have also been investigated.

Monitoring and modelling approaches to forest management and sustainability

The second theme revolves around issues of sustainability and the management of forests. The discussion paper examines the monitoring of progress towards sustainability in the Community Forests in England. Completed and ongoing research studies look at modelling stakeholders' visions in the Sherwood forest area and address issues surrounding landscape planning and management. The interface between planning and forestry has been explored in relation to sustainable development objectives and the preliminary findings of the study are reported. This theme also includes a study on the practicalities of creating a community development evaluation model to explore the accumulation of social capital in rural Scotland.

Community involvement in decision-making and management

The third theme focuses on the importance of involvement and participation of communities, stakeholders and citizens at different levels. The discussion paper explores community woodlands and identity in Scotland. It is suggested by this study that community woodlands contribute much more symbolic value rather than economic value to a community. Two papers focus on practical research and include the development of a framework for Forest Enterprise (FE) managers of how and when they might engage with the public. Pilot projects to research, test and evaluate methods of delivering community aspirations for FE forests in Wales are also described. A paper on planned research in southwest Scotland focuses on what community involvement and working effectively with communities means for agencies such as the Forestry Commission.

Interactive workshop discussion groups

In the four workshops, held on the second day of the conference, delegates explored topics for further investigation which were based primarily on the need to make the most of existing information, to carry out further research and to reflect and learn from ongoing management. A number of recommendations on the way forward for social science research into forestry were formulated. Each workshop debated one main aspect of social forestry currently considered to be important and identified the main research needs which are listed below.

Workshop 1: Stakeholder analysis

Research needs identified:

- Map stakeholders using collaborative processes to discover who has a stake and what it is in.
- Clarify different types of stakeholders (identification of power bases and avoidance of elite capture).
- Explore appropriate levels of decision-making control by different stakeholders.
- Investigate which stakeholders are representing the wider public, so that the process of involvement does not become side tracked by vested interests.
- Assess how the public good (forests, woodlands and trees) should be distributed.
- Explore excluded groups and investigate how they might become involved in participatory processes.
- Assess whether current stakeholder involvement is an organ of representative democracy and if so which representatives of various organisations and interested groups are being approached to speak for the wider public.

Workshop 2: Environmental values

Research needs identified:

- Combine different research techniques to discover woodland meanings and values (using both qualitative and quantitative approaches).
- Research, at multi-level scales, the local agenda and national agenda and relate this to geography, scale and type of tree cover.
- Review methods for eliciting values comprehensively and systematically.
- Study representations of forestry through discourse analysis which is used to examine systems of knowledge, power and social practices.
- Investigate how woods are reported and represented in the media through content analysis which involves the examination of documents to understand the communication of meaning.
- Evaluate the role of public service forestry and the contribution different sectors make to what people want, e.g. community owned, public owned and privately owned woodlands.

Workshop 3: Public participation in environmental decision-making

Research needs identified:

- Assess and examine approaches to build trust between communities and agencies.
- Investigate different agencies' approaches to participation. What is their message? How accessible and flexible are they?
- Explore and review how established objectives can be revisited and refined during the consultative process so that agencies do not stick to a predetermined formula once it has been established.
- Investigate the different approaches used for setting up an effective dialogue with the public.

Workshop 4: Social sustainability

Research needs identified:

- Research to identify indicators in order to be able to demonstrate the progress of the social forestry agenda within the Forestry Commission.
- Review Forestry Law (e.g. The Forestry Act) to consider any changes required to take account of the increased focus on social forestry.
- Identify the importance of making forests accessible and open to all, particularly groups who currently do not use woodlands.
- Review best practice and project failure at home and abroad relating social forestry research and practice to identify how forests are being used to contribute to social sustainability.
- Elicit and evaluate non-market benefits of forests and woodlands, through both qualitative and quantitative methods, to ensure these can be taken into account in forestry policy.
- Carry out a scoping study to review ways in which the Forestry Commission could carry out joint research with agencies and academic institutions.

Conference discussion topics

During the conference a broad number of issues where debated. The topics listed below emphasise certain key discussion topics raised throughout the conference which will need to be explored and debated in greater detail in the future. Some of these topics are interlinked, so co-operation between researchers will be important.

- **Social justice and equity**

  Agyeman (2000) suggests that justice focuses on correcting unjust burdens (e.g. reducing inequalities within society) while equity revolves around sharing burdens. In focusing on public goods that are of benefit to society the concept of social justice and equity suggests that benefits be distributed equally across society. One of the discourses of sustainability is environmental and social justice which highlights inequalities to do with issues of race, class, gender, poverty, environmental degradation and pollution and these topics need to be addressed. In approaching the issue of equity, for example, the provision of opportunities for a wider cross-section of society to get involved in participatory processes might be advocated. This would involve not only taking into account people's views but also involving them in decision-making and incorporating these decisions into management.

- **The relationship between expert and lay knowledges**

  A balance needs to be sought in using and bringing together both expert and lay knowledges. Agencies should not ignore the sometimes important information and specific knowledges which people have about their local environment, although there is a risk of romanticising lay knowledges.

- **Social learning**

  Social learning is a discursive process, related to exchanges of information and knowledges. It implies a multi-way process between organisations, institutions, experts, politicians and lay publics. It was suggested that improved social learning would provide a better approach to education and knowledge acquisition for both agencies and the public. Research could provide institutions with information and knowledge of how to change various aspects of their culture and organisational practices to meet sustainable objectives and changing societal needs.

- **Power and governance**

  The impact of different power bases (experts, agencies and publics) needs to be considered and addressed. Elite capture should be avoided when setting up participatory processes and in advocating public involvement. The language organisations use for describing a particular area and its value may act as a barrier to the public. The language may be unfamiliar to local people and bear no relation to the reasons they give for valuing a particular site or area.

- **Social capital**

  In the publication Prove it! (New Economics Foundation, 2000) Robert Putnam described social capital as 'features of social organisation, such as networks, norms and social trust, that facilitate coordination and cooperation for mutual benefit'. Social capital was considered to be important and it was suggested could be improved by encouraging and strengthening community networks and connections and by developing trust and understanding between agencies and the public.

- **Links between people and green space**

  Current debate suggests that certain sections of society, particularly the younger generation, are becoming separated from green space and its use. How are green spaces used? Where can they be accessed? Exploration of the issues of green and open space is needed. These issues could include debate over safety, social and lonely space, public and private space, rights and legitimacy (both perceived and actual) to use green spaces.

- **Social inclusion and multiculturalism**
  It was suggested that agencies need to give greater regard to excluded and minority groups, particularly when they are trying to involve the public in decision-making and management. Agencies need to be aware of the richness and relevance of various cultural influences and think about how they might bring nature into people's everyday lives when certain groups may have little experience of green space or little opportunity to experience it. Longer project time frames are needed when trying to involve the excluded in order to encourage participation and build trust and interest.

- **Participation and community involvement**
  Delegates suggested that there was no prescriptive template for participation. They illustrated the need to be wary of trying to apply a particular participation process to all attempts at involvement. People need to play a meaningful role in participatory approaches which allow them to determine what goes on in their local environment. Deliberation through civic engagement should be advocated to help bring about long lasting outcomes and decisions.

- **Public good**
  Environmental management decisions affect society rather than solely individual interests. Consideration needs to be given to what is in the public interest especially where public money is involved. Public good questions, using deliberative research approaches, can be debated and negotiated by society within the public domain. Uncovering the sometimes hidden values of members of the public would enable agencies to discover issues they may not have previously considered or may highlight where they could improve on their current provision.

New era for forestry

The success of this conference was made clear with a request from the floor for frequent meetings in the social forestry subject area to share information and promote debate. Increasingly social considerations in regard to forestry are being thought of as a crucial element in sustainable forest management. The fundamental concept of sustainability is driving the need for research into the three major themes (outlined at this conference and structuring this publication): values and meanings, public engagement and participation, and governance and institutional processes. Socially engaged sustainable management provides new opportunities for emphasising how forestry contributes to a wide agenda which includes having a positive impact on health and well-being, social capital, urban regeneration, rural development, public engagement and social inclusion.

Bass (2001) argues that processes such as providing public benefits and undertaking participation are not quick or easy. He suggests that 'relationships need to be formed first and that [for example] participation cannot be switched on as if it were a new machine'. While it may seem a daunting task to involve the public more closely in decision-making and forest management, without their involvement the forestry industry risks alienating the very people who could help to positively contribute to a new era for forestry and other types of environmental management.

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1 Overview and introduction

Liz O'Brien and **Victoria Edwards**

What is the role of forestry in today's society? This is a question that is increasingly being asked as traditional forestry is replaced by a more socially engaged approach. It takes into consideration social, political and ethical issues as well as environmental and economic ones. A number of factors have led to this new direction. These include a demand for more public participation, greater deliberative and democratic approaches to involvement, and public distrust of authority to understand and make decisions about local issues. The forestry industry faces a difficult task in adapting to these concerns and in negotiating with an increasing variety of different stakeholders. Kennedy *et al.* (2001) emphasise that there is a demand for a mature citizen partnership with forest managers within a broad social context, which is inclusive. The English, Scottish and Welsh forestry strategies all advocate greater public involvement in forestry and recognise the importance of incorporating social objectives into current and future management (Forestry Commission, 1998; Scottish Executive, 2000; Welsh Assembly, 2001).

Mather (2001) describes the productivist era of forestry in the 20th century and suggests that it has been replaced by a postproductivist era. This has a reduced emphasis on timber production and increased concern for multifunctionality in which numerous social, environmental and economic benefits are provided. The meanings associated with trees and woodlands in modern society go beyond concerns with economics and timber production. It is clear that woodlands and trees mean many things to different people and greater social investigation is a way of obtaining insights into these perceptions, experiences and narratives. There are difficulties in valuing forestry's contribution to health, well-being, participation processes and social inclusion, for example. One of the key challenges is to incorporate multifaceted values into management and decision-making. People's appreciation of nature and woodlands is related to cultural, spiritual and ethical values, the meanings, perceptions and experiences that they derive from woodland use and the contribution that woodlands and trees make to the wider landscape. Understanding why people consider woodlands to be important could contribute to appropriate management, particularly of public woodlands where social benefits could be maximised.

Sustainability concepts will provide the bedrock behind the objectives and strategies of environmental policymakers and managers. Bass (2001) argues that 'genuine sustainability must ultimately be people centred'. Cultural change is needed within environmental organisations which, in the past, have perceived technical and economic factors as more important and relevant to their concerns than community involvement in decision-making and social inclusion. These and other social factors, advocated in sustainable development discourses, are increasingly being regarded as crucial to the sustainable forest management approach. Achieving sustainable forest management is now the key issue for forestry in Britain. This exemplifies a holistic view of management, which involves individuals and communities in decision-making and reviewing the acceptability of management through public dialogue. The forestry industry will have to be adaptive to issues such as the greater involvement of people and communities in how woodlands are designed and managed. This approach offers new opportunities for providing a more socially inclusive resource. Changes will occur in the management of the environment in Britain particularly after the impact of foot and mouth disease has been assessed. The debate surrounding this issue is concerned with how the countryside and landscape is managed in the future, for what purpose and for whose benefit.

Mather (2001) suggests that the current emphasis on recreation, environment, participation, communities, inclusion and landscape 'epitomises a transformed social construction of the forest' as opposed to a productivist construction which illustrates the utility of forests. The language of forestry has changed and become a much broader concept, incorporating a wider variety of meanings. Realisation of the social importance of forests, trees and woods is in the ascendancy. The changes that we see occurring are related to changing values in society and changing political and socio-economic processes. These are based on the rejection of top-down bureaucratic approaches to environmental management, in favour of greater deliberative and democratic approaches. There is also a realisation that involving people in decision-making and incorporating their values into management could provide a more popular and useful resource that meets a wider variety of needs and provides an exciting new role for forestry in the 21st century.

Cardiff conference: development and raison d'être

The need to understand and respond to the social context of forestry has given rise to the Social Forestry Programme of Forest Research and in turn led to this conference. The publication *Social forestry: questions and issues* (O'Brien, 2001) emphasised the importance of research into the social aspects of forestry. A number of issues highlighted in the seminar on social forestry, which the above publication is based upon, include the need to be more socially inclusive, to develop flexible approaches to involving stakeholders in decision-making and to explore the social and cultural values associated with woodlands. It was suggested that these issues needed to be explored and debated further and this led Forest Research to organise this conference at Cardiff on 19 to 20 June 2001. The main aim was to bring together a range of academics and practitioners in order to disseminate information and research connected to the social aspects of forestry and the natural environment. The meeting was attended by a wide variety of delegates and highlighted some of the research projects currently being undertaken by academics, PhD researchers and practitioners in this field, and was organised to:

- Give academics and researchers an opportunity to present their work focusing on environmental social science research.
- Encourage better communication between researchers, academics and organisations, and develop a broader perspective on issues connected with people and the environment.
- Provide delegates with an opportunity to raise their concerns and any relevant issues, and to contribute to four workshops in which they could develop solutions to current problems and further researchable questions.

The four workshops have illustrated further areas of possible research that will be necessary if we are to understand more clearly what woodlands and trees mean to people and how improvements in current provision can be achieved.

This publication provides the paper presentations, questions and answers and plenary session discussions that were undertaken on day one of the conference and the morning of day two. It is also augmented by the important contributions made by delegates in the workshop groups held on the second day. Delegates were drawn from a wide range of interests and thus had different experiences and perceptions which they contributed to the discussions. The section that follows is derived from the conference welcome and introduction and is included to set the scene for the two days that followed.

Setting the scene: welcome and introduction

This conference is hosted by Forest Research and supported by the Scottish Executive Rural Affairs Department and the Environment Agency, for which we are very grateful. The Forestry Commission has for some time recognised the increasing importance of the social dimension of everything it does – both as a woodland owner and as the forestry authority. We are making every effort to develop this crucial aspect of our work and to increase the resources that support it. But we can't do it alone. Despite all our best efforts, we will never have sufficient resources, skills, knowledge, understanding or just sheer determination to single-handedly further social forestry in Britain. That is where you come in. Together, foresters, academics, policymakers, managers, owners, researchers, movers and shakers can make a difference – to enhance what trees can do for people and, perhaps, what people can do for trees?

We have a fascinating collection of presentations today and tomorrow and an excellent line up of speakers. There will be stimulating discussion on all sorts of issues related to trees and people – from the values we place on trees, to community involvement in decision-making and the role of forests in cultural identity. Tomorrow, everyone will have a chance to participate in one of the four workshops and contribute personal knowledge and experience to the debate.

It is hoped that the conference will provide us all with a better understanding of the issues relevant to social forestry, some idea of the scope of research in progress and some pointers for the future research agenda. We should all use this conference to form further networks in social forestry research and to identify how we can, collectively, push forward this important work.

The next few years will be a crucial time for land use policy. At last there seems to be a consensus that we need to rethink our institutions, including the common agricultural policy. There could be some big gains for forestry and for communities. It is hoped that we can spend the next two days seeking research answers to practical problems. Our work is always going to be a balancing act: balancing the needs and wants of different people and striking a balance between taking the time to find ways of doing things better and, in some cases, just getting on and doing things. The presentations over the next two days cover important issues such as the valves and meanings associated with trees and woodlands, public engagement and governance and institutional processes.

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THEME ONE

Culture, Values and Meanings

2 Trees, woods and forests: an exploration of personal and collective values

Jacquelin Burgess and **Liz O'Brien**

Introduction

Research from a range of disciplines has contributed to the debate over the ways in which people value nature. In recent years economic valuation techniques based on individual preferences have dominated the study of environmental values. In contrast, social and cultural approaches to eliciting values focus on public judgements over the ethical and moral dimension of environmental issues. Current levels of citizen frustration in regard to environmental governance are highlighted and this suggests that public trust in institutions such as government, business and the media is declining. There is increased public demand for involvement in decision-making. Greater levels of public engagement and the provision of opportunities for deliberation over environmental values are potentially effective strategic approaches in the pursuit of sustainable forest management. A technique known as deliberative monetary valuation combines both economic and deliberative approaches but a number of problems have been observed in trying to bring these two methods together. It is suggested that public good questions can be addressed through the involvement of citizens in informed, deliberative debate which allows them to establish the ethical reasons that lie behind the articulation of their values. Environmental issues which are subject to public policy are public goods according to Jacobs (1997) as they are objects of ethical concern which should be debated within a public forum.

According to Jackson and Marks (1999), conventional economics links increasing material consumption with an increase in human well-being. They outline how the public is trying to meet its non-material needs through increased personal consumption and suggest that this practice is not satisfying those needs. Trees, woods and forests can provide a wide range of benefits at low cost that contribute to the public's non-material needs. Cultural change within forestry has led Mather (2001) to outline the characteristics of the postindustrial forest with its emphasis on the wider significance of trees, woods and forests. This indicates a change towards greater recognition of the importance of forestry in a social context.

Approaches to environmental valuation

Until recently research studies exploring environmental values were undertaken using a predominantly economic approach. Neoclassical economics has focused on cost–benefit analysis and contingent valuation methods which look at individual preferences in a hypothetical market. Surveys elicit people's 'willingness to pay' for environmental goods and services or 'willingness to accept' compensation for the loss of goods. The validity of economic valuation rests on the assumption that people are utility maximisers. Environmental psychology approaches have focused on areas such as landscape visualisation methods, and used attitude and preference studies to elicit values. Both of these methods focus on individual attitudes and preferences that are then aggregated, e.g. for a particular project or the protection of a particular species. Niemeyer and Spash (2001) argue that preference aggregation is 'neither ethically neutral nor welfare maximising'; they suggest that preferences 'are often ethically loaded and unequal'. In contrast sociological and philosophical approaches are concerned with the social and cultural discourses of meanings and values which involve the citizen in debate and negotiation about what is important to the community or society as a whole rather than the individual.

The various disciplinary approaches to examining and assessing environmental values frequently use similar words, e.g. 'values', although these are often associated with different meanings within each discipline. As noted above there is a division between, on the one hand, economic and psychological

approaches which focus on the individual and her/his preferences, behaviour and attitudes and, on the other hand, social and cultural approaches which consider collective values and 'public interest'. Deliberative value elicitation approaches are based on the concept of the ethical citizen rather than the self-interested consumer, emphasising a broad and complex conception of the citizen and the important contribution (s)he can make to environmental and social debate.

Recent research includes Tyrvainen's (2001) study on the 'Economic valuation of urban forest benefits in Finland'. In this research Tyrvainen used the contingent valuation method to assess urban residents 'willingness to pay' for large wooded areas or small forested parks. This type of approach as Neimeyer and Spash (2001) argue:

> assumes away … components essential to understanding environmental problems, such as complexity, political processes, and ethical considerations.

Harrison and Burgess (2000), using sociological techniques, undertook what they called a common good approach to valuing nature and stipulated that it should be

> based on ethical and moral concerns about nature and expresses these values through a social and political process of consensus building.

A number of recent studies concerned with the dominance of economic approaches to environmental valuation have tried to combine them with deliberative methods into a technique known as deliberative monetary valuation, with little success. For example, Kenyon and Nevin (2001), in their study of the Ettrick Valley forest floodplain restoration project in the Scottish Borders, took an approach which combined a contingent valuation survey with a citizens' jury. Their aim was to evaluate the project's success. They concluded with a suggestion that citizens' juries could be used as a participation technique to provide a monetary valuation. However, significantly, they went on to emphasise that reports from citizens' juries could very well provide sufficient information for policymakers and project funders on public values, without the need to resort to monetary valuation. This emphasises the conception that economic valuation approaches may be incompatible with citizens' deliberations over environmental, cultural and social justice and equity issues. This paper suggests that within the public realm, it is as citizens that people advance their claims regarding values, through reasoned debate, and assess the claims that are made by others.

Value formation

Values are the motives and reasons people give for action at an individual and collective level. They are associated with cultural plurality and ideas of rightness. Value systems according to O'Brien and Guerrier (1995)

> refer to underlying principles about the proper conduct of life in general and about the ways of interpreting specific events in terms of more extensive commitments to particular social arrangements and political orders.

Values are what people reason towards and involve deliberative decision-making. Meanings are culturally concerned with representations that are both personal and social in character and vary in time and space; they are formed out of a social process of debate and dialogue which incorporates the ethical and moral judgements people bring to bear over environmental issues. Values also relate to institutions as well as individuals. Citizens' juries, multi-criteria mapping and stakeholder decision analysis are some of the approaches that have been, and could be, used to determine collective environmental values within society. Use of these techniques would provide more elements to decision-making and highlight the plurality of values rather than trying to focus on a single value type such as economic welfare.

Environment and society: meanings and values

Changes in personal consumption patterns and shifts in values, both public and political, since the 1950s and 1960s emphasise the changing meanings associated with the environment and the drive to satisfy non-material needs. Table 2.1 highlights the changing meanings of countryside recreation. Research has illustrated a shift from universalism (opportunity for all) to greater claims of exclusivity in the provision of high status and high cost leisure pursuits. There has also been a shift from the notion of moral uplift associated with countryside recreation to hedonistic consumption (see consumer citizen below) and from collectivisim to privatism. Each of these shifts signifies the potential for social conflict between various groups with different leisure lifestyles, other groups with legitimate claims to the countryside, and the agencies responsible for managing the countryside. Recent research suggests that while society has moved progressively towards the right-hand column of Table 2.1, forestry is still largely situated in the left-hand column (Grove-White *et al.,* 1998; Henwood and Pidgeon, 1998; Jackson and Marks, 1999).

Table 2.1 Changing meanings of countryside recreation

Universalism	Exclusivity
Moralistic	Hedonistic consumption
Collectivism	Privatism

Citizen consumer

Quality of life issues and satisfaction of non-material needs have become increasingly important to the public and are frequently expressed through hedonistic consumption practices, particularly in western societies. For example, personal consumption expenditure in the UK has doubled in the past four decades with the biggest increases being in recreation and entertainment. Analysis of consumption patterns by Jackson and Marks (Jackson and Marks, 1999), highlights how conventional economics has linked increasing economic consumption with an increase in human welfare and well-being. These authors studied well-being (quality of life) and the purchase and use of material and non-material goods as a way in which people express an image and identity. Their research suggests that people are trying unsuccessfully to satisfy non-material (social and psychological) needs and express their values through increased material consumption practices, particularly in western societies focused on the importance of economic growth. The research outlines that there is a small number of finite needs that have to be met for survival; such needs can be satisfied in many ways which differ considerably across different cultures. Jackson and Marks (1999) conclude by suggesting that:

> Material consumption may offer at best a pseudo-satisfaction of non-material needs and at worst may actually inhibit or violate the satisfaction of those needs.

They argue that individuals, in pursuing well-being and quality of life improvements through increased consumption, will become progressively more dissatisfied. A realisation of this and the reduction in consumption they suggest would be of great benefit to the environment. In their conclusion they emphasise that

> modern society is seriously adrift in its pursuit of human well-being

as a sense of well-being does not seem to be related to an increase in material possessions.

Citizen activist and citizen deliberation

Recent waves of environmental protest, for example at the Gothenburg WTO summit in 2000, highlight new levels of public frustration at both national and international levels. Citizen activists are demanding that their views be taken into consideration. Many are advocating or undertaking direct protest in order to get their message across and this suggests that, in some cases, normal representative democratic methods are no longer viewed as an effective forum for bringing about change. Dominant decision-making in Western society is hierarchical with power resting in the hands of the few. Evidence suggests that public trust in institutions such as government, business and the media is declining. Greater demands for deliberative approaches which provide appropriate fora in which citizens can articulate their values, make decisions and contribute to environmental policymaking and management are being advocated. The public is questioning the ability of institutions and authorities to deal adequately with issues considered to be important, particularly in relation to the environment and sustainable development.

Trees, woods and forest values

In the early 1990s, when talk of enhancing economic value within forestry was still dominant, the Forestry Commission sought to quantify both market and non-market benefits to determine whether they were worthwhile management objectives. The changed agenda for forestry in the 21st century emphasises a realisation that values are difficult to price and a more encompassing holistic approach is being regarded as important. Mather (2001) explores postindustrial forestry in his paper 'Forests of consumption: postproductivism, postmaterialism, and the postindustrial forest'. He suggests that less emphasis is now being placed on timber production in forestry as other factors such as recreation and biodiversity have become increasingly important.

He argues that the postindustrial forest is the result of a change in culture, and suggests that postindustrial forests are places where recreation and amenity are now consumed by a predominatly urban society, as opposed to places that produce timber. In Britain in the 1980s forestry was dominated by productivist concerns until increasing pressure about the environmental impact of forestry in certain areas, such as the Flow Country in Scotland, led to a gradual change in emphasis. Mather (2001) outlines the traditional top-down approach to decision-making in forestry and advocates a move to greater participatory and deliberative approaches. The matrix in Table 2.2 devised by Mather (2001) outlines a number of differences between the industrial forest and the postindustrial forest. He emphasises that timber production is still relevant in today's forestry although it is not central, as it once was, since other aspects of forests and woodlands are now more widely valued.

Table 2.2 Characteristics of the industrial and postindustrial forest (from Mather 2001)

	Industrial forest	Postindustrial forest
Management objective	Timber production Monofunctional	Environmental services Multifunctional
Typical composition	Even aged/conifers	Mixed age and species
Typical location	Peripheral/remote/ upland	Peri-urban/lowland
Values	Instrumental	Intrinsic
Ethos	Rational	Emotional
Management style	Authoritarian	Consultative
Management approach	Mechanistic/reductionist	Organic/holistic

The move towards the postindustrial forest has been exemplified by the creation of the Community Forests and the National Forest in England and according to Mather (2001) this

> epitomises a transformed social construction of the forest.

It emphasises a change in the view of why forests are important and the impact they can have on communities and individuals in both urban and rural areas. The move to a new era in forestry is related to changes in values which involve a greater public demand for transparency in policy and decision-making; and an increased awareness of the many social benefits that woodlands and forests provide and how they can contribute to people's quality of life. Social objectives within forestry have, until recently, predominantly focused on recreation and conservation without incorporating wider social issues, and forestry's possible contribution to issues such as urban regeneration, rural development and community engagement.

Key social research in forestry

There are a number of key social science reports that have been undertaken in recent years from a forestry perspective. These include:

- Growing in confidence: understanding people's perceptions of urban fringe woodlands (Burgess, 1995)
- Woodland sensibilities: recreational use of woods and forests in Britain (Grove-White *et al.*, 1998)
- The place of forestry in modern Welsh culture and life (Henwood and Pidgeon, 1998)

Box 2.1 shows a number of important themes which have been emphasised from the qualitative research outlined above. These themes are related to Table 2.1 and the changing meanings of countryside use and recreation.

Box 2.1 Themes emerging from key social forestry studies

1. Forestry is concerned with universalism rather than exclusivity

- Importance of local woods for a wide variety of social groups and activities
- Low cost, low outlay 'everyday' recreation
- Not associated with conspicuous expenditure – part of quality of life

2. Forestry is concerned with moral uplift rather than hedonistic consumption

- Simple sensory pleasures
- Contact with nature and naturalness
- Spiritual feelings

3. Collectivism/privatism (contested). This emphasises the social element of the majority of forestry activities as opposed to recent trends

- Memories of childhood
- Significance for children today
- Occasions/sites for social recreation
- Real and imagined communities
- Anxieties for the self/loved ones

Conclusions

Forestry is part of a broader environmental and social sphere which can provide opportunities for contributions to urban regeneration, rural development, quality of life improvements and social inclusion. Current trends to look in greater depth at the complex and sometimes contradictory nature of values suggest that approaches which explore the social and cultural context in which values are constructed, rather than those which focus on monetary value alone, are needed to inform the social dimension of sustainable forest management. New approaches and decision-making support systems allowing people to articulate their values, and hear other accounts, are needed. Many researchers are now calling for ways to capture values which could include the ethical and moral judgements people bring to bear over public goods such as woodlands and forests. The three key social science reports mentioned above highlight the role that forestry can play in improving people's quality of life. The research carried out suggests that cultural and spiritual associations, personal experiences and childhood memories, rather than economic benefits, are of particular importance when people consider their relationships with trees and woods.

Future research issues related to environmental values

- Identity – assess public needs and wants to explore what they are and the links that needs/wants have to the identity and image that people express through personal consumption practices.
- Quality of life – examine the importance of quality of life issues and well-being in relation to trees, woods and forests.
- Decision tools – develop tools that capture values and meanings, for example approaches such as multi-criteria mapping and stakeholder decision analysis.
- Social learning – explore and assess the process of social learning, through which both forestry experts and citizens are able to gain a better understanding of their different knowledges, values and practises.

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3 Forests and woodlands: towards a new outlook

Robin Grove-White

Forestry and the social sciences are coming together at an important moment for both. The potential for creative collaboration, with benefits all round, is considerable. These thoughts are offered by myself as both a former Forestry Commissioner and Professor of Environment and Society at an energetic social research centre, at Lancaster University.

Relationships to trees and woods are *important* to people – in different ways, in different contexts, and at different life stages. There is already a fair body of social research that confirms this, if confirmation were needed (e.g. Macnaghten *et al.*, 1998; Ulrich *et al.*, 1996; Hartig, 1986). Increasingly, over the past decade or so, the Forestry Commission (FC) has been moving to reflect such an understanding – moving beyond priorities of timber production, landscape enhancement and biodiversity, to engage actively with *people.* Indeed, progress towards an expansion of the nation's tree cover, as now urged by many institutions in addition to the Commission, can only benefit from an increasingly sensitive attunement to the wishes and needs of real people in real places. Such developments are occurring in a period of transition for the social sciences, too, a matter which is highlighted below.

I served as a Forestry Commissioner between 1991 and 1998, following a period in the 1980s as Director of the Council for the Protection of Rural England. In this earlier role, I had tended to picture the Commission as rather arrogant and remote, but on joining its Board I found that, under the regime of Robin Cutler and Raymond Johnstone, it was in fact striving against many difficulties to move towards forms of forestry that were socially and environmentally more diverse, i.e. 'multi-purpose forestry'.

In a sense, the Commission was suffering from its earlier production-focused success. It had few real friends in the wider world. So in the 'privatising' world of the early 1990s, it was faced increasingly with a tightening of screws by the Treasury and National Audit Office. 'Efficiency', narrowly conceived, became the watchword. This fostered a climate in which, whatever the inclinations of the Commission's more far-sighted innovators, there was little institutionalised scope for exploring and engaging with the changing needs and inclinations of the wider population towards woodlands. To be sure, there were many imaginative projects in individual FC regions and districts, for example, Grizedale, the New Forest, the Forest of Dean and Delamere Forest, but the central thrust of policy continued to render these relatively marginal.

There were two important moments of change in this regard, during my period as Commissioner. The first was the Government's 1993–1994 Forestry Policy Review which was widely assumed at the time to be the precursor to full privatisation of the FC's publicly owned estate. Grass roots protest around the country – 'hands off *our* woods' – ensured the survival of both the estate and the Commission itself. FC officials around the country were surprised and gratified to find that, in the crunch, they enjoyed major public support for the new 'multi-purpose forestry' they were working to create.

The second episode was in 1996, at Laggan in north-west Scotland. Progress towards genuine community participation in local FC woods at Laggan was taken up politically by the Conservative Government of the time, as an exemplar of the emerging new approach, at a time when devolution was on the cards. As a consequence, the previously low-key 'People, Trees and Woods' network co-ordinated by Commission officials from Edinburgh, assumed increasingly major strategic significance within the Commission overall.

Coupled to the growing success of individual local partnerships, aimed at generating both environmental and social benefits, involving the Commission, NGOs and other public agencies, such developments gave a boost to the FC's capacity to engage more systematically with wider recreational and social needs. Indeed, it is striking that in a recent study (Macnaghten *et al.,* 1998) social researchers found that recreation managers across a spectrum of national agencies regarded the Commission not only as one of the country's leading rural recreation providers, but also as something of a pioneer in developing practical methodologies and intellectual reflection on such matters.

This is a promising base on which to build.

What then of the present state of social research in the 'people and forests' sphere? As these proceedings suggest, several different kinds of social research are now on offer. These range across model building (Rubiano and Haines-Young, Chapter 8; Pickering, Chapter 9), analyses and monitoring of institutional behaviours (Selman, Chapter 7; Ghag, Chapter 10), ethnographic investigations (Bishop *et al.,* Chapter 6; Smith, Chapter 14), specific social group studies (Burgess, 1995; Macnaghten *et al.,* 1998), sociological reflections on 'meanings' (Evans, Chapter 11), as well as contingent valuation (CV) studies of the kind referred to by Bill Slee.

All of these approaches have their strengths. But some major distinctions may help to assist the FC's own planning. The following are suggested:

- *Forms of research with apparently direct and recognisable pay-offs for the Commission.* These include: CV studies needed for the FC's negotiations with Treasury and National Audit Office – albeit with caveats noted in the literature (e.g. Grove-White, 1999); empirical studies to inform the FC's negotiations and joint initiatives with partners such as public agencies, local authorities, land-holders, NGOs, etc; and opinion polls/consultation surveys conducted for specific FC purposes.

Social research findings of these various kinds are able to be incorporated relatively frictionlessly into the FC's established frameworks and way of working.

In contrast to this, there are:

- *Forms of insight on contemporary social and cultural change and changing public sensibilities, with more indirect (but strategically significant) pay-off for the FC.* These include sociological and anthropological investigations and reflections, exploring such issues as:

– What are people's emerging needs and values *vis-à-vis* woodlands and recreation more generally?

– What are contemporary people like, beneath the radar of conventional opinion polling?

– In what ways are people alienated from public institutions and what are the implications for new 'people-focused' initiatives?

– What might the evolving trends in cultural pluralism mean for new leisure/recreational provision?

Current social research activity on the latter kinds of issues tends to be fragmented and cross-disciplinary, often at the point where the different disciplinary insights of anthropology, cultural geography (Tsouvalis, 2000) and the sociologies of knowledge and culture meet and interact. And,

perhaps more significant in today's context, such forms of research insight are less familiar, and at this stage perhaps harder for the staff of organisations like the FC to digest and operationalise than those in the first category.

Nevertheless, they are if anything *more* important for the FC's policy planning in this sphere in the period ahead. As Paul Selman has observed, the Commission's venture into the domain of social research will only be useful if there is a commitment to reviewing past assumptions and practices. How then may we picture the potential relationship between these two 'classes' of research, and their adaptability to the Commission's needs?

Figure 3.1 offers a suggested way of picturing the relationships. The small circles (e.g. policy and planning studies, forest planning and modelling) refer to social research addressing specific FC *operational* needs from social scientists. The large circle, on which the smaller circles sit, represents a body of 'social intelligence' which can underpin and inform the design of the more specific studies. How might one envisage creating such social intelligence?

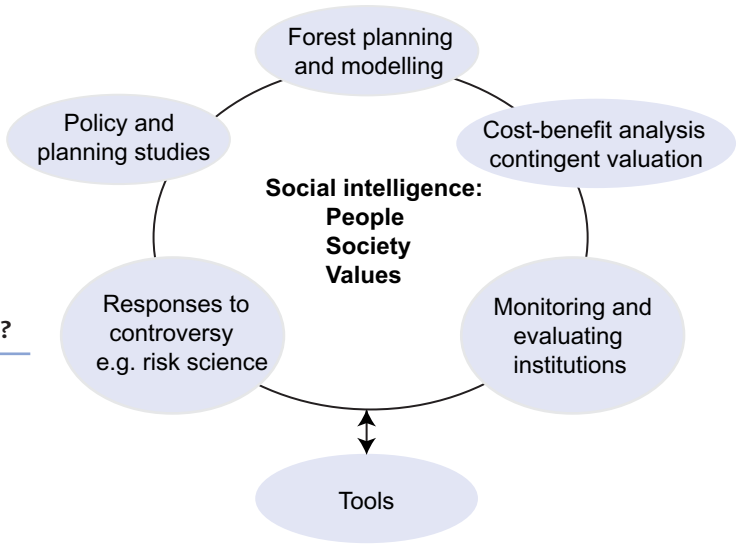

Figure 3.1 **Making social research useful?**

There is a major opportunity here for the FC to act as 'patron' for the creation of a new discursive space, within which researchers and analysts under the second suggested distinction can come together and synergise their insights. This might be grounded in a forum, meeting regularly, in partnership perhaps with the ESRC – an intellectually creative framework in which a diverse range of individuals and disciplines could be expected to participate with enthusiasm. It is no coincidence that the Government's Agriculture and Environment Biotechnology Commission is now calling for the creation of an analogous network of social researchers in the GM sphere (AEBC, 2001).

Seen from the perspective of the social researcher, the FC and its estate are highly alluring. The Commission is the country's largest landowner, now interacting constantly with highly diverse publics in an overwhelmingly positive fashion, on matters that touch important aspects of people's lives. The prospect of being associated with its aims and activities, and of contributing to their development in progressive fashion, can be expected to be highly attractive to social scientists of many kinds. Given

the right structures and opportunities, many enterprising academic researchers would be drawn in. There is potential for FC partnerships with Research Council programmes and capacity-building, for PhDs, internships and secondments (as the Commission has already initiated with University College, London).

All of this could be expected to translate rapidly into useful tools for Commission staff, enriching and helping to refine with new social research insights into those initiatives which have already been set in motion by FC staff – such as Hislop's developing 'Decision Framework' and Wallis's 'Consultation Framework for Socially Excluded Areas'.

The times have never been better for new forms of partnership between woodland recreation bodies like the FC and the social science community. The associated challenges of public engagement are already being explored anew by bodies as different as the Parliamentary Office of Science and Technology, the Royal Society of the Arts, and many local authorities, benefiting from similar partnerships.

Aim high, and the rewards will be correspondingly great.

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4 Forests, people and place

How individuals and communities perceive and relate to trees,woodland and forests in a Welsh context

Sue Hunter, Nick Pidgeon and **Karen Henwood**

Introduction

Theories and research on why nature and natural beauty are important suggest that significant health and psychological benefits can be attained by using natural resources both for recreation and everyday interactions (e.g. Ulrich, 1993; Godbey, 1995; Kaplan, 1995; Mausner, 1996; Hartig *et al.*, 1991). The initial aesthetic impact of a natural scene, however, comes not just from its physical or spatial qualities, but also from the extent of naturalness perceived (Mausner, 1996; Hodgson and Thayer, 1990; Schroeder, 1991; Henwood and Pidgeon, 1998; Burgess, 1995), the functional affordability the scene offers to an observer (Appleton, 1975a; Kaplan, 1987; Kaplan and Kaplan, 1983; 1989), and other emotional, experiential and cultural factors. Macnaghten and Urry (1998) demonstrate this by showing how perceptions of nature have changed over time according to political, geographical and historical climates. Culture itself is continuously changing, and so therefore is its impact upon people's assessments and conceptions.

The past 20 years have seen a period of intense economic and social restructing in the countryside (Marsden *et al.*, 1990;1993). Socially, a movement towards counterurbanisation, as individuals find ways to commute from rural areas, has changed the demographic makeup of many rural areas so that they are 'disproportionately biased towards those who, in terms of their wealth, power and influence, are influential in deciding national policy and public opinion' (Rogers, 1993, quoted by Ilbery, 1998). Murdoch and Marsden (1994) propose four ideal types of British countryside which characterise the varying outcomes which may be expected by this restructuring:

- The *preserved countryside*, characterised by anti-development and preservation interests, most clearly expressed by middle-class sections of the population (Cloke and Thrift, 1990), where rural change is highly contested.

- The *contested countryside* where rural spaces lie outside the main commuter belts, and although agricultural and traditional concerns may still be politically dominant, recent waves of incomers again adopt the more preservationist attitude, causing increasing conflict between old and new groups (Ward *et al.,* 1995).

- The *paternalistic countryside* which refers to areas in which large estates and landowners still dominate.

- The *clientelist countryside* where agriculture is still heavily subsidised and processes of rural development are still dominated by farming, landowning and state and local subsidies.

In relation specifically to the Welsh context, rural areas could be characterised predominantly as the contested or preserved countryside, as large numbers of predominantly middle-class English incomers are often seen as imposing their aesthetic and recreational needs on the local populations. This class analysis has been the topic of considerable debate and highlights three main issues. First, that rural social conflict does not stem simply from middle-class incomers displacing local residents (Cloke and Thrift, 1987, 1990), evidence showing that initially many of those 'locals' will themselves be middle or higher class (Newby *et al.*, 1978), for example farmers.

Second, counterurbanisation has been occurring for so long that some in-migration may be the displacement of other incomers. Third, not all contemporary incomers are middle-class (Cloke *et al.*, 1995). The countryside is therefore not only middle-class territory, but 'in many respects a racialised, nationalised, aged, sexualised and gendered space' (Agg and Phillips, 1997; Cloke *et al.*, 1995; Murdoch, 1995b; Phillips, 1993).

Issues of ambiguity over 'who' is in the countryside, and an acknowledgement that rural communities are composed of a myriad of demographic factors, have led to a fuller awareness that within any community, individuals are constantly renegotiating their identity and sense of place (Cloke *et al*., 1995). Marginalised individuals in a community find it harder to access the resources of that community (Cloke and Little, 1998), experiencing exploitation and deprivation (Maclaughlin, 1987; Cloke and Milbourne, 1992). This ties in with the fact that different groups of individuals have been shown to view their ability to use nature as a resource as greater or lesser, depending on their social group: age (Lawton, 1989b), gender (Burgess, 1995; Valentine, 1989; Macnaghten *et al*., 1998) and ethnicity (Burgess, 1995; Agyeman, 1995; Kinsman, 1993).

This chapter focuses on one particular aspect of the research findings. This is the sense of 'home' or 'heritage' associated with the natural landscape, and the fragmented nature of this concept, depending on length of residence and association with the community or area, which we hypothesise corresponds in some measure to a sense of empowerment and control over issues pertaining to the environment as a whole and to people's perceptions of it both personally and culturally.

The Cross Wales Regional study

The question can then be raised of whether there are differences in the perceptions of the natural environment depending on people's differing geographical and social regions, and how those perceptions are displayed both symbolically and in discourse at the level of both public and personal understanding? An individual who has lived in an area for all or most of their lives, for example, may feel they have different justifications for commitment and affiliation for their region than someone who has been resident in an area for only a short period, despite the fact that in both cases that perceptual affiliation may be seen as equally great.

The methodological approach adopted in the present Cross Wales study is based on an original scoping study conducted in Bangor, North Wales, in February 1998 by (Henwood and Pidgeon, 2001). This original study aimed to look at the meanings and values that individuals held for aspects of their natural environment and landscape, specifically forests, woods and trees, in terms other than purely economic ones (commissioned by the Forestry Commission). Woodland, trees and forests were found to be symbols of nature and to also have wider cultural associations.

The Cross Wales study develops the original research questions:

- What is the importance of woods, forests and trees to the life and culture of people in Wales, and what do they symbolise?
- How are woods and trees perceived at the level of public and personal understandings?
- Do different meanings and experiences tend to be associated with woods and forests, depending on people's geographical/ regional location within Wales?

Methodology

Four areas of Wales were chosen for the study for their varied social and geographical character. Wrexham, situated in north-east Wales is an industrial and market town, with a history of coal mining, brewing and steel working. Milford Haven, in Pembrokeshire, was primarily a fishing port until 50 years ago, when it was developed as the chief point of entry for Middle Eastern oil by the petroleum industry. Lampeter, in Ceredigion, is historically a rural market town, and Cardiff, in South Wales, is the capital for Wales and a centre for tourism and industry (Figure 4.1)

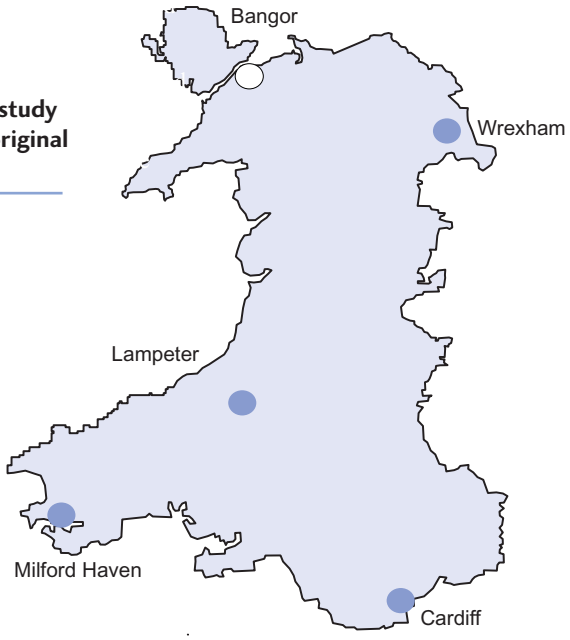

Figure 4.1 **Map of Wales showing the four study regions and the original scoping area**

These sites were chosen for their contrasting socio-geographical status to ensure that the study design included those axes of cultural and landscape difference that gives Wales its varied character. Participants for the Cross Wales study (105 in total) were members of the general public selected upon the criterion of having lived in Wales for at least five years, to ensure a wide knowledge and experiential basis for discussion of personal, local and national landscape and environmental issues. Participants were also chosen to include both long-term residents (individuals who had lived in Wales for all or most of their lives), and short-term residents (individuals who had lived in Wales for at least five years but not for all or most of their lives).

Between four and six 2-hour discussion (focus) groups were run in each region. The protocol for the focus groups was designed to elicit responses concerning participant's values and meanings of forests, woodland and trees, moving during the 2 hours from a more general discussion at the start to more personal themes concerning issues of culture and identity (Figure 4.2). This structure was designed to allow participants to feel more confident and comfortable talking about such issues as they begin to participate fully in the group interaction.

As well as discussion, the focus groups also required individual participants to complete several paper tasks:

- a mapping and gridding task, wherein they selected three wooded sites in Wales of personal significance, and highlighted the differences and similarities between them;
- a ranking task which asked them to rank a list of possible reasons for the importance of woods, trees and forests in Wales in terms of their personal and national significances;
- a moods and feelings questionnaire.

Figure 4.2 Focus group protocol

A	Welcome and introduction to the study and to each other. Brief outline of the proceedings.
B	General discussion of aspects of the landscape and natural environment: locally, regionally and nationally.
C	General discussion of the terms 'forest', 'woodland' and 'tree'.
D	Discussion of moods and experiences in forests using a selection of photographs of various woodland scenes as prompts.
	Break for tea
F	General discussion of the importance of wooded sites in Wales.
G	Individual ranking task.
H	Discussion of untouchable woods vs management issues. Discussion of ownership: who should own the trees in the landscape?
I	Dilemma discussion of a hypothetical issue whereby a local copse of trees is to be cut down to make way for a playground/bypass.
J	General discussion of aspects of forests, woods and trees represented in culture; artistic, modern and deep.
K	Individual moods and feelings task, and completion of individual participant questionnaire.

Main results

Overall findings

First, there was a general tendency to perceive a distinction between forests and woodland, both in terms of language and definition. Forests are seen as plantations – coniferous, commercial – whereas woodland is associated with the natural, inherent landscape of Wales, interpreted to be deciduous and home to a greater variety of plant and animal life. This distinction also comes across in terms of amenity or economic usage of forests and woodland; leisure purposes vs 'cash crop'. This linking of forests with commercial concerns enables them to be conceptualised as more 'artificial', and under human control. Secondly, forests, woodland and trees can be viewed in symbolic terms, i.e. control over nature as a wider symbol of human interventionist control, and post-modern concerns over loss of traditional community and personal efficacy and livelihood. Thirdly, there is another layer of meaning moving towards personal 'spiritual' associations (the linking of personal and community identity with natural aspects of landscape), where an individual can feel a sense of nature on levels other than the physical.

Regional variations

Regional variations across the groups showed not only in terms of the geographical or historical background of the area, but also in the social dynamics relating landscape to culture and identity in a way that is specific to a region. There appears to be a strong association between seeing an area as 'Welsh' in an ancient cultural way, and a willingness to elucidate self-identity as having an affinity with the landscape which is frequently bounded by tradition and conceptualised by language and cultural associations. This was especially highlighted in the more rural and Welsh speaking areas such as Lampeter.

The most urban group, Cardiff, in contrast, highlighted issues of modernisation as a threat, especially perceiving this as a threat both to the identity of the community locally and to Wales as a whole.

This led to a strong sense of suspicion against any natural resource being 'exploited' for commercial gains. Nature was used in part to symbolise an obvious example of threats to everyday life.

Individuals, community and the environment

A very important aspect of people's interaction with aspects of the natural, or perceptually natural, environment is the personal and cultural memories associated with them. For many individuals, particularly those born and brought up in rural areas, trees do signify 'home', and as such comprise an integral part of their personal and community identity. The natural landscape is also seen as an integral part of the Welsh culture, part of the inheritance of Wales. This deeper identification between home, heritage and landscape, however, appears to be marred by the sense of frustration concerning visible access to 'natural' environments, that is, which areas individuals may or may not be allowed to enter and which organisation sets such constraints. This is in addition to a sense of a lack of control and available knowledge over management decisions which affect the local landscape. However, within the community groups themselves, there also appeared to be different levels of discussing an identification with the landscape, depending not just in a simplistic way upon the differences between long-term and short-term residents, but also upon their individual identifications with the dominant topic of concern and its managers. This suggests that in the valuation of the surrounding landscape and perceptions of available input into its management, perceived rights of inheritance and power also come into play.

Conclusions

Findings from the Cross Wales study suggest that the perceptions of forest, woodland and trees can be viewed at varying levels of meaning, relating the individual both to their own personal experiences and expectations and to their perceived relation to, and within, the local and wider community. The apparent key issues in an individual's perceptions of the environment are summarised in Box 4.1.

Box 4.1 Key issues in an individual's perceptions of the environment

- Personal memories associated with nature both in specific places and in their immediate locale, which appear to be mediated by the sense of belonging which the individual perceives themselves to have both in the spatial location and within the social groups or communities of that space.

- Nature perceived as a symbol for the individual self, where a person senses a relationship between their own sense of empowerment and control over personal decisions and issues, and their ability to affect the external environment, i.e. health concerns, access issues, the dichotomy between man-made (controlled) and natural.

- Although many individuals do feel a sense of identification with the landscape, particularly in terms of both their own personal sense of home and place, and a wider link to the inheritance of the Welsh landscape as a whole, this identification and access to deeper connections with nature is marred by the sense of a lack of control over planning and design decisions which affect their surroundings. This is further complicated by the inherently complex and fragmented nature of communities in Wales, traditionally a bilingual nation where issues of belonging and inheritance can be complicated further by the influx of incomers, who may or may not identify with the landscape either physically, psychologically or aesthetically.

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5 Language, land and processes of cultural recovery: the Millennium Forest at Borgie

A. Fiona D. Mackenzie

Introduction

North Sutherland shares with the other eight areas designated under the Iomairt aig an Oir (IAAO)/Initiative at the Edge programme in Scotland a history of declining population and limited job opportunities (System Three, 2000; Reforesting Scotland, 2001). Residents with genealogical depth in Sutherland trace these processes of cultural loss and dispossession to the Clearances of the early decades of the 19th century (Hunter, 1976; Devine, 1994; Bangor-Jones, 2000). (In this chapter genealogical depth refers to someone whose claim to residence in an area can be traced through one or more family members back to the early 1800s). But for many, the Clearances have continued to the present with loss of jobs in the fishing and forest sectors and the collapse of prices for sheep. The central objective of the IAAO is to promote the economic and social sustainability of communities in North Sutherland, Ardnamurchan, Colonsay, Lochboisdale in South Uist, Eriskay, the Bays of Harris, Uig and Bernera on Lewis, and Westray and Papa Westray, Orkney. This is to be achieved through support for communities in identifying their own needs and then promoting inter-agency co-operation to work with communities in resolving their needs.

Currently the population of the three parishes, Farr, Tung and Durness which comprise North Sutherland, has been reduced to under 2000, some communities having lost close to 30 percent of their population in the last decade (Sandy Murray, cited by Ross, 2001). Evidence of widespread commitment to turn around this state of affairs is found in the unprecedented levels of attendance at two events at Borgie Forest in 2000 and in the recent rise of the North Sutherland Community Forest Trust (NSCFT) as an initiative to spearhead change. The first event, the Borgie Forest Open Day on 2 September 2000, was attended by over 500 people. It was organised by the NSCFT, Forest Enterprise, and Caithness and Sutherland Enterprise, to coincide with the planting of the Millennium Forest, a one-hectare site next to Borgie Forest. About 200 people participated in the second event, the Opening of the Millennium Forest on 2 December 2000.

The main objective in this study is to examine the Millennium Forest at Borgie in light of the popular significance of these two events and the emergence of the NSCFT. Its symbolic importance rests on the profound statement it makes about land, the symbolic centre of resistance to ongoing processes of cultural erosion, to globalisation, and a reimagining of a future at odds with the logic of global capitalism (see Gibson, 1999). A revisioning of the future is achieved in three ways:

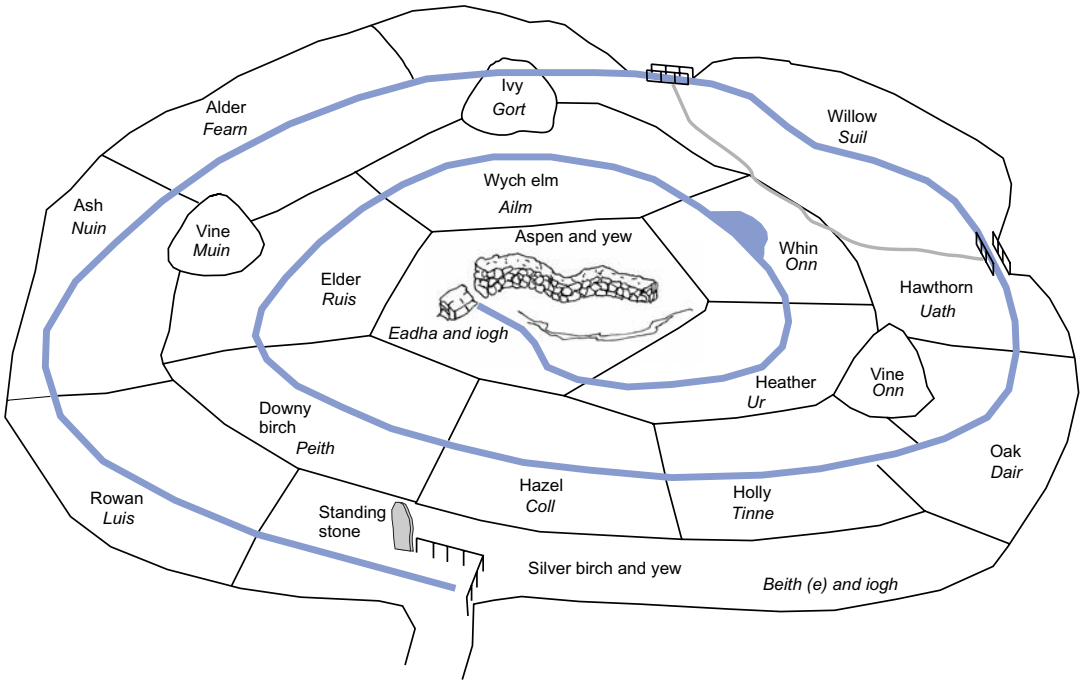
- Through the socially inclusive practices employed in the creation of the Millennium Forest.
- Through the metaphors on which, as art, it relies.
- Through the link between this very local event and the struggle for collective ownership of land elsewhere in Scotland. Recent examples of this struggle are the buy-outs of land in Assynt, Eigg, Bhaltos, Knoydart and Borve-Annishader (see MacAskill, 1999).

The Millennium Forest, Borgie

The A'Chraobh (tree) group, Skerray

In order to be eligible for funding from The Millennium Forest for Scotland Trust, a proposal had to meet two objectives: the restoration of Scotland's woodlands and revival of the connection between a community and its woodland. The A'Chraobh (tree) group in Skerray, near Borgie Forest, which included local residents and two artists from further south in Sutherland, drew on extensive collective experience, first as a co-operative and, in the last 10 years, as a company limited by guarantee, North Coast Community Enterprises Limited (NORC-CELT) to develop the proposal.

Figure 5.1 **Design for the Millennium Forest at Borgie (source: Nic Bheatha/Beith, 2000)**



The design for the Forest includes three main elements (Figure 5.1). The first, a standing stone at the entrance is engraved with the motif which inspired its layout (Figure 5.2, page 80). This is a spiral branch from which grow the leaves of each of the trees associated with the ancient Gaelic alphabet, A'Chraobh Ogam. Below this the letters of the alphabet are engraved, together with the names of the trees in Old Gaelic and their translation into English. From the standing stone, the second element, a spiral pathway, leads through the seedlings of the trees associated with the alphabet, in order: birch, rowan, ash, alder, willow, hawthorn, oak, holly, hazel, a vine (honeysuckle), ivy, peith, elder, wych elm, whin/gorse, heather, aspen and yew. Along the path are laid pieces of Caithness flagstone on which have been sandblasted designs of the leaves of the trees and Gaelic proverbs, together with their translation into English. A dry stone dyke with a gap at one end forms the third element at the centre of the woodland, its curve mimicking the bends in the Borgie River which it overlooks.

Conscious that North Sutherland was far from socially or culturally homogeneous, the A'Chraobh group adopted practices of social inclusiveness. The young were central to the creation of the woodland. Children from nearby schools drew the designs which, through the co-ordination of artist Sue Jane Taylor, were sandblasted onto the flagstones laid along the pathway. In September the children, along with a few adults, planted the 700 seedlings which comprise the woodland. At the Opening in December, the children also held the circle of boughs of birch, ivy, holly and honeysuckle at the entrance and played a large part in the ceilidh which followed. Ian Westicott, responsible for the design of the dry stone dyke, worked with senior residents, women and men, to produce prints of the leaves of the trees represented in the alphabet, which hung as banners in the marquee and later the village hall.

Local materials were used with the exception of the flagstone from Caithness, and people with local skills took part, for example, in the construction of the dry stone dyke and in the design of the small bridges along the pathway. The seedlings were provided by the Tree Network, a group of local crofters who breed indigenous trees for ecological specificity. The bilingual book, *A'chraobh/The tree* (2000), was also a collective effort. Its main feature includes Mairi Nic Bheatha/Mary Beith's discussion of the Ogam alphabet and of the social, medicinal and spiritual role of the trees in Celtic culture. The book also contains visual evidence, photographs and drawings, of social inclusiveness.

Despite some very minor controversy – involving those whose interests in private property were seen to be threatened – the extent of participation in the project reflects the degree of collective ownership. The breaking down of boundaries between 'artist' and 'community', between people of different ages, and between residents with varying degrees of genealogical depth in the area, and between Gaelic speakers and those without this skill, were critical in achieving this as were the metaphors evoked through the Forest as 'art'.

Metaphors and meanings

Through two metaphors, the stones of the dry stone dyke and the trees of the A'Chraobh alphabet, the past and future are mediated in such a way as to reframe notions of belonging. As metaphors, the stones and trees provide the means through which, symbolically, cultural recovery is achieved. The past is recalled, but metaphors which could evoke an essentialist and exclusive identity (such as one based on fixed ideas of timeless tradition and unchanging culture, the provenance of one only with generational depth in North Sutherland) are used in such a way as to suggest culture and language as always in process, always subject to change, and inclusive notions of belonging to place. Probing the meaning of the metaphors reveals complex histories and multiple pasts.

The stones of the dry stone dyke come from homes of tenants and cottars in Strathnaver, an area cleared in the early decades of the 19th century by Patrick Sellar, notorious factor of the Duke of

Sutherland, to make way for the more profitable sheep. Their incorporation into the dyke recalls that act of dispossession. But the break in the dyke suggests a political space to re-imagine a collective future – one which draws on images of a pre-Clearance past and disrupts the processes of enclosure which defined not only that event but also more recent processes of integration into circuits of British and global capital.

For those with genealogical depth in North Sutherland, the stones recall a past where people were closely bound to the land. The notion of *duthchas* is central to understanding this relationship. Referring to a 'hereditary right' (Dwelly, 1994) to land, a right that was inalienable and that predated the clan system (Grant, 1961), the notion of *duthchas* implies a view of property at odds with one which recognises private ownership (Devine, 1994). The Gaelic proverb, ' a salmon from the pool, a branch from the wood, and a deer from the hill', indicates that this collective right was extended to rivers, to woods and to the livestock that ran wild on the land.

For those with deep historical attachment to North Sutherland, particularly Gaelic speakers, the ancient tree alphabet recalls the integral relationship between people and land, people and nature, of the past. The biodiversity evident in the trees associated with it, planted in alphabetical order along the pathway, was essential for Pictish society – its economy, its culture and its spirituality (Nic Bheatha/Beith, 2000; Foster, 1996). Visually, the biodiversity and indigenity of the trees of the Millennium Forest contrast with the biological uniformity and exotic origin of the Forestry Commission's plantings of the adjacent Borgie Forest.

But neither the metaphor of the stones nor of the trees is the exclusive purview of those who claim historical depth in the area. The stones recall both a past where collective rights sustained people's livelihoods and a history of dispossession associated with the Clearances. Yet dispossession did not cease once security of crofting tenure was legislated in 1886. The loss of jobs and the outmigration of families and family members is experienced by both 'locals' and 'incomers'. The break in the dyke suggests a place from which to rethink the future.

The trees, as metaphor, suggest inclusiveness at two levels. First, it is evident on the standing stone at the entrance to the Forest for a Gaelic speaker, or in Nic Bheatha/Beith's discussion in the bilingual book *A'chraobh/The tree,* for a non-Gaelic speaker, that there has been linguistic change. The congruence between the letters of the ancient Ogam alphabet and the names of the trees is not in every case evident in Modern Scots Gaelic. As an example, the name for the ash in the old alphabet was *nuin;* in modern Gaelic, *uinnseann* replaces it. Language is shown to be subject to change, not a fixed signifier of belonging. Second, through the obvious biodiversity of the trees, claim is made to an idiom of enormous contemporary association in the post-Rio era, one of the essential pillars for any definition of sustainability and to which there is widespread subscription.

The North Sutherland Community Forest Trust

Borgie Forest, comprising about 3000 hectares in total, is part of the 12 000 hectare Naver Forest, located in the parishes of Tung and Farr (Reforesting Scotland, 2001). Cleared in the 19th century by the first Duke of Sutherland and then 'gifted' by the fifth Duke to the Scottish Board of Agriculture under the terms of the Land Resettlement Act, allegedly to assuage land hunger following the 1914–1918 war (Leneman, 1987), the land on which Borgie Forest stands has been

managed by the Forestry Commission since the 1920s. Local interest in owning and managing Borgie Forest is linked to this history and to the steady loss in local forestry jobs from a peak of 31 in the mid-1960s to a present low of 6, largely the result of restructuring of the industry under the Thatcher and Major administrations (Reforesting Scotland, 2001). The benefits of the industry in terms of employment go to those outwith North Sutherland. A survey of NSCFT membership and a local community survey in 2000 demonstrated overwhelming community interest not just in the management but also the ownership of the Forest (Reforesting Scotland, 2001).

The current initiative to seek community control of the Forest may be traced to a meeting of the IAAO National Steering Group in North Sutherland in July 1999 at which Alastair Morrison, Minister for the Highlands and Islands, expressed his support. After a workshop on the subject in Strathy in August, a steering group with members drawn from each of the 11 communities concerned, headed by Sandy Murray, set up an interim organisation, which was then followed by the establishment of the NSCFT after extensive public consultation. The NSCFT was formally constituted as a Company Limited by Guarantee in May 2000. A year later, the first Annual General Meeting was held and the slate of directors, chaired by Sandy Murray, was re-elected. At present, the NSCFT is pursuing a partnership agreement with Forest Enterprise to manage the Forest and is exploring the option of purchase. Further initiatives under way include a chainsaw training course for young people and detailed plans for the generation of further jobs and amenities, including those based on a more biologically diverse forest (NSCFT, 2001).

At present, membership stands at close to 330 (NSCFT, 2001), approximately 20 per cent of the eligible population in the area. Membership is broadly based across North Sutherland and includes young adults and more senior residents, women and men, 'incomers' and 'locals'. A similar spirit of inclusiveness is found among the directors: 11 represent their respective local communities, one having additional responsibility for the interests of the disabled; two are 'expert, subject-matter advisors'; one represents the interests of the owner of the Borgie River; and the final representative is from Forest Enterprise (Reforesting Scotland, 2001).

During the earlier period of its formation, the group liased with other community organisations, such as the Laggan Forest Trust and Culag Community Woodland Trust. The NSCFT is now a member of the Community Forestry Network. In June 2000, three of the directors participated in a seminar on land reform on Eigg, an island at the centre of a highly publicised and controversial community land buy-out a few years ago. On this occasion, the Community Land Action Group was established in order, inter alia, to lobby the Scottish Executive during the final consultation of the proposed legislation for land reform. The NSCFT is also currently involved in the establishment of the Community Land Action Network whose aim is to support groups involved in land management (NSCFT, 2001).

Conclusions

The NSCFT links a sustainable future to ownership of the forests of North Sutherland, of which Borgie Forest is one. The reappropriation of land, based on collective principles of ownership, is seen as central to reversing current trends of outmigration and limited job opportunities, of resisting processes of globalisation in which these problems are enmeshed, and in revisioning a future where cultural recovery is locally grounded. In this broader sense, the Trust is linked to other

collective claims to land in crofting areas of Scotland. These claims draw from the deeply resilient knowledge of an individual's inalienable right to the land, through the notion of *duthchas*, for the purposes of gaining a livelihood.

The Millennium Forest at Borgie symbolises this process of cultural recovery and a reimagining of the future. Through the stones and trees, historically resonant images of the close association between people and the land and between people and nature are rewoven in ways that suggest 'new inclusive senses of location' (Nash, 1999), of belonging to place. As indicated, this has been achieved both through the practices employed in creating the Forest and through the metaphors of stones and trees. Both metaphors may have historical depth, but they do not belong to an unchanging subject group. The pathway through the Forest connects two disparate and discontinuous historical elements. These are a mythologised and romanticised Pictish past, of which the trees of the ancient alphabet are iconic, and the far more recent expropriation of the land, of which process the stones are emblematic. Any tendency towards the construction of an essentialised identity is undercut by portraying the past as complex and multiple, and language as constantly in the process of undergoing change. Identity is shown to be always in the process of becoming.

This reimagining of the future, through the symbols of the trees and stones, must be seen in the context of a reimagining of Scotland as legislation for land reform is introduced, biodiversity and the environment are assuming greater political significance and as social justice is claimed by the Executive as the principle on which an inclusive society is to be built. To draw on Warren Magnusson's (1996) discussion of new political spaces at the intersection of localities and social movements, a locally specific event, the Millennium Forest, is connected, through the NSCFT, to larger scale political struggles of the imagination.

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6 Forestry, community and land in the South Wales Valleys

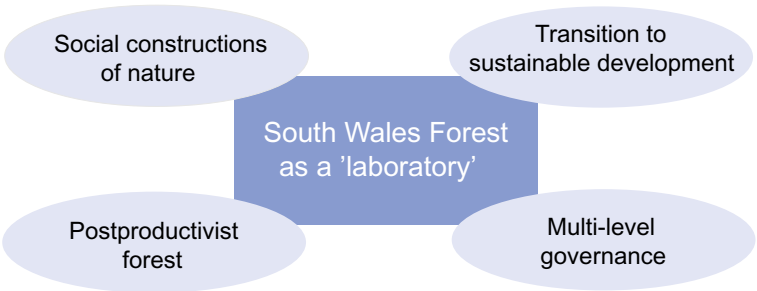
Kevin Bishop, Lawrence Kitchen, Terry Marsden and **Paul Milbourne**

Introduction

Forestry, Community and Land in the South Wales Valleys is a three-year research-based partnership between Cardiff University and the Forestry Commission. The context for the research is illustrated in Figure 6.1. The vector labelled 'social constructions of nature' is concerned with the ways in which individuals and groups in selected localities within the South Wales Valleys forest construct and interact with forestry. These include connections between forests and other forms of local nature, physical interactions with local forested spaces, involvement in the management of local forests, existence of forest-based identities, media representations of local forests and linkages between forest nature and local society (including social exclusion). This was the focus for the first phase of the research programme and is the subject of this chapter. The aim was to study the social construction of community life and its relationship with the surrounding forests. As such, the research contributes to the growing debate about how individuals and communities interpret nature (Demeritt, 1996; McManus, 1999; Macnaghten and Urry, 1998; Irwin, 2001) by developing an approach that is locality based rather than abstract.

While relevant to the first phase of the research, the other three vectors in Figure 6.1 that provide the context for the research, are the focus for phase two of the research programme. In recent years forestry policy within the UK has witnessed a paradigm shift to postproductivism – a reduced emphasis on timber production relative to other social and environmental objectives (Lowe *et al.*, 1993; Mather, 2001). As outlined below, the South Wales forest was planted according to a productivist ethos and is now being re-examined to see how it can be managed to meet post-productivist objectives. Part of this switch to postproductivism is concerned with the general transition to sustainable development (see O'Riordan, 2001, for example) which in Wales is given a legal mandate by Section 121 of the Government of Wales Act 1998. This, again, is demanding a reappraisal of the role of forestry and forestry practices. Phase two of the research will be exploring new roles for the South Wales forest.

Figure 6.1 **Theoretical context for the research**

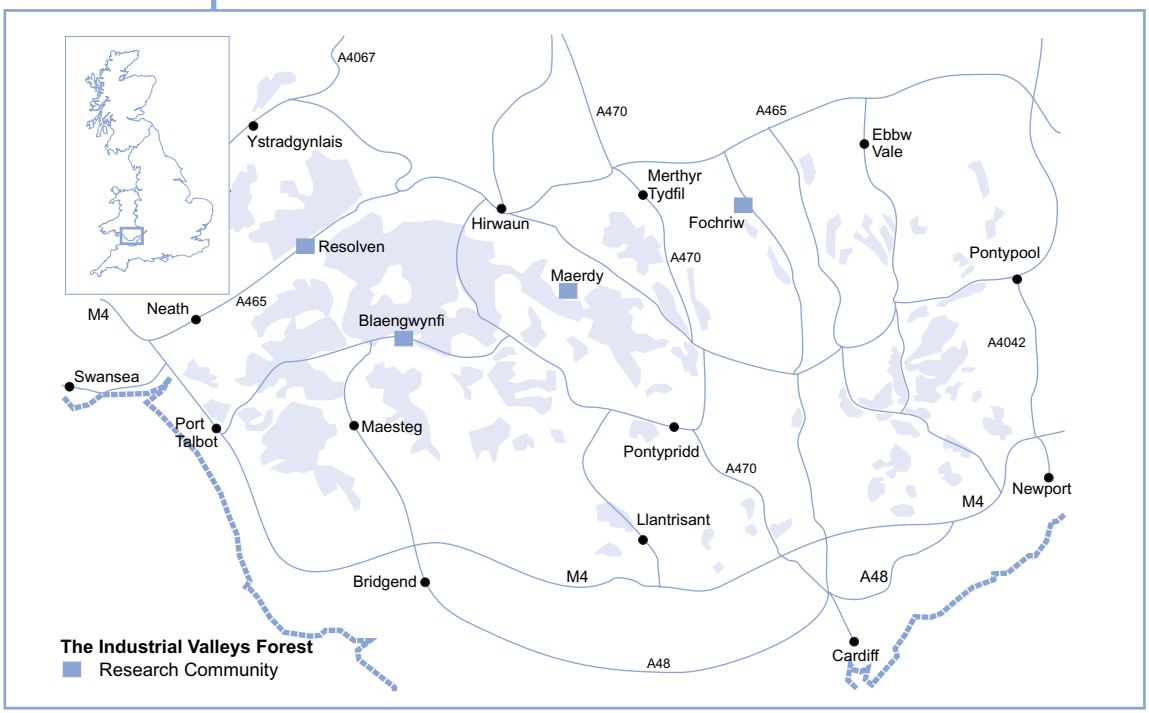


The programme of devolution and constitutional change implemented by the Labour Government elected in 1997 has introduced a new framework of multilevel governance within the UK which the Forestry Commission is having to address. For example, the Forestry Commission and Forest Enterprise, within Wales, now report to the National Assembly for Wales. Phase two of the research will be examining the extent to which this is leading to new policy networks and the development of a spatially differentiated forestry policy within Great Britain.

The South Wales forest

The South Wales forest (Figure 6.2) provides the spatial context for the research and a means of integrating the four contextual vectors illustrated in Figure 6.1. The South Wales forest is defined as the industrial valleys management zone within the Coed y Cymoedd Forest District. It comprises over 27 000 hectares of forested land which constitute 23% of the total Forestry Commission estate in Wales. The forest is not a solid block of trees. Rather it consists of different areas of trees interspersed with small settlements, open country, farmland, derelict land, coal tips, reclaimed mining land, opencast mine workings and mountain areas. The wooded parts are most extensive in the western parts of the forest area (Figure 6.2).

Figure 6.2 South Wales forest and case study research communities



While planting started in the 1920s, it remains a relatively 'young' forest, with only half the trees planted more than 30 years ago. It contains a large number of extensive plantations, many of which are greater than 2000 hectares in area. Around four-fifths of the trees in the forest are coniferous. The forest is managed by Forest Enterprise (an agency of the Forestry Commission) which employs 82 people in its offices at Resolven. A further 100 people are employed directly in forestry as contractors, while others are employed in so-called 'downstream' forestry activities such as local sawmills, pulpmills and builders' merchants. In the financial year 1999/2000, 177 000 m^3 of

timber were harvested from the forest, with just over half of this timber harvested by Forest Enterprise using contract labour. However, what makes the South Wales forest unique is its spatial setting and, in particular, the juxtaposition of 'productivist forests' with postindustrial communities. An estimated 1.8 million people live within the South Wales forest (70% of the total population of Wales). These communities are, as stated, ex-industrial, having once been dominated by coal mining and associated industries, but also rural and remote, being visually dominated by large-scale productivist forests and characterised by high levels of socio-economic deprivation. (We use the term 'productivist' to describe a commitment towards timber production and by 'postproductivism' we mean a reduced emphasis on timber production relative to other social and environmental objectives.)

When the Forestry Commission was established in 1919 there were no state forests in Wales. This situation soon changed as much of the early acquisition of land and tree planting involved Wales. With a remit to create a strategic reserve of timber for times of war or national emergency, the Commission worked within an extremely productivist framework, armed with wide-ranging powers. Not only was it able to compulsorily purchase land, it gave little consideration to the social effects of its operations. As Ryle (1969), a former deputy director-general of the Forestry Commission, states:

> In their very first year, the Commissioners decided for their own discipline to adhere to a list of six guiding principles, the last of which was, 'Generally the elimination of all activities, however attractive,' which do not conduce directly or in the long run to an increase of timber-production.

In South Wales, as in other parts of Britain, the Commission set about acquiring large tracts of land in order to create vast industrial plantations of coniferous trees. As Linnard (2000) comments, this early forestry involved 'the large-scale planting of pure blocks of conifers, with intensive boundary lines and straight rides and roadways, coupled with wholesale coniferization of low-grade broadleafed semi-natural woodland'. According to Linnard (2000), the Forestry Commission did not experience any difficulty in acquiring land. It did not have to resort to the use of compulsory purchase powers; instead it mainly purchased farms, which would otherwise have been difficult to sell, from anxious vendors (Linnard, 2000). Nevertheless our own research has illustrated that the Commission was purchasing land from large estate owners with many tenant farmers effectively cleared from these estates. According to one of the Forest Enterprise staff interviewed:

> The land was acquired mainly from the large estates…These estates had tenant farmers on their land. The estate owners wanted to sell what was perceived as poor land. Farmers were offered the choice to buy the land, but either did not want to or could not afford to… . (Forest Enterprise employee)

A similar picture emerges from the programme of local research (see below). For example, one respondent reported:

> It [her husband's grandparents' farm] was owned by Margam Estate. They were the last people to live in it. So what the Forestry Commission did, they bought all the land from Margam Estate…So eventually you couldn't farm, you know, you had isolated fields. And when Gary's [her husband] grandmother wanted to pay to have a road brought up to the farm, they said no, the lease was up. So they bulldozed the whole farm. I think it had been up since the 1700s. (Group Discussion)

The South Wales forest can be seen as an 'imposed' environment, one which was created and managed with little consultation. The only involvement of local communities was in the form of direct employment or the early 'Forestry Camps' where ex-miners were 'reconditioned'. The productivist justification for the creation of the South Wales forest is clearly set out in this quote from a Forestry Commission pamphlet on the history of part of the South Wales forest:

> So at the present day the local mines are almost entirely dependent on overseas forests for pitwood…But there is no reason why a considerable proportion of this essential demand should not be met from the hillsides of Wales…Nor need the workers in the Valleys look out forever on dismal grey pit dumps which could carry green trees, producing the timber so sorely needed for house building and industry, and at the same time providing healthy employment for local men. (Forestry Commission, 1949)

Research methods

The methodology utilised in phase one of the research programme was designed to investigate the social and institutional context of forestry at two spatial scales: one focusing on the South Wales forest, the other on four case study communities situated within the forest. The forest-wide research involved:

- Archival research on the history of the South Wales forest aimed at determining how land for the forest was acquired and from whom, the format of planting and degree of consultation.
- A review of key policy documents to establish the local authority policy context for forestry, including policies on new planting, management and use of existing forests, access, consultation with the Forestry Commission/Forest Enterprise.
- Interviews with Forest Enterprise staff looking at the institutional context for forestry, the role of Forest Enterprise staff in developing and managing forested areas in the Valleys and the extent and nature of interactions between local communities and the forest in the South Wales area (from the perspective of Forest Enterprise staff).
- Content analysis of newspaper coverage of local forestry/forest issues to determine how such issues are represented in local media and the way in which the Forestry Commission/Forest Enterprise present themselves.

The local research was focused on four villages/small towns situated in different parts of the South Wales forest. We used a range of criteria to select the case study communities from a long list of potential case studies, including: proximity to the forest (we wanted communities that were adjacent to forested areas); indicators of social disadvantage (we wanted communities that were representative of the wider socio-economic context of South Wales); presence of community groups (these were important as 'entry points' into the community); and spatial coverage of the South Wales forest (we wanted a spatial distribution of the case studies across South Wales and across different unitary authorities). The four communities that we selected for the localised research were: Blaengwynfi, Fochriw, Maerdy and Resolven (Figure 6.2). They are all ex-industrial in the sense that they were once dominated by coal mining and associated industries, but also remote and visually dominated by large-scale industrial forestry (see Figures 6.3 and 6.4, page 80) and characterised by high levels of socio-economic deprivation (Table 6.1).

Table 6.1 | **Socio-economic characteristics of the case study communities (source: 1991 Census data)**

	Population	Households	% Unemployed	% Households lacking bath/shower /WC	% Households with no car	% People with long–term illness	% Accom owned	% Accom rented
Maerdy	4 169	1 584	24.4	3.8	54.7	29.0	57.3	42.7
Darran Valley (Fochriw + Deri)	2 338	1 005	16.6	1.2	43.3	21.9	63.7	36.3
Resolven	3 372	1 330	8.7	3.0	38.6	18.9	79.1	20.9
Gwynfi	1 741	644	19.6	2.0	47.8	26.4	67.4	32.6
Study areas combined	11 620	4 563	17.0	2.7	46.5	24.1	66.5	33.5
Industrial valleys	721 746	279 144	12.5	1.9	38.4	20.2	70.2	29.8
Wales	2 835 073	1 105 829	10.1	1.1	32.4	16.2	70.8	29.2

Within these four case study communities we have utilised the following methodologies to explore our research aims:

- Focused discussions with local community groups. We approached existing community groups as previous research in the South Wales valleys had demonstrated the practical difficulties of topic specific focus groups.
- In-depth interviews with local residents, which included 'in-forest' interviews, use of photographic and pictorial representations of their local environment.
- Ethnographic research in the study communities. This included the keeping of a field diary of notes about events and conversations which the researcher took part in or observed while working in the study communities.

Social constructions of the South Wales forest

An important practical finding that emerged from the study was the difficulty of researching nature and forest in the four study areas. Within the group discussions and individual interviews, residents were much more willing to talk about the built environment and associated socio-economic issues and problems than their local countryside and forests. Discussion of 'nature' required detailed and careful probing on the part of the research team. While the forest dominates the four study communities visually, it did not feature prominently within the group discussions.

The South Wales forest fulfils a multitude of roles and is ascribed a variety of values, some of which are contradictory. There is no 'singular' construction of the forest but a range of contested constructions seemingly dependent upon wider social factors and institutional factors. Nevertheless, these multiple values can be positioned within three main constructions of the Valleys forest.

The forest as an exclusionary space

The four study communities, and communities in the Valleys forest area more generally, are characterised by above average levels of social exclusion as revealed through official figures (Table 6.1) and our own qualitative research. The loss of employment through primary industries (particularly those based around coal mining) has not been replaced by new employment opportunities in these localities. Furthermore, the study area communities are remote from the economic development that has taken place along the M4 corridor within south-east Wales. Respondents described how key facilities and services in the four study communities had been gradually withdrawn. In many respects these communities have lost their raison d'êtré – they were developed around the mining industry and no longer have an economic core. Consequently, the study communities can be described as excluded in relation to economic factors, the provision of services and physical isolation. The following quotes from Forest Enterprise personnel and people within the study communities highlights the perception of exclusion:

> Oh I think it is so much more difficult to establish forestry in the Welsh valleys than it is anywhere else. I know places where I can't even get out of my car and leave my car unless I leave somebody near to it you know, cos it'll get burnt. Yeah that's it, it's a war zone really. (Forest Enterprise Employee)

> Fochriw is a land of its own. It is the land that time forgot really. Be fair. What have we got here? A pub, a club and two shops. Very rarely got street lights on. (Fochriw Parents Group)

There are important differences between 'outsider' and 'insider' constructions of the study communities. The localised research in the case study areas clearly demonstrated a strong sense of collective identity, linked to their Valleys location and historical mining cultures. There is a feeling of collective strength in the face of economic adversity. It is also the case that these communities still retain a great deal of social cohesion, particularly in relation to remaining community infrastructure. This social cohesion is formed around community group activities and cross-community cohesion does not always exist. The following quotes illustrate this sense of cohesion but also hint at the tensions that exist between different sectors of the community:

> When I go down to Port Talbot…the smell will greet you and you say thank God for Blaengwynfi. (Blaengwynfi Leisure Development Committee Group).

> Very close knit community, not as close as it used to be because of the movement and the intake of people in and out of the council houses. Fochriw was Fochriw born and bred until they built the sites. (Fochriw Darran Valley Community Council)

> They had trouble in Blaengwynfi a couple of years ago. There were vigilantes out because the police weren't doing enough. (Field diary)

> There was a gang of boys in their late teens and early twenties causing trouble. Smashing cars and the like. (Field diary)

> What happened – did they grow out of it? (Researcher)

> Let's say they were made to see the light. The mother of one of the troublemakers told the police that the citizens group were armed and accused us of bombarding her house. We found ourselves answering to the police rather than the people causing the trouble. You know what these lawbreakers are like; they know the law better than we do. (Field diary)

Neglect and withdrawal of key services

As noted, an important component of social exclusion described by local residents concerned the withdrawal of key services from their areas. Many respondents highlighted the withdrawal of public or state supported services and facilities. It was felt that the unitary authorities neglect these areas. This was illustrated by an interviewee in Blaengwynfi who reported that one council official was heard to state 'Ill be off down the valley – back to civilisation' on leaving a meeting in the village. The Forestry Commission (including Forest Enterprise) was seen within this 'gaze', as a state organisation that had neglected the area:

> I didn't think there was much interest around here with the forestry. Because the Forestry Commission they seem to have forgotten about this place and the forestry itself. (Blaengwynfi Football Club)

Not only have the number of local jobs related to forestry declined but, more importantly, many people commented that they rarely saw Forestry Commission personnel or vehicles in and around their communities. Thus, contrary to the views of many of the Forest Enterprise staff interviewed, there was no widespread antipathy towards the Forestry Commission but a strong desire to see a greater 'on-the-ground presence'. This related to concerns about illegal use of the forest (see below).

Industrial and unwelcoming impressions

When asked directly to discuss the local forest, respondents tended to view them in relation to their productivist characteristics. The industrial nature of the plantations, in terms of their scales, design and monoculture, presented the impression among residents that this was a forest for national financial profit rather than local community benefits. Linked to this was the view that these 'wood factories' are dark, unwelcoming places largely bereft of wildlife.

> I don't like the idea of the forest. It's a blot on the landscape. I like woods but not the forest, you can't walk much. It's just a wood factory. (Resident of Maerdy)

> Gloomy. All those pine trees. Because everything is dead underneath. Yes, everything is dead on the ground. It is all poisoned you know. The pine trees are leaching all the goodness. (Resident of Maerdy)

The Valleys forest is considered by some as having been constructed as a space for deviancy by FE staff and members of the case study communities. It is viewed as a location for unlawful and anti-social behaviour with the trees providing a screen of secrecy. Such activities range from the dumping of rubbish or fly-tipping to a suspected murder reported in the local papers, where the police were looking for a body in the forest. Many respondents spoke of the forest as a space for joy-riding, dumping and stripping stolen cars, drug taking and drug dealing:

> I think that some people around here, people who are pinching cars, seem to think it's a dumping ground for burnt out cars. You walk in the forest and all you see is burnt out cars. My son won't go in there because he is a bit scared of the forest because it's all dark. We've been through the forest and we've walked through with the dogs and all we've seen inside the forest was burnt out cars everywhere. I don't know if you've been down there or not but if you go deep in the forest you see burnt out cars. (Resident of Fochriw)

> I've been chased by a Forestry Commission Land Rover through the forest. It was great! (Blaengwynfi Field Diary)

For some, this activity was leading to exclusion:

> We would be afraid to leave our children to go in the Forest. There have been loads of drug needles found up there for a start. And there have been drugs sold up there. (Maerdy Mother and Toddler Group)

Exclusion and confused space

The exclusionary nature of the forest also emerges from the review of the local policy context and media constructions of local forest issues. Much of the Valleys forest is viewed in policy terms as a 'white space', from which development and the 'tentacles' of the statutory town and country planning system are excluded. In terms of the media review, it is apparent that the Valleys forest rarely features as a 'news issue' except in cases where the Forestry Commission has issued a press release to publicise a particular event/initiative or when the press report on illegal activities within the forest. With the latter the forest is but a backdrop to the activity and not the focus of the article.

The forest can also be considered as a 'confused space'. Most of the local people who participated in the research were confused about the ownership and management of their local forests as illustrated by the following extract from an interview:

> Well at one time it was the government, but I don't think it is now. And it's a very secretive thing but there's been a lot of it sold off. A lot of parts of the forestry as I understand, and I don't know for certain, but a lot of it I think has been sold off. I know a few years ago they were talking about sales of plots of land within the forestry. And I know since then it does seem funny that they've changed their name from the Forestry Commission, which of course smacks of government, to er, Enterprise. I thought well, yes, it's become private this. (Resident of Resolven).

Local people were also unsure about their rights of access concerning the local forest:

> Well it's a no go place. Yes, we're not supposed to go there are we? (Resident of Fochriw)
> We have no rights I know that. There are no public walkways. (Resident of Maerdy)

The forest as an inclusionary space

Paradoxically the forest is also a space for inclusion as well as exclusion. The focus group discussions and one-to-one interviews revealed that a majority of local people place a great deal of value on the role that the forest plays in place identity. Some described the forest as the defining feature of their localities:

> When I think of home this is what I think of. I don't think of home and house but the forestry around it. (Resident of Resolven)

> The only pretty landscape we've got. (Fochriw Parents Group)

> I think that because the trees are so close it makes the community a bit special. It does really. It makes it more like a community. (Gwynfi Mother and Toddlers Group)

> It is what closes the village in and makes it more of a community. (Resolven Mothers and Toddlers Group)

> You are not living in Wales if you haven't got the forest and mountains there. (Resident of Maerdy)

In many respects the sylvan setting was a subconscious value and not something that respondents immediately commented upon when describing their local community/environment. The following quote is a good indication of this:

> We don't appreciate it to be honest. If you come from away they say oh it's a lovely place this, and you think well it's home. But you just don't appreciate what's around here. (Blaengwynfi Football Club)

People in all of the study communities reported high levels of individual and collective use of their local forests, and even those who criticised the forests still made regular use of them! For the majority of users the forest was a place to escape to, offering solitude and tranquillity away from the stress and strains of life in their community. While describing it as planted, dark, alien and gloomy, many also considered the forest as a natural space beyond their immediate built and social environments. The following quotes illustrate the value of the forest as a leisure space:

> It's peaceful, breezy, fresh. You can scream at the top of your voice if you want to, take your shoes off and jump in the stream you can. (Resident of Blaengwynfi)

> Peaceful. There's an adrenaline rush because you never know what's under your foot and you could be down the side of a mountain. I just love it. (Resident of Blaengwynfi)

The forest was also a 'connecting space' with several respondents stating that they used forest tracks and roads as 'commuting routes':

> I go down to Pontypridd a lot. If you go down on the bus or if I get a lift down to Pontypridd, we walk back. That is about seven or eight miles. Go through the forestry and you don't have to touch the roads. (Resident of Maerdy)

> On my motorbike I can get from Blaengwynfi to the Bwlch and on to Rhigos in 5 to 8 minutes. It takes 30 minutes by road. (Field Diary)

The forest as differentiated and contested space

It is clear from the research in the four study communities that the forest is characterised by a great deal of differentiation in social and spatial terms. The values ascribed to it are often paradoxical: it can be a source of local pride and a key part of genius loci but at the same time a space from which people are excluded and where anti-social activities take place; it can be described by the same person as both a wood factory and a source of natural beauty. It is also the case that the variety of different interactions between people and the local forests led to a series of tensions and conflicts. Those using the forests as a space for walking often complained about people riding motorbikes through the forest; older respondents reported tensions with younger members of the community; and managers mentioned conflicts resulting from deviant uses of the forest (e.g. arson). The following quote illustrates the contested nature of the forest space:

> Sometimes it [the forest] can feel very remote and occasionally it can feel quite threatening. On a number of occasions I have come round corners and there are people with shot guns and dogs and staff and on two occasions I have come across people stripping cars, stolen cars. It can be a little unnerving from that point of view. (Resident of Fochriw)

Conclusion

The South Wales forest fulfils a multitude of roles and is ascribed a variety of values, some of which are contradictory. Despite the spatial significance of the forest and its proximity to the communities studied, it was often difficult to get respondents to talk about it in detail. Their perceptions of the forest and the values ascribed to it are linked directly to broader aspects of community construction. Residents, seemingly in contrast to other rural and forest-based studies in other parts of the UK, felt increasingly excluded from the largely state-led processes which are affecting them. They felt that public authorities had forgotten about them and while there was no widespread animosity towards the Forestry Commission for the way in which it had planted the forest there was a feeling of being excluded from the management of these areas. This feeling of 'insider' exclusion is reinforced by 'outsider' constructions of these places (including those of some Forest Enterprise staff) as criminalised and socially irredeemable.

The values the communities ascribed to the forest are often subconscious ones (revealed only when people start to think about their locality from the outside), with the forest providing a sylvan backdrop for life within the community. In many respects the communities construct a sense of place that is 'inward' looking, in that comment and discussion always tended to focus on the built environment, the community fabric and historic connections with mining. The forest and the natural topography may be acting as a form of 'mirror', reflecting attention back to the built environment.

The research undertaken in the South Wales Valleys is to be extended to examine community attitudes and interactions with local forests in other parts of the UK. This new study will be focused on communities in the East Midlands, north-east and central Scotland. The aim is to use the same methodology to derive results that will facilitate comparison between the different case study areas.

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Questions and answers

Jacquie Burgess presentation

Q **Nigel Lowthrop**
You were talking about values including aesthetic values but I think we might be in danger of losing sight of timber products and woodland as an important productive resource. We need to get across the value of products that come from the wood that is sold locally.

A **Jacquie Burgess**
People appreciate woodlands that are being worked. People actually working in woods give others feelings of safety, which is particularly important. Reconnecting people's understanding of, for example, where furniture comes from is also vital, and the challenge is trying to make this happen.

Q **Steve Evison**
Have attitudes about the links between risk and resource changed?

A **Jacquie Burgess**
There is a change in attitude in people's experience in urban and peri-urban woodlands. Studies have shown that urban adults and children feel unsafe in woodlands. People have become separated from greenspace and often prevent their children going into woodlands. There are also fundamental issues to do with gender and ethnicity that need more research in regard to these experiences and safety issues.

Robin Grove-White presentation

Q **Alan Stevenson**
One of the key drivers is partnership at a local level often brought about by mavericks within the Forestry Commission. Other staff can often be inward looking and sometimes have a narrow skills base. We do have important projects such as the New Forest LIFE project, the Welsh Heritage project and Sunart Oakwoods Project in Scotland. These have brought new opportunities and new resources. There are opportunities here for research to assess these projects.

A **Robin Grove-White**
Partnerships are central, many partners are looking to the Forestry Commission to be a leader in its interactions with the public.

Comment **Simon Hewitt**
An area you have not really covered is devolution, which has greatly affected forestry, and it opens up new opportunities. We have a large estate and should make use of it. There are many things we can deliver at little extra cost.

Sue Hunter presentation

Q **Dan van der Horst**
Did you look at types of woodlands and how this affected people's perceptions and the meanings they associate with woodlands?

A **Sue Hunter**
It depended on the geographical regions I studied and what was already there. In areas of little woodland, people still identified with trees.

Comment **Marcus Sangster**
This is the biggest focus group work that has been undertaken in recent years in Wales.

Q **Bill Burch**
Why did you use focus groups when there are difficulties with representation? Was there bias?

A **Sue Hunter**
There are two points I would like to mention:

- I sent out several hundred letters getting names from the electoral role in order to get a random selection of respondents.
- The focus group work enabled me to get a deeper look at people's perceptions than would be the case in a questionnaire.

Q **Rhys Evans**
Did you ask questions on gender or separate out the groups?

A **Sue Hunter**
I had a female group and male group in each region that I studied and there were differences between these groups on why the natural environment was important to them.

Q **Paul Selman**
Did anyone say: I value trees because they bring money into the area?

A **Sue Hunter**
No.

Fiona Mackenzie presentation

Comment **Gareth Wardell**
As devolution and European funding rely on bottom-up approaches this leads to a new type of tension: the extent to which local people should have the trees and land given back to them by the government. I was in Scotland in an area where the crofters' perception of Forest Enterprise was that they were contractors who came in from outside the area, cut the crofters' trees down and took them away, and the money that was made did not go back to the local community. Does one give away the land as the taxpayers have paid for it? Could this be a way of redistributing wealth? Crofters who are poor often see Forest Enterprise as exploiting their heritage.

Comment **Marcus Sangster**
This raises the question of whether the crofters are poor; they are heavily subsidised.

A **Fiona Mackenzie**
Not all crofters are poor. The majority are suffering with the collapse of sheep prices and there is talk of putting the Common Agricultural Policy headage subsidy on to an area basis. These crofting areas are a public good and should be supported because of that in terms of biodiversity and cultural heritage.

Kevin Bishop presentation

Q **Gill Clark**
Are you doing a broader historical study in your South Wales Valleys research?

A **Paul Milbourne**
We are trying to look at cultural significance in a historical context. There are important connections between national landscapes and national identity. We are building up a picture of the development of forestry and the connection between mining and forestry but we are mainly focusing on a post 1960s view. We are also looking at the links between communities and woods which appear to be different in South Wales compared to people's views in North Wales.

Q **Rhys Evans**
There is a strong identity associated with the men who worked in the mines in this area. Is there a similar masculine identity associated with men working in the forests?

A **Kevin Bishop**
The identity is nowhere near the same as it is for mining. The historical legacy in this area is one of mining and is on a different scale in terms of cultural links compared to forestry. Even though trees cover a much larger area of land, the men identify with mining rather than with forestry.

Q **Innes Maclagan**
In your study you carried out focus groups using existing community groups. Was this self-selecting?

A **Kevin Bishop**
We are doing our best to get representative views of the communities we contacted. It is very difficult to involve people when you're not using existing groups, and difficult to get people to turn up to focus group discussions. Lawrence Kitchen, one of the research team, did go out and network with people to try to extend the range of views obtained from the focus groups.

A **Lawrence Kitchen**
The younger age groups in particular are very hard to get hold of. We networked to get a wider coverage of people than the focus groups provided.

THEME TWO

Monitoring and modelling approaches to forest management and sustainability

7 Monitoring progress towards sustainability in community forestry

Paul Selman

Introduction

Sustainability, used here as a shorthand for sustainable development, has become a widely adopted policy objective, yet one which has consistently defied clear definition. Each subject area has had to redefine it to fit its own circumstances, striking a delicate balance between the pressures for conservation and development. Forestry policy, understandably, has adopted the language of sustainable development, especially since the Earth Summit accord on 'Forest Principles' in 1992, and the subsequent pan-European principles and national strategies. To many foresters, the need for such a policy shift must have been puzzling as their industry is characterised by exceptionally long investment horizons and inter-generational benefits, and it is founded on principles of sustained yield. This chapter considers some of the meanings associated with notions of sustainable forestry, especially within a community context in developed countries. In particular, it suggests ways in which these notions can be operationalised, in order that progress towards a more 'sustainable' condition can be measured and monitored.

One of the most striking features of recent UK forestry policy has been the emphasis on community involvement, and the creation of forests close to towns and cities where multiple benefits can be enjoyed by large numbers of people. Indeed, there is a prevalent assumption that simply giving forests a community orientation – encouraging widespread participation in planning and management, and optimising non-timber benefits – will axiomatically deliver sustainability objectives. Consequently, this chapter approaches the issue of sustainability from a community forestry perspective, yet, in doing so, inevitably touches upon a range of issues which are also applicable to traditional commercial plantations. Although written against a background of contract and other research, it is intended as a broader speculation rather than a proposed 'cookbook' for sustainable community forestry.

Community forests and community forestry

While most of this study takes as its context the Community Forest initiative in the UK, it is worth noting that this is a sub-set of the wider practice of community forestry. The term more often relates to practice in the developing world where, either through tradition or policy instrument, forestry is based on local tenure, knowledge and management systems. Some of the 'sustainable' or 'community' forestry initiatives currently being pioneered in the UK might more accurately be termed 'social forestry' or 'rural development forestry'. In most situations encountered internationally, the legal underpinnings to community forestry are almost invariably deficient, although there is typically some common ground in terms of security (instilling confidence that rights cannot be taken away arbitrarily) and flexibility (allowing legal space to make choices adapted to local situations) (Unasylva, 1999). Nonetheless, despite the growing tendency to pass responsibility for protecting forest resources to local communities, this is rarely accompanied by comprehensive user rights, and the community's entitlements are generally limited to minor or non-wood forest products (Fisher, 1999).

A key feature in most interpretations of community forestry, in practice, is the devolution of some significant degree of power, if not outright ownership. Accordingly, it presumes a high degree of trust in the community's expertise and civicness to manage the resource in a sustainable way. What is more widely practised – and may masquerade as devolution, being more acceptable to governments and the forestry industries – is decentralisation. This can be defined as the

relocation of administrative functions away from a central location, providing the community with a capacity or authority to contribute to decision-making.

This latter option is more akin to the situation in relation to community forests in the UK, where responsibility for plan-making, advisory services and grant-aid is given to dedicated teams, who in turn use a variety of methods to involve local stakeholders and the public in the creation and upkeep of a diverse constellation of woodlands. The range of community-oriented techniques now being employed by the Forestry Commission has been reviewed by Inglis (1999) and includes:

- helping stakeholders become more involved in consultations about future plans regarding state forests in their localities;
- establishing formal partnerships for making local forest management decisions;
- achieving outright change of ownership and control through purchase.

In addition, more effective links between forests and the local socio-economy can be instilled by adding more value through forest product processing and utilisation and enhancing recreation and tourism facilities. Experience suggests, though, that community participation is more readily achieved in relation to conservation and detailed design, rather than economic aspects (Bell and Evans, 1998).

While much of the vocabulary of the international concept of community forestry apparently coincides with contemporary UK practice – such as extensive use of indigenous species, local participation and management and land use integration – these are likely to mean very different things in the social and economic context of the 'developed' countries. Younis (1997), for example, has illustrated the differential extents of tenure and legislative change, while the variable interpretation of community forestry even within the developed world has been discussed by Harrison (1998). Characteristics more typical of western practice include open access, grant-aided concessions in private forests, the production of ecologically sustainable felling plans, and the promotion of rural development (Inglis and Beck, 1996; Slee and Snowdon, 1999). In Germany, where a belief in the value of sustained woodland cover is especially well embedded within the psyche of the population at large, Bralant (1999) reports that residents pay towards a community forest through the tax system (creating a strong sense of ownership), while foresters have a broadly based training reflecting the multiple benefits of woodland.

Whereas community forestry is clearly an integrated, even holistic, concept, this study suggests that it can be represented through, if not reduced to, a set of potentially measurable criteria. The intention is not so much to recommend ways of evaluating performance as to tease out the qualities which might characterise sustainable community forests in the UK. Within this context, there are two distinct and complementary issues to be considered:

- The measurement of progress according to a range of technical criteria.
- The gradual transformation of attitudes towards forests and forestry among professional and lay communities about the relationship between people and the total woodland estate.

Without the latter, it is likely that technical indices, as with so many performance indicators, will merely flatter to deceive.

Attempts to define sustainable forestry

Within the UK there have been a number of attempts to map the dimensions of sustainable forestry, with a view to evaluating and influencing the future direction of policy measures. Thus, most notably, the UK Forestry Standard (Forestry Commission, 1998a) and England Forestry Strategy (Forestry Commission, 1998b) signal a significant shift in the direction of multi-benefit forestry which integrates economic development, ecological conservation and recreation and access. As an illustration of how these policy aspirations might be tracked in practice, Ghag (Chapter 10) has proposed that working definitions of the contribution of town planning decisions to the Community Forest programme can be operationalised through the implicit and explicit sustainability principles of the England Forestry Strategy. This publication contains a number of key statements which can be interpreted in order to detect where and when sustainable community forestry is actually being practised. These statements relate to the seven strands or hallmarks shown in Box 7.1.

Box 7.1 | A preliminary framework for identifying hallmarks of sustainable forestry

Key hallmarks of sustainable forestry	Examples of how hallmarks might be met
Good forestry	Managing woodlands in a prudent and sustainable manner, and assisting environmental protection through the use of best practicable environmental options
Economic growth and development	Providing jobs and stimulating investment in forestry downstream activity in order to contribute to the growth of local economies
Development planning	Providing green settings for new and existing urban areas
Recreation and social growth	Widening public access to and use of forests
Conservation and integrated approach to land use	Incorporating forestry within a holistic approach to land use which helps meet biodiversity, conservation and climate change targets
Partnership	Achieving common goals through collaboration between private, public and voluntary organisations
Capacity building	Contributing to environmental education and social learning in order to build up skills and knowledge of all people in society

Research is in progress to convert these strands into specific measurable actions and policy commitments, which can then be related to individual planning decisions to see whether they are supportive or obstructive of the purposes of a Community Forest.

Another approach to defining sustainability is through the use of indicators, in respect of which the Economics and Statistics Unit of the Forestry Commission has recently published a discussion paper (Forestry Commission, 2001). As with all indicators, these are likely to be influenced by the availability of historic runs of data, in addition to framework policy statements: in this case, the Pan-

European Criteria and the UK Forestry Standard. This draft suite of indicators attempts to reflect sustainability in terms of:

- forest area
- forest production
- forest condition and management
- biological diversity
- soil and water
- air
- people and forests (workforce and communities)
- economy
- heritage and landscape.

This discussion paper – which, it must be acknowledged, represents only the first step – betrays a skew towards the traditional face of the industry and is strongly influenced by resource management considerations. There is little here to distinguish sustainable forestry from any other sort of responsible forestry, unless, of course, we take the view that forestry is itself the quintessence of sustainability. In practice, the indicators are dominated by data on such topics as woodland area, geographic distribution, species composition, ownership, age class distribution, annual increments and workforce safety. Nevertheless, some reflection of the wider contribution of forestry can be inferred from estimates of non-timber products, contribution to renewable energy, wildlife conservation and landscape ecology, recreation facilities, and economic contributions. The publication signals a growing sensitivity to new styles of forestry which relegate timber production and bulk processing objectives, and elevate those related to the community's appreciation of trees and woodlands. It is questionable, though, whether it yet captures the depth and richness of meanings associated with 'community' and 'sustainable'.

Reviewing the forest-related literature on sustainability

A starting point in measuring progress towards sustainable community forestry is to review literature on its multiple facets. However, most of the relevant literature refers to 'urban forestry' rather than 'community forestry', though it could be contended that there is a considerable overlap between the two, as urban and community forests provide the major opportunities for public involvement and both have an emphasis on multiple benefits, with a strong acknowledgement of non-timber outputs. Indeed, this chapter argues that sustainable forestry can only occur within the perspective of the whole forest and woodland estate, not just that productive part of it which is owned or grant-aided by the state. This is essential to capturing the importance of woodland within the national psyche, and promoting an attitude whereby the need to expand and retain tree cover is embedded within our land use decisions. As with all 'sustainability' measures, the benefits of urban/community forestry divide into economic, social and environmental.

Economic benefits

Turning first to economic issues, local forests have been shown to increase property values (Kitchen and Hendon, 1967; More *et al.,* 1983; Cordell *et al.*, 1978), which generally contributes to a sense of well-being and neighbourhood stability. Tyrväinen and Miettinen (2000) estimated that a 1 km increase in the distance to the nearest forested area leads to an average 5.0% decrease in the market price of a dwelling. Dwellings with a view onto forests were on average 4.9% more expensive than dwellings with otherwise similar characteristics. A wide-ranging review of costs and benefits is provided by Randrup *et al.* (2000), who noted that positive factors include microclimatic (e.g. shade, wind reduction) and air quality programmes, increased land values and local tax bases, improved public health, and job and training opportunities. Disadvantages included maintenance

costs and, in some areas, supplementary irrigation, while Bernhardt and Swiecki (1993) noted conflicts between tree cover and urban infrastructure. Overall, though, the balance sheet is positive, and McPherson (1994) estimated a benefit: cost ratio of almost three to one. Employment benefits derive from direct forest labour, supervision, project management and wardening, while further beneficial local economic impacts occur as income from these jobs is spent locally and wood-using industries develop.

Social benefits

Social benefits have been widely attributed to local forests. Ulrich's (1984) well-known study of recuperation rates after surgery found that patients whose windows offered a view of a wooded landscape recovered faster and with less medicine than patients who could only look out on to brick walls, and similar conclusions can be inferred from Ottosson's (2001) first-hand account of recovery from traumatic injury. General health benefits are likely to accrue from the noise reduction and pollution filtering effects of woodland (Harris, 1992).

Neighbourhoods with attractive landscapes foster a sense of community and belonging (Dwyer *et al.,* 1991), and community pride increases when neighbourhood residents participate in woodland-related activities (Miller, 1998); local woodlands also provide places for neighbours to meet, and can facilitate the development of social networks (Sullivan and Kuo, 1996). Bengston *et al.* (1999) undertook a content analysis of some 30 000 on-line news stories about the US national forests, which identified four broad categories of benefit, namely: recreation (the most common), economic commodities, ecology and spiritual-aesthetic qualities. Latterly, this displayed an upward trend in intangible benefits relative to timber-related commodities, suggesting a need to align forest management more closely with changing social values. Hodge (1995) likewise identified the values of forests in helping people maintain contact with nature, providing peace and tranquillity as well as emotional renewal, improving the attractiveness of urban environments, and raising senses of pride and self-worth.

Community participation in landscape regeneration is another hallmark of social spin-off, and some authors suggest that effective community interest in forests can be related to 'awareness-raising', generation of local interest, degree of participation, and the type of responses made by the forestry organisation. Coles and Bussey (1999), reporting on a four-year study of community use of woodlands in a new town, concluded that the key factors were proximity (within about a five-minute walking distance), easy 'visual access', absence of physical or psychological barriers, an area of at least 2.0 ha, preferably an open canopy, and a mixture of species.

Environmental benefits

Numerous environmental benefits exist. Various studies (e.g. Nowak, 1994; Harris, 1992; Lull and Sopper, 1969; McPherson, 1994) point to the trapping of airborne dirt and chemical particles, reduction of air speeds assisting the deposition of heavy airborne particles, run-off regulation, reduction of soil erosion, and provision of wildlife habitat and environmental education opportunities. Randrup *et al.* (2000) and Valentini *et al.* (2000) also refer to carbon sequestration benefits, reduction of demand for heating and air conditioning, and mitigation of wind speeds. Various studies have shown the benefits of local woodlands for a range of wildlife (e.g. Pauleit and Duhme, 2000), although empirical data are limited by the absence of detailed research, and there is a case for using more generalised landscape ecological indices as proxies for species abundance and diversity (e.g. Woodland Trust, 2000; Peterken, 2000).

Table 7.1 **Possible indicators of progress towards sustainable community forestry in the UK (information based on numerous sources cited in the text)**

Potential indicator	Corresponding measure
Overall woodland area, including a range of sizes of woodland/forest patches	Hectares planted (regional and local incidence)
Appropriately managed tree stock	Tree condition
Reinforcement of ecological networks	Landscape ecological indices
Creation of new ecological habitats	Woodland and other habitats created
Contributing to biodiversity action plan objectives for semi-natural woodlands	Protection and contiguous planting of Ancient semi-natural woodland
Physical environmental aspects: air quality, carbon sequestration, water quality, urban drainage	Analysis of planting designs and proximity to sensitive issues; carbon sequestration models
Visual improvement	Landscape assessment of planting designs
Removal of dereliction and reclamation of derelict land	Hectares of damaged land returned to forest cover
Health benefits and personal well-being	Surgery recovery rates and incidence of various illnesses; screening of sources of aural and visual insult
Community pride and belonging	Residents' increased satisfaction with neighbourhood
Recreation and public access	Woodlands opened for linear/general access; paths created/linked; proximity to transport routes
Community involvement in design, planting and management	Range of public participation methods used; evidence of public input to design and management plans
Property values, land values and urban tax base	Perceptions and empirical evidence of house prices
Employment in forests and forest-related businesses	Employment returns
Attraction of inward investment	Relative increases in factory/office relocation and start-ups
Multiplier effects and direct input of forest products into local economy	Surveys of local traders

Relating measures to objectives

This list of multiple benefits confirms the scope for sustainable community forestry even in a late-modern economy such as Britain's but also paints a different picture from community forestry in many other parts of the world, and must thus be framed and measured in its own distinctive terms. A major purpose seems to be a rather anthropocentric goal of directly or indirectly improving the quality of life of citizens, within a range of rural, urban and peri-urban settings. Naturally, no set of indicators is perfect, and they must always reflect a compromise between an ideal set and ease of obtaining data. However, when interpreting the sustainability benefits of community forests, we must have regard to three main constraints.

1. The stated policy objectives of the Community Forest programme.
2. The broader range of benefits and costs identified by researchers as being related to community woodland.
3. More intangible factors which help incubate a sense of value for forests among the wider population.

Policy priorities are summarised in Box 7.2, while Table 7.1 sets out a suite of potential sustainability measures extracted from a review of the literature. In Table 7.2 these are arranged against each other so that policy objectives can be mapped onto qualitative and quantitative criteria. Although a somewhat reductionist and positivistic approach – and thus one which is limited in terms of capturing the cultural dynamic of a transitional concept of sustainability – it nevertheless gives a starting point for mapping the dimensions of what sustainable community forestry means within a late-modern society.

Box 7.2 Policy priorities of England's Community Forests (source: Countryside Agency and Forestry Commission, 2000)

- The creation of a network of small and large woodlands on the urban fringe which brings the greatest benefit to the largest number of people through public access, new landscapes, urban regeneration and town–country integration.
- Creation of larger woodlands, where they can bring enhanced social benefits to help sustain long-term sustainability and environmental diversity and improve market infrastructure.
- Restoration of former industrial land to achieve economic, social and environmental benefits, and enhance landscape, access, wildlife and sustainable economic investment.
- Reversing the fragmentation of ancient woodlands by managing existing woodland and planting new native woodlands.
- Gaining public confidence and support for well-managed woodlands and forests through environmental education, arts and cultural activity, environmental volunteering and wider community involvement.
- Enhancing the economic value of forest resources by working with landowners and mangers to encourage new marketing initiatives and improved management systems.
- Encouraging and facilitating public access to woodlands.
- Greening of major transport corridors.
- Creating a robust and sustainable framework for future investment.

Table 7.2 Policy criteria against which to evaluate progression towards sustainability in Community Forests

	Timber production		Environmental				Environmental/social		
	Overall woodland area + range of sizes	Appropriately managed tree stock	Ecological networks	New ecological habitats	Contribution to BAP-semi-natural habitats	Physical environment: air quality, etc.	Visual improvement	Removal of dereliction	Health benefits and well-being
1	✓		✓	✓	✓		✓	✓	✓
2	✓	✓		✓	✓	✓	✓	✓	✓
3							✓	✓	
4			✓	✓	✓				
5							✓		
6		✓							
7	✓								
8							✓		
9		✓							

	Social			Social/ economic		Economic	
	Community pride and belonging	Recreation and access	Community involvement	Property values, land values and urban tax base	Employment in forests and forest-related business	Attraction of inward investment	Multiplier effects and input of forest products economy
1	✓	✓	✓	✓	✓	✓	
2		✓		✓	✓	✓	
3	✓			✓		✓	
4							
5	✓	✓	✓	✓			
6					✓	✓	✓
7		✓					
8	✓			✓		✓	
9					✓	✓	✓

1. Creation of network of small and large woodlands on the urban fringe
2. Creation of larger woodlands
3. Restoration of former industrial land
4. Reversing fragmentation of ancient woodlands
5. Gaining public confidence and support
6. Enhancing the economic value of forest resources
7. Encouraging and facilitating public access to woodlands
8. Greening of major transport corridors
9. Creating a robust and sustainable framework for future investment

Conclusion

Sustainable community forestry is an inherently desirable pursuit, but a fluid concept. Operationalising its definition not only assists the assessment and monitoring of policy achievement, but also helps us understand more fully its nature within a UK context. In broad terms, it reveals why traditional commercial forestry has not been sufficiently sustainable or community oriented, despite its multiple outputs and sustained yield.

However, indicators are crude and sterile by nature, and can conceal as much as they reveal. In the previous section, it was suggested that there is a range of factors which can incubate social attachment to community forests. These include, pre-eminently: integration with wider land use planning and resource management systems; instilling innate values for woodland among the public and decision-makers; increasing local control over certain woodlands; and moving towards a policy recognition of the total national woodland estate. However much we might try to perform according to a suite of sustainability parameters, therefore, the significant challenge is to instil a deep-seated attachment between communities and the new woodland estate, so that promoting woodland cover becomes second nature to officials, politicians, developers and lay people. Indicators cannot win hearts and minds, but they can be useful for forcing the pace of change in unfamiliar directions.

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8 Modelling stakeholder visions for the Sherwood Natural Area

Jorge Rubiano and **Roy Haines-Young**

Introduction

This chapter presents the results of ongoing research that addresses issues surrounding landscape planning and management in the Sherwood Natural Area (SNA) , where multiple stakeholders are expressing their 'visions' for the future of the landscape from different spatial and time perspectives. The objective is to develop a set of tools for the management of SNA using a 'soft systems' approach to support the decision-making process.

Two general components are included in the approach described here. The first is the human system, which includes a detailed stakeholder enquiry directed towards the identification and representation of users' visions. The second is the information system that includes a GIS database, Bayesian inferential models and an interface for external consultation and valuation.

Tools for landscape management

It has been argued that current methods of environmental planning are inefficient in terms of the way in which they deal with and integrate the multiple services and values that nature provides for society. This is mainly due to the lack of ecological knowledge and limitations of existing decision support tools (Kangas *et al.,* 2000). The need to develop tools that allow us to assess the set of 'possible and alternative futures', and their consequences in terms of the goal of sustainability, is one of the major challenges facing landscape ecology today (Haines-Young and Potschin, 2000; Potschin and Haines-Young, 2000). As a result, methodological research into the integration of various software technologies, knowledge acquisition tools and specific user needs is required (Mikolajuk, 1999; Underwood, 1998).

Characterising the problem

Geographical Information Systems (GIS) are often seen as a key decision support tool for environmental planning (Lein, 1997). The problem that we face in using them is that the construction of these systems is often regarded simply as an exercise in capturing and integrating data, rather than as one of characterising 'our view' of the world. As a result the application of GIS technology has often been criticised as promoting the views of the expert and of excluding key stakeholders from environmental debates and their views of what constitutes 'relevant knowledge' (see for example, Pickels, 1995 and Schuurman, 2000). We suggest that in developing more participatory applications of GIS, we must go beyond simply broadening the approach to include more 'local' forms of knowledge (cf. Harris *et al.*, 1995). We must also develop ways of using these systems to represent the different and sometimes opposing visions that stakeholders might hold about the world, and of dealing with the uncertainties that attach to these visions.

The motivation for this work is therefore our recognition of the need to devise new methods to identify stakeholders and involve them in the planning process (cf. Christensen *et al.*, 1996). New types of information handling tool are needed to characterise stakeholder opinion, and to manage the interactions between stakeholders and institutions involved in the planning process (Szaro, 1998; Yaffee, 1996; Christensen, 1996). As a premise for this work we take for granted that all decisions are made in a climate of uncertainty, where we cannot assume that the relationships between variables are known, and that the integrated interpretation of data is rarely free of bias. In any planning debate there is rarely an optimal solution (cf. Hall, 1999). The essential job of any decision support tool is to enable users to explore the available choice space and consider the trade-offs that might be required in selecting different options for the future (Haines-Young, 2000).

In this research we focus on the SNA as a case study. The goals of the current research are, therefore:

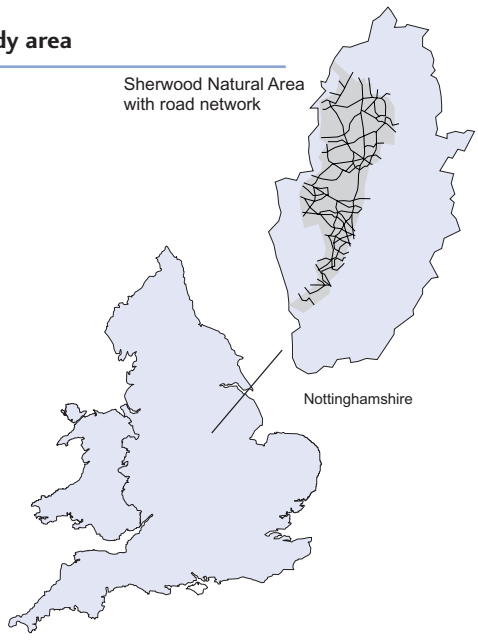
- To develop a method to capture and model the environmental institutional visions of the study area.
- To represent these visions so that their relative environmental impacts might be assessed.

Methodology

Study area

The Sherwood Natural Area (SNA), shown in Figure 8.1, was selected because it is typical of the landscape found in the English Lowlands. Despite the image of the area as a forest that has been promoted by the media, the landscapes are a mosaic that includes farmlands, heathland and settlement together with woodland. The current situation is that the SNA appears to be undergoing a period of accelerated change, which is affecting its biophysical and socio-economic resources. 'Most natural and semi-natural habitats have declined in extent and quality and some species have become extinct from the county' (Nottinghamshire County Council, 1996). The most recent changes in the area result from the closure of mines on the South Nottinghamshire coalfield, the increase in recreational and tourist activities, and urbanisation. Population growth rates in the rural East Midlands are higher than in the region or nationally (Ministry of Agriculture, Fisheries and Food, 2000), resulting in increasing social and economic demands.

Figure 8.1 Study area



In the present context, the study area is of interest because we see within it the convergence of environmental and socio-economic problems including loss of biodiversity, pollution of water, air and land, reduction of farming and expansion of urban zones, and unemployment due to the closure of coal mines and textile industries. It is also of interest because we find that as a result of these problems a number of different initiatives have been developed to overcome the environmental, social and economic problems that are now apparent. The SNA therefore provides an 'arena' in which different stakeholder visions or aspirations can be compared. It is manifestly a 'multifunctional landscape' that can be characterised according to the different values that different groups assign to it (Table 8.1).

Table 8.1 | **Environmental organisations considered in the documentary analysis**

Level	Stake
1. International (Great Britain)	
The Forestry Commission	To expand forest cover
Department of Environment, Transport and the Regions[a]	Environmental legislation
2. National (England)	
Countryside Agency	Rural population
Environment Agency	Water monitoring
English Nature	Biodiversity, heathlands
Country Landowners Association	Farming
3. Regional (East Midlands)	
East Midlands Advisory Group on the Environment	Competitiveness and regeneration
East Midlands Development Agency	Economy and environmental quality
East Midlands Regional Assembly	Economic development
4. Subregional (Nottinghamshire County)	
Nottinghamshire County Council	Conservation of farmland, historic landscape and biodiversity
Greenwood Community Forest Newark and Sherwood District Council	Partnership and community involvement
5. Local (Sherwood Area)	
Sherwood Forest Trust	Restoration of heathland and woodland
English Nature	Semi-natural habitat conservation schemes
Nottinghamshire County Council	Partnership and farming, forestry, tourism and recreation in harmony

[a] Since June 2001: Department for Environment, Food and Rural Affairs.

The importance of ecosystem services is widely recognised, as well as the conditions and processes through which these sustain and fulfil the species they embody, including human life (Haines-Young and Potschin, 2000; Daily, 1997). SNA, like many other areas, is important because of the services it provides to the current groups living there, but it is particularly problematic in the contrasting way in which society seeks to value and manage these services. For instance, some groups consider water as one of the most important resources. Sherwood is located on an important aquifer that supplies the population of Nottingham and surrounding areas with drinking water. However, not all the social groups and individuals think the same; other stakeholders variously emphasise agricultural production, employment or historical issues as the main concern. The case of ancient woodland and the patches of heathland are particularly interesting. The remnants of ancient woodland are important in terms of the biodiversity of insects and birds associated with them, and it has been argued that they should be preserved and protected by further woodland planting. However, heathland is an equally important habitat in the historical landscape, which has in the past been lost to commercial forestry as well as agriculture and development. Questions about the relative balance between woodland and heathland restoration are important ones within the study area, together with others about where such restoration efforts should be targeted.

Tools for decision support

The development of decision support tools for the management of SNA emerged as a proposal from a study by the School of Geography, University of Nottingham and the UK Forestry Commission (Haines-Young,1998). It was argued that a new approach was necessary to overcome the limitations of available spatial decision support systems (SDSS), using ideas from environmental accounting and 'soft systems' methodologies. The 'soft systems' approach is a process for analysing and modelling complex systems that integrate environmental and social issues. Its key characteristic is that it recognises that problem solving is essentially iterative, and that we discover more about a problem as we attempt to solve it (Clayton and Radcliffe, 1996; Checkland, 1991).

Capturing visions

The current research considers as a basic assumption that there is no single vision to which all stakeholders subscribe. Instead, it is considered that there are always contradictory visions and that we need to capture and understand them as part of the research, planning and resolution processes. In order to achieve this goal, several approaches are being evaluated. In a first stage, a *stakeholder analysis* was carried out in order to identify the goals, missions and visions of the different 'actors' in the area. To deal with the large volumes of existing documentation, systematic *text analysis* was undertaken with the help of computer tools. The findings of this first step are currently a matter of discussion with the stakeholders, based on structured interviews. The description of the visions highlights the main stakeholder concerns, the spatial and temporal scale in which they are treated and the conceptual relationships with other topics or elements of their strategies. This information is represented in *acyclic graphs* in order to implement simulation exercises.

Text analysis

Documentation review and text analyses are part of what is called 'qualitative analysis' (Lemke, 2001). Even though these techniques have been used extensively in all kinds of research, they gained importance recently due to the recognition that 'our post-modern culture is dominated by representation and images' (Aitken, 1997). The study of the use of these elements in human communications, both in language and by various non-linguistic means, is called semiotics (Hornby, 1995) and when it refers to the science of interpreting or explaining a text it is called hermeneutics.

Acyclic graphs

An acyclic graph is a representation of the dependencies held among the variables in the phenomenon that is being represented. It is the qualitative part of a belief network and consists of a digraph where each vertex represents a statistical variable that can take one of a finite set of values. The set of arcs of the digraph models the relationships among these variables that can take the form of a direct influential or causal relationship between the linked variables. The direction of the arcs designates the effect or consequence of the cause. Absence of an arc between two vertices means that the corresponding variables do not influence each other directly and, hence, are (conditionally) independent (Van Der Gaag, 1996).

Having in mind the incorporation of these models into a GIS, special attention was given to the spatial elements considered in the documentation. The key points addressed in the text analysis were to identify:

1. The expressed vision of the organisation.
2. The aims, goals and objectives of the organisation.
3. The elements or components of the landscape that are considered by each organisation in order to obtain their goals.
4. The means, methods or strategies used to manage the elements identified in point 3.
5. The particular driving forces that are orienting the problem-situation and redirecting the organisation goals, e.g. agricultural policy as a driver of reduction or increase in cropped areas.

Preliminary results are presented in Figures 8.2 and 8.3. The browser interface for text consultation is shown in Figure 8.2, and Figure 8.3 illustrates an acyclic graph derived from English Nature documents through text analysis. In Figure 8.3, modern farming methods are considered as the cause of the current environmental conditions. This has a consequence for the design of management strategies. The application of these strategies occurs in the land classes shown in the figure and focused in the SSSIs and in individual species and selected wildlife populations. The output of this action had to be reflected in the promotion of nature conservation and its quality together with information for the public and decision-makers.

Figure 8.2 **Concordance HTML consultation interface. The text in the boxes indicates the content of each frame**

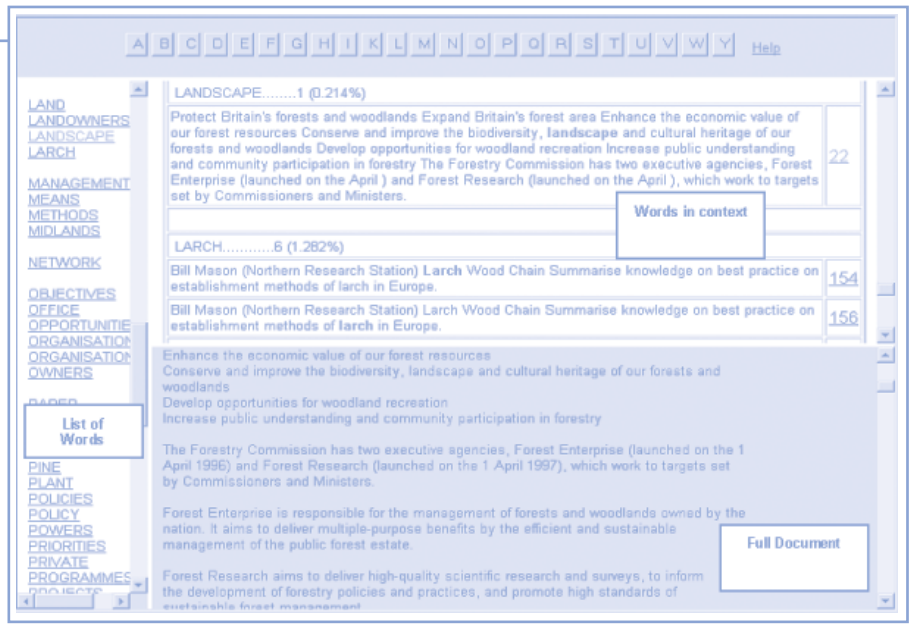
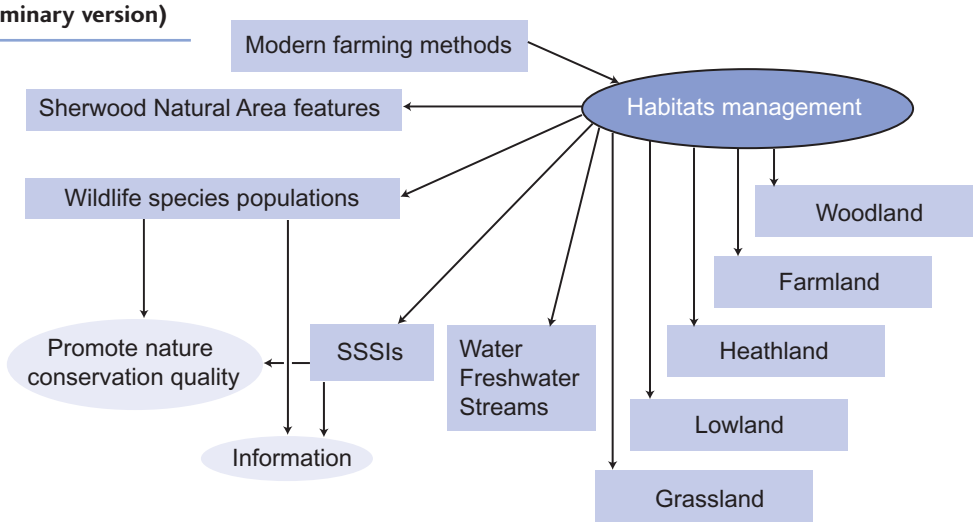


Figure 8.3 **English Nature model from institutional documentation analysis using Concordance (preliminary version)**



From 'visions' to 'models'

A sensible assumption for simulation modelling is that prediction of the future is not possible. Rather, it is better to search for the implications of our current actions and to evaluate them given existing evidence. Following these premises, Bayes's Theorem was considered here as the principle for modelling uncertain and complex environmental processes. This represents the second key stage of this research.

It is possible to obtain a probabilistic distribution of the occurrence of the modelled events, and reduce the uncertainty and sample space for further inquires, in order to compare them against alternative strategies. An advantage of a Bayesian approach is that it allows explicit recognition of multiple perspectives (Spiegelhalter *et al.*, 2000). It answers questions like 'how should a piece of evidence change what we currently believe' (Spiegelhalter *et al.*, 1999). In addition, the Bayesian paradigm offers a natural and consistent way for framing the problem, for data integration and for developing methodological solutions (Herriges and Kling, 1998).

At the moment, complementary methods based on Bayesian inference are being implemented in this research, namely Bayesian Networks (BNs), Weights of Evidence (WofE) and Logistic Regression (LR). As noted by Cain (1999) BNs 'can be used to examine the impacts of potential management options on an environmental system as a whole'. In this sense, BNs provide the option of developing a holistic formulation of management plans of environmental systems, based on a mathematical framework, while not excluding a more descriptive approach. Once the models represent specific problem domains, with the (causal) relations among variables identified, it is possible to calculate probability distributions of the unobserved variables given the observed variables (Kjaerulff and Jensen, 1996). BNs are also called belief networks, causal networks, qualitative Markov networks or constraints networks. The principle of networking nodes representing conditional, locally updated probabilities is a key characteristic of these techniques (Varis, 1997).

WofE and LR are different types of techniques based on the loglinear model for multivariate analysis. The methods have been used extensively in geology for predicting mineral potential for regions, where a number of representative mineral occurrences are known (Bonham-Carter *et al.*, 1988; Agterberg *et al.*, 1990; Bonham-Carter, 1994). For the purpose of 'vision georeferencing', the method works as follows: the stakeholders are asked to locate on a map or to mention the names of places where it is possible to find the ideal situation or desired conditions representing their vision. These places are treated as the evidence, represented by points or polygons in the landscape where the subject phenomenon occurs. Then a list of criteria for the selected sites has to be collected and expressed in spatial layers of information. The analysis of these layers consists of a reclassification, according to the individual contribution (positive or negative) which they make in producing the average characteristics of the selected points. These characteristics are expressed in probabilistic terms as the logarithm of the odds. The input layers of information can be multi-class, thereby preserving the original classes derived from the original data source. No subjective classifications are included, although the system allows it, if required; for example, if expert knowledge were available.

Application for the modelling of visions of Sherwood Forest

For the purpose of this research, the stakeholders were the environmental organisations who have activities in the SNA or influence planning in the study area. A selection was made following the recommendation of two partnership co-ordinators in order to address stakeholders likely to possess the most extensive knowledge of the area, a condition required by the devised method. Those included in this research were: Nottinghamshire County Council, Sherwood Forest Trust, Forestry Commission, Newark and Sherwood District Council, Bassetlaw District Council, English Nature, Nottinghamshire Wildlife Trust and a member of the National Farmers Union. Stakeholder views were obtained through focus groups.

The stakeholders were asked to signal in a map of Sherwood the place or places that represent the vision of the institution, in other words, the places that are currently as they would like to see in extensive areas in SNA; the future they are supposed to be working for if the desired place is not in the same area, adjacent areas inside England can be used as 'ideal' situations as long as the information is available. The fact that the complex structure of a desired situation is embedded in the selection of a point or points reduces the subjectivity associated with complex questionnaires of preferences.

Geographical data in the form of layers of biophysical and socio-economic information of the area then have to be prepared. These can be of either raster or vector format. These are two alternative ways of representing landscape features from the real world. Vector format uses points, lines and/or polygons while raster format uses regular square cells for each attribute. Raster data are preferred because they reduce processing time. The pixel size (resolution) of the layers does not need to be the same, and the system allows the selection of the pixel size for the assignments of the weights. For each data layer weights and contrasts are calculated to identify the cut-off of binary maps to be included in the WofE or LR. Posterior probability maps are then created with the use of the 'vision' points and the selected layers of data. These maps represent the probability of finding a place with similar characteristics to those initially highlighted by the stakeholder. Analysis is carried out to identify which of the variables is contributing the most or the least in the average characteristic of the points. The extent and content of the area representing a higher posterior probability are subject to a complementary geographical analysis.

Once a particular vision of Sherwood has been 'captured', it is possible to compare systematically the stakeholders' views in order to identify similarities and differences in the desired goals for the area of concern. For the representation of the different visions in the landscape, selected visions can be modelled virtually in a 3D model, taking as an example the specific locations from which the points were signalled. Several applications are being considered for this purpose. Figure 8.4 (page 81) summarises the whole process. The process starts in A, selecting the places with the desired characteristics and the list of variables that better describe those places. Then in B, posterior probability maps are created to identify the probability of finding similar places across the whole study area. In C, the analysis consists of comparing the different stakeholders' visions. At the moment, a geographical information system database is being constructed upon which the modelled visions will be tested and their impacts assessed.

Preliminary results

The following preliminary results have emerged from the research undertaken:

- The identification of stakeholders' visions resembles a process of 'discourse analysis'. The construction of models has developed contrary to the way in which environmental models are traditionally built, from empirical and scientific knowledge to tools for decision-makers. In that sense, building models from the vision of the stakeholders has implied a rediscovering of their assumptions and their understanding of 'how the environment works'.
- Text analysis and graphical modelling are rapid, systematic techniques for producing an initial picture of institutional concerns although their outputs depend completely on the selection of the documents.
- Stakeholders without written documentation to support their views and expectations can be included though systematic interviews.
- BN modelling presents unexplored potential for the integration of biophysical and socio-economic variables and the simulation of diverse scenarios of environmental management. A critical step in its implementation is the definition of the states and its boundaries (initial probabilities).
- The use of WofE and LR allows the discovery of several components of the landscape that are contained in the conscious or unconscious stakeholders' preference system as well as offering the possibility of integrating the most important ones for the discovery of new places with similar characteristics. In addition, WofE can be a source for the identification of the states and initial probabilities for the BNs.

The methodology described here allows a systematic identification and comparison of stakeholders' visions. This study has taken a step in the modelling of stakeholders' visions in order to enrich the debate that leads toward a more informed environmental management process. In addition it goes further in the stakeholder analysis incorporating the spatial dimension of their scope. Additional work is suggested in refining the representation of landscape components and their incorporation into geographical information systems. In order to refine the methodology, further research could extend its application with a more specific resource/services study and less broad in scope as the landscape dimension treated here.

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9 The practicalities of constructing a rural community development evaluation model

Jon A. Pickering

Introduction

Community development has emerged as a politically and academically favoured means of interfacing indigenous needs with service provision. It is also a way of tailoring projects with attempts to develop community leadership and to facilitate mutually beneficial relationships between neighbourhood-based leaders and organisations in the larger support communities (Gittell and Vidall, 1998). Community development can be implemented by very different actors or agencies. They may be community development agents, voluntary organisations, private sector firms, local authorities or local enterprise companies. For simplicity's sake, this range of bodies is generically labelled here as 'agencies'.

This study looks at the various trade-offs and tensions inherent in the community development process and the key issues that must be addressed when constructing an evaluation model for such projects. The construction of any such model is complex. It must focus on the accumulation and utility of social capital and the subsequent impact on resource and implementation efficiency. A means must be found that incorporates measures of empowerment and value-for-money so that both sides of the community development process – reflecting the different perspectives of the communities and agencies involved – are addressed. This discussion is drawn from qualitative research in progress in three case study areas in rural Scotland which represent different types of projects:

- a horticultural project operating in Skye and Lochalsh;
- the development of a community hall on Easdale Island;
- the Linwood community forest near Selkirk.

The diversity of the case studies reflects the heterogeneous nature of community development projects. The research aims to develop a generalisable evaluation model that can be applied across geographical and sectoral space.

The community development balancing act

Community development exercises are aimed at capacity-building and strengthening the voice of local people, enabling the provision of services tailored to their wants and needs (Barr *et al.*, 1996), thus offsetting deficiencies in resources or decision-making influence caused by geographical marginalisation, social exclusion or market failure.

Despite the heterogeneous nature of community development initiatives, three key concepts can be identified (Rogers *et al.*,1999):

1. The *partnership* ethos, facilitating relationships between agencies and local communities.

2. *Community consultation and involvement,* creating more participative and representative forms of government as part of the shift to governance, as well as ensuring that the relevant government or agency 'strategic vision' is shared by the public.

3. *Community leadership*, recognising the key role that local authorities and grass-roots bodies have in stimulating bottom-up development through developing partnerships in order to build the capacity of communities.

Slee (1994) identifies a similar group of key characteristics: the local determination of development options; the local control over the development process; and the local retention of direct and indirect benefits of the development process. (Governance represents a shift towards decentralisation and public–private partnerships in service delivery, with decisions taken at the most appropriate level.)

This means that community development is potentially capable of placing communities at the centre of decision-making processes, shifting from channels of indirect democracy (through political representation) to direct democracy through increased individual participation (Bailey, 1993). The influence that communities bring to bear upon decision-making depends on the level of involvement they are afforded. Community involvement may be constrained by implicit tensions between traditional, top-down policy processes and bottom-up development.

Critical to the successful fruition of community development projects are trustworthiness, effective information channels, an understanding of the extent to which social relations provide connectedness to other people, and the extent to which a community group can be adapted for a variety of goals (Reimer, 1997).

Figure 9.1 **Ladder of involvement (source: Wilcox in DoE, 1995)**

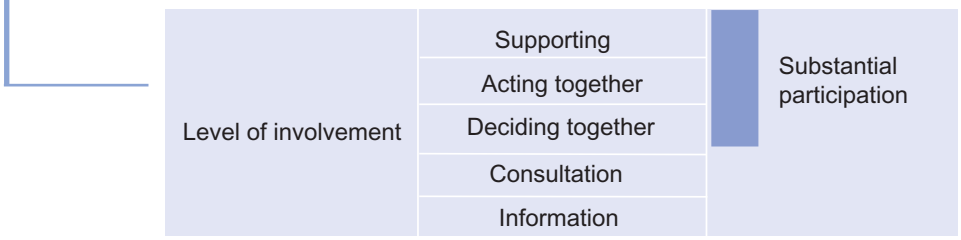

Figure 9.1 illustrates this type of best practice community development process in the form of a simple ladder of involvement, correlating different levels of engagement with differing degrees of participation. The five rungs are not mutually exclusive; rather, each rung incorporates the lower rungs in an ascendant model. An effective consultative process, particularly in value-added community development projects, should be geared towards capacity-building via substantial participation; this is indicated by the dark-shaded bar on the right of the figure. This point is elaborated by Newton (1982) who argues that bottom-up ventures are, or should be, shaped as:

> The best practical balance between the needs of efficiency (in terms of population, geography and balance, and resources of money, manpower and technical equipment) and the requirements of effective representation.

In community development projects, a trade-off between representation and efficiency could be triggered from a variety of sources. It could be from the size of community involved, the number of community groups, the number of involved agencies, the resources available, the tension between top-down and bottom-up, and external or internal agendas.

In the Lochalsh case study area the trade-off phenomenon was represented in the form of a debate surrounding what local people interpreted as the imposition of an external agency agenda, without prior consultation. This catalysed a conflictual dynamic within the existing community group. One of the case study respondents described this in the following way:

> [We have been] slowly building people's confidence. [The agency] has come along and been imposed on the area … [the agency] saw lottery money available to fund jobs…. So there was a lot of personal conflict and a lot of philosophical conflict between them taking a lot of the ideals of our project for their own, almost trying to put their badge on it and call it their success story rather than ours. Tens of thousands of pounds to set up this immediate infrastructure run by office-workers, people who don't know how to grow a lettuce – rural development 'experts'. That tends to grate with the grass-roots approach that we have been built on.

This illustrates the primary importance of consultation in community development. When effective consultation does not take place, the imposition of external agendas can negatively affect social capital, stimulating distrust and, ultimately, conflict. In order for conflict to be avoided and social capital to be accumulated, project objectives must attempt to meet community expectations through meaningful dialogue.

The accumulation and utilisation of social capital was observed in Lochalsh, as one project respondent remarked:

> The people who run the project are not paid for it, they meet once a month somewhere on the island, once a month, they travel without reimbursement of time or money purely because of their enthusiasm for it – their belief in it.

Moreover, it is clear from the case study findings that this concept of working towards a common good permeates beyond established community groups into the extended informal social networks. The utilisation of social capital, in this respect, reinforces community integration thereby breaking down inherent barriers of social or cultural exclusion in rural areas. One respondent reflected on this positive aspect of the project by saying:

> Everybody in the village, we share our disasters, we take the mickey out of each other and we borrow each other's equipment … other people know I have a tractor … I'll help them plant trees and they'll help me do other stuff.

Conversely, community development can also be hampered by intra-community conflict between groups or individuals, or through unused social capital, which deteriorates rapidly (Ostrom, 1999).

To reduce the likelihood of inefficiency in the development process this research suggests that an agreement has to be facilitated between all parties involved about rationales, goals, objectives and recognition of constraints at the outset of the project. This would mean developing the ability to compromise – negotiating a trade-off between different agendas (internal or external) – and building an in-depth knowledge of local considerations within the sphere of sustainable development. The research further indicates that an independent third party can play an important part in establishing an effectively negotiated compromise between different community groups and the individuals within communities, and the external agencies engaged in promoting rural development. In this respect, a community development agent, or 'animator', can 'enable its subjects to do what they cannot do on their own – *trust each other*' (Putnam, 1993; italics added).

3 Implications for an evaluation model

A key finding of this research is that the community development process is subject to a series of trade-offs that ultimately impact upon the success or failure of the project results and outcomes. Community development is built on the founding principle of facilitating effective partnerships between communities and agencies.

This means that in order to construct an effective evaluation model for community development, both partnership sides must be examined with different criteria and indicators applied. On the one hand, the demand-side must be looked at. This involves comparing the project returns with community expectations, and evaluating the process in terms of community empowerment, the accumulation of social capital and inclusiveness by utilising qualitative or 'soft' indicators. On the other hand, the supply side must be evaluated by comparing the project objectives with results and outcomes, measuring efficiency and value-for-money, invariably by using quantitative or 'hard' indicators.

As Edwards (1998) suggests, in any evaluation process the analysis of the key actors involved in the process is paramount. In particular, the identification of which members of the 'community' participate, with what goals in mind, and who benefits from any action that results. In addition, it is important to take into consideration that while the whole community may not participate in the community development process, the community as a whole often benefits from the direct or indirect outcomes.

In many instances, evaluations do not go beyond a summative role, merely focusing on resources, outputs and results in line with performance measurement criteria rather than identifying elements of good practice (Sanderson, 1998). The utility of evaluation is bounded by the idea that it is solely a mechanism for collecting quantifiable data. Midmore (1998) asserts that:

> '[any] concentration on targets, especially if externally imposed, may lead to neglect of the underlying mechanisms themselves'.

The findings of this research imply that an over-reliance on statistical analysis in the evaluation process will bypass the formative analysis of the consultation and empowerment process.

One persuasive alternative to the 'hard', quantitative evaluatory approach is the Scottish Development Centre Model which utilises 'community empowerment' and 'quality of life' indicators. The indicators are shown in Box 9.1. The rationale of this model informs the development of the community development evaluation model which will form the central output of this research work.

Box 9.1 Scottish Community Development Centre Indicators (source: Barr *et al.*, 1996)

Community empowerment
1. A learning community: personal empowerment
2. A fair and just community: positive action
3. An active and organised community: development of the community
4. An influential community: participation and development
Quality of life
5. A common wealth: local economic development
6. A caring community: social development and services
7. A green community: environmental development
8. A safe community
9. A good place to live
10. A lasting community

A second, alternative, approach to evaluation, which has the capacity to take account of the community-agency split, is the A-B-C Amoeba Model developed by Brown (1999, after Deelstra, 1994). This advocates the use of :

- Area-specific indicators, drawn up by local communities and agents to reflect priority needs of the local.
- Basic-set indicators, developed by authorities within the region.
- Core indicators, applied inter-regionally.

The A-B-C Amoeba Model is similar to the evaluatory principles of the LEADER Programme (EU Community initiative to provide support for rural development).

The incorporation of lay discourses would also allow for the easier identification of evaluatory 'imponderables' such as deadweight (that is, what would have happened anyway, even if the project had not occurred), multiplier effects and displacement (Williamson, 1996).

The community development model must therefore feature both summative and formative dimensions that evaluate the agency and community parts of the project/programme. As Sanderson (1998) argues:

> There is a need both to extend the analysis of 'what', in terms of the range of aspects of performance, and to develop an analysis of 'why', to provide a detailed understanding of how outcomes and impacts are being achieved (or not, as the case may be).

Conclusion

This study has explored some of the issues relating to the construction of an effective community development evaluation model. The concepts of community development, social capital and efficiency have been highlighted, identifying some of the key features such a model should include.

An evaluation model should assess the opportunity costs of a community development project, the extent of local involvement and the subsequent impacts on efficiency. To do this effectively, a 'split' model should be developed, with equal emphasis on different sides of the community–agency partnership. Communities and agencies may attach different values to encompassed themes and thus different sets of criteria and indicators must be utilised. A split model would entail utilising both qualitative and quantitative indicators with an effective correlation of the different types of data harvested. A weighting of community empowerment and efficiency would then be required in order to form a synthetic judgement based on the involved social, economic and environmental factors.

A community development evaluation model must be generalisable enough to be applied across a heterogeneous range of projects, but also specific enough to retain credibility with the involved community. Amplifying the voice of the involved community through a qualitative methodological component has the capacity to address the inherent challenge this represents. The suggested 'split' model would reflect local knowledge and local needs and wants as rural communities attempt to improve their quality of life and promote social inclusion through the community development process.

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10 Achieving sustainable development objectives for forestry through the land use planning system

Jasbinder Ghag

Introduction

The concept of sustainable development, defined in policy terms by the Brundtland Commission (World Commission of Environment and Development, 1987) and championed globally by the Rio Earth Summit (UNCED, 1992) has become a cornerstone of UK government policy (HM Government 1994; Department of the Environment, Transport and the Regions, 1999). It is now a central policy objective being pursued by both the forestry and land use planning systems. The adoption of sustainable development principles means that the land use planning system could help to deliver sustainability objectives for forestry, and forestry could help to deliver sustainable planning objectives. The England Forestry Strategy (Forestry Commission, 1998) sets out the government's strategic priorities and programmes for the next 5–10 years and it expresses the desire to achieve sustainable forestry in a number of ways, including through the land use planning system. The Community Forestry initiative aims to create a lowland forested landscape which is entirely coincident with the sustainability agendas of both the forestry and land use planning systems. However, forestry (along with agriculture) remains outside the land use planning system, and consequently any interface between the two provinces has operated within a strictly demarcated space, including restoration after-uses, Tree Preservation Orders (TPOs), and selective consultation on Woodland Grant Scheme (WGS) applications. Yet, while these two systems have traditionally operated separately, they do share common objectives associated with the delivery of multiple environmental, social and economic benefits.

The interface between planning and forestry may be explored at various scales, from the national level to the individual site. This chapter reports on the preliminary findings of research being undertaken in Vale Royal Borough Council and Cheshire County Council on the synergy between planning decisions and the development of the Mersey Community Forest. Focusing primarily on the operation of the development control system, it indicates ways in which applications for residential and mineral development might complement sustainable forestry; the study is currently turning its attention to the contribution which might also be made through the reclamation of derelict land. Therefore, in the main, it addresses areas of land use which, although core to the daily activity of planning, are not necessarily aspects that are central to the promotion of the Community Forest. It is likely that derelict land reclamation and the use of planning agreements on major industrial sites will afford greater opportunity for forestry. This is likely, at least partially, to explain the findings reported here.

Most of the research to date has been based on content analysis of a wide range of textual material contained in planning officers' files. The textual material has been scrutinised in detail and checked against a 'sustainable forestry indicators framework' derived from statements made in the England Forestry Strategy that relate to:

- good forestry practice
- economic growth and employment
- development planning
- recreation and social inclusion
- conservation and integrated land use
- partnership and capacity building.

Sustainable forestry is a complex concept (integrating social, economic and environmental elements) and, consequently, researchers and practitioners may have difficulty in recognising where and when sustainability occurs. In this study, the specially developed indicators framework has been

used to check file entries systematically for evidence of 'sustainable forestry' practices. It is acknowledged that the interpretation and utilisation of indicators in measuring a 'sustainability transition' is not straightforward and is a matter for debate.

Trees and woodlands within residential development

Recent changes to UK forestry policy mean that the establishment of lowland woodland and trees close to where people live should become a key concern for land use professionals. In this context, residential land use proposals are of special interest as they create settings wherein most people learn to appreciate trees, as well as representing people's main source of knowledge about the planning system. Generally, trees in residential settings will not contribute to what the Forestry Commission understands as sustainable forestry, but they are significant for three main reasons.

1. They form part of an urban forest which strongly influences most people's knowledge of wooded landscapes.

2. Their treatment provides an insight into planners' understanding of trees and their ways of consulting relevant experts.

3. Some residential applications are sufficiently large to facilitate 'development forestry', assisting the extension of a community forest at the urban edge.

The evidence presented here is based on planning applications for ten or more dwellings, as these were considered to have a potentially significant impact on the landscape. Also, within the study context, the Borough Local Plan seeks an element of 'structure planting' for large developments, in order to ensure the integration of new developments into the surrounding area (including the Community Forest), while *Supplementary planning guidance 2: Provision of public recreation space in new housing development* (Vale Royal Borough Council, 1996) requires open space provision (ideally incorporating mature and attractive landscape features) for more than ten dwellings.

Wider organisational and interdepartmental behaviour at the district level appears to be a significant factor influencing the ways in which trees and woodland are considered with respect to site development. In most cases, trees are planted in order to enhance and maintain rather than restore a site. An applicant often submits a landscape plan, and may sometimes consult a local authority landscape architect, tree preservation or conservation officers in order to obtain their views. Consultation by a tree preservation officer (usually in the planning department) or a development control officer with officers from other departments (such as Community Partnerships) can trigger consideration of the aims and objectives of the Community Forest. In one instance, the landscape architect (based in Community Partnerships) expresses concern to the development control officer that no provision has been made:

> … for a landscape buffer between this site and the Community Forest site… . Some provision needs to be made for a buffer which will necessitate a redesign of the layout and in this respect 5 metres should be seen as the average minimum width.

In practice, the treatment of trees and woodland features in residential applications appears to be variable. Where a landscape plan has been submitted, it may be revised during consultation and a range of standard and special planning conditions attached. However, analysis of planning files suggests that, perhaps due to the absence of proformas or standards of provision, 'special'

conditions tend to vary between apparently similar developments. Moreover, there is evidence that conditions concerning trees are checked, monitored and enforced less vigorously than other types of condition.

Tree planting is frequently something requested by external and internal consultees, for example, parish council, residents, landscape architect, and is a significant influence on the negotiation of site design. As a minimum, agreement is often reached to locate buildings away from existing areas. The density of housing on a site relative to the retention of natural features or for the incorporation of buffer planting are more hotly contested issues as developers seek to maximise financial returns. Case files of instances when trees and woodland features have been an issue indicate that planning officers are reliant on advice from internal consultees and certain other sources regarding woodland matters (Table 10.1). The issue of maintenance and management of natural features was raised, though not necessarily resolved, in a small number of cases.

Table 10.1 Factors relating to trees and woodlands which appeared to influence planners' decisions (based on 30 cases)

Sources of planning officers' information on trees in residential development	
Views of other officers within local authority	**18**
Chief planning officer's views	**3**
Advice of county forester	**2**
External consultees (environmental)	**3**
External consultees (generalist)	**5**
Views of residents	**7**
Other factors influencing officers' decisions on residential developments involving trees and woodlands	
Location of trees within site boundary in relation to buildings	**9**
Presence of TPO on or adjacent to site	**3**
Proximity of other woodland	**4**
Safety aspects of trees, including roads	**4**
Concern over inaccuracies on drawings (surveys and proposals)	**10**

As noted above, consultation on tree matters is typically with local authority officers. At this level, there appears to be no Forestry Commission involvement. From the files examined, there is no evidence to suggest that development control officers consult with the Forestry Commission or Community Forest when considering residential development applications. New build of 125 dwellings could provide sufficient open space provision to be eligible for the Woodland Grant Scheme (WGS). However, this opportunity has not been pursued, although in one case the landscape officer commented:

> The suggestion to beef up the planting adjacent to Park Road is to be welcomed; WGS should be available for a decent linear woodland.

Application of sustainability indicators

The use of sustainability indicators with regard to residential applications leads to a number of observations on this aspect of the planning–forestry interface. The *good forestry indicator* is evidently being only partially met, although there is some evidence of concern for tree health and positive management. While issues of economic growth and employment do not appear to be addressed, the *development planning indicator* reveals a degree of success, particularly in relation to transport corridors and the improvement of residential amenity. In most cases, planting has been located close to the edge of developments, near to access points or associated with green spaces, in order to create a more attractive environment. Fuller integration between buildings and trees, although not always achieved, is nevertheless being pursued in some instances. For example, one landscape officer commented:

> …subject to everyone's agreement this greenery should flow into the various cul-de-sacs in some form or another… Let's see a 'greenery' entrance to the town… .

Planting is frequently specified in development briefs, and sometimes occurs to the prescribed extent, though it may also be reduced in size or may follow rather than precede the start of construction. As a minimum, an amenity 'screen' is secured, though there is scope for greater use of 'framework' planting.

Attainment of the *recreation and social inclusion indicator* occurred only occasionally, with protection and extension of public access to new and existing woods (both urban and rural) being met in two cases. A cohesive approach to site design and the linking up of footpaths with cycle routes, while popular in policy terms, may ultimately be dependent on the effectiveness of detailed implementation by a private developer. Nevertheless, the provision of interconnecting footpaths and cycleways through a woodland infrastructure is likely to appeal to planners, and illustrates an important convergence of thinking with foresters.

The *conservation and integrated approach to land use indicator* was met rather more frequently. Individual cases showed that planners had sought:

- an integrated approach to land use;
- expansion of woodland cover;
- enhancement of biodiversity via the creation of new and more valuable sites for wildlife;
- maximisation of overall site benefits through careful consideration of design and location of planting;
- avoidance of fragmentation of ancient woodland;
- planting of native species;
- recording of key species;
- other environmental safeguards.

Partnership and capacity building indicators were represented only by an isolated instance of a developer spotting the environmental education potential of a site:

> …90% of the open space is now laid out, planted and contains a children's play area, and part of the site contains a woodland area of special biological interest identified in the local plan.

Trees and woodlands on land used for mineral extraction

The extraction of minerals and the subsequent restoration of sites provides another important context in which to consider the contribution of land use planning to the attainment of Community Forest objectives. Encouraging both minerals operators and planners to consider forestry as an after-use is important for creating a forested landscape, especially since mineral sites tend to be large and time-scales are long, and they may also be located in generally forested areas. Of particular importance is the spatial concentration of mineral sites due to geological factors, resulting in major opportunities for extensive and contiguous woodland creation, and for links between sites.

Creating a forested landscape: opportunities and constraints

By and large, the forestry interest in mineral sites relates to the creation and restoration of landscapes after extraction, though some natural features may be retained from the outset. Advance (remedial) planting in order to screen residential properties and minimise visual intrusion to the surrounding area is standard practice in appropriate circumstances. While scientific knowledge about site restoration to forestry has improved, perceptual and legal barriers remain. These include: complex landownership issues; the limited training of mineral operators and planners in visualising and understanding forested landscapes; a lack of clear advice and support from forestry organisations; and traditional tensions between agriculture and forestry. The historical presumption against irreversible loss of best and most versatile agricultural land as a result of mineral extraction still tends to prevail. This is despite a shift in policy emphasis away from agricultural fundamentalism, and even though the Town and Country Planning Act, 1990 (Schedule 5 Part 1, s2-4) indicates forestry and amenity as appropriate after-uses. This Schedule defines forestry as 'the growing of a utilisable crop of timber', which is helpful in terms of distinguishing it from ornamental or amenity planting, but perhaps unhelpful in the context of community forestry, where economic timber production as an objective is merely first among equals. Despite the fact that both agricultural and forestry organisations have signed up to the community forest vision, file analysis suggests that they do not give integrated advice to this effect in respect of mineral site restoration.

Accommodating multiple interpretations of sustainability

Significantly, mineral extraction sites which have previously been afforested are being restored back to commercial woodland, albeit with rather more concessions to amenity. Mineral operators appear to be putting forward arguments that the loss of woodland as a natural asset is not critical in sustainability terms. One operator stated that:

> …this stems both from the short term nature of the loss, the absence of any formal access provision to the woodland itself at the moment, the relative immaturity of about two thirds of it and the refusal of the owner to agree any formalised access arrangements to it after restoration.

Indeed, there is some evidence that mineral operators perceive the retention of woodland strips to be contrary to sustainability principles as this would sterilise resources, and work against some statements in mineral planning guidance.

Planners were found only to consult with the Forestry Commission over existing afforested sites, so that woodland aspects on agricultural and amenity sites were more likely to be referred to the county forester or other conservation specialists. The differing professional outlooks of these types of consultee need to be reconciled if planners are to re-evaluate their attitudes and practices

towards trees and woodlands. Both sets of professionals have the opportunity to serve as catalysts to the promotion of an interface between forestry and planning, and their approaches and advice must be complementary in the promotion of sustainable community forestry. Presently, planners weigh up the various interests, and so afforestation may not be a substantial feature on a site. Moreover there are differences in the extent to which planners take on advice from local and central government consultees. While similar types of guidance/plans, i.e. those mainly related to design issues, tend to be sought by planners from mineral operators or their agents, and also local/central government consultees, there is still evidence of variation in terms of the standard of plans submitted by all these parties in respect of tree clearence and re-planting, long-term management and formal after-care schemes.

Sustainability indicators in practice

Achieving sustainable development objectives for forestry at mineral extraction sites presents a more complicated picture than for residential activity. The *good forestry* measure, indicating sustainable management of existing and new woodlands, reveals only limited levels of commitment to managing habitats and woodland on a long-term basis, while forestry-related issues of *economic growth and employment* are rarely raised. The *development planning indicator*, however, reveals that planners often seek landscaping and tree belts of sufficient height, depth and density to protect adjacent residential occupants. There was no formal reference (among the files examined) by planners to tree and woodland strategies, although one resident, objecting to a mineral proposal, remarked that:

> I trust the Council are aware of the 30 year plan for the Community Forest of which Delamere and the surrounding woodland are purported to be the 'jewel in the crown' and the Council's published 'good practice guide' which include adopting a nature conservation strategy and doubling the area of planted woodland by the year 2015.

Woodland planting in association with transport corridors is occasionally effected, while the *recreation and social inclusion* indicator, is also met in part. Afforested sites tend to provide local people with informal public access, albeit full public access to a site is dependent upon the landowner. On one file, a planning officer notes that:

> A wood is currently enjoyed as an informal recreational facility, particularly for walkers.

Similarly, a resident states, in the light of successive consents for site extension, that:

> They have waited a long time to be able to enjoy the views, and undertake walks…and that there is some merit in keeping small woods for locals.

Another states

> I appreciate that X Wood is a commercial woodland but Forest Enterprise has provided facilities for walking within the wood, i.e. footpaths, a bench and proper entry facilities and a notice. The wood is used by people both local and otherwise for recreational walking and cycling. The loss of X Wood would be detrimental… .

The potential disruption to the links between people and place caused by the extraction of minerals can clearly work against the interests of sustainability, for example, where people have become accustomed to previously established woodlands and their associated recreational facilities.

In relation to the *conservation and an integrated approach to land use indicator*, operators are often obliged to modify their proposals due to the presence of an SSSI/SAC within the area. For example,

dry extraction may be undertaken so that the hydrology of the area is not affected. Also, mineral sites do appear to contribute to woodland planting and the enhancement of biodiversity via the creation of new and more valuable sites for wildlife; importantly, woodland is not always allowed to dominate, and complementary habitats, such as heathland and wildflower areas, are being established. Case sites suggest that biodiversity action planning objectives are being addressed through internal consultations between planners and conservation officers. These include consideration of site design, location of planting to ensure that overall benefits are maximised, a balance between woodland and non-woodland habitats, and planting of native species. Indicators relating to *partnership and capacity building* were being met in a limited number of cases where the Forestry Commission worked in partnership with woodland owners, managers and other landowners in order to deliver objectives.

Conclusions

Analysis of planning files of residential and mineral developments in a Community Forest area suggests that the land use planning and forestry systems are only loosely coupled. Central to this situation is the tension between competing policy objectives, and the tendency of development control officers, especially in residential cases, to be strongly influenced by a core set of appeal-proof considerations. Moreover, while development plans and supplementary guidance do recognise the value of trees and woodlands, other policy objectives are likely to receive greater prominence and so development control officers may not perceive the 'wider benefits' to accrue from a 'sustainable forest landscape'. Equally, it must be borne in mind that a 'sustainable forest landscape' comprises other habitats in addition to trees and, in some schemes, planners may propose a reduced level of woodland establishment in response to pressures from other countryside interests.

This research is now being extended to derelict land reclamation, and here the pursuit of sustainable community forestry appears to be more positive. Although a speculative suggestion at this stage, there does seem to be a distinct 'cultural' influence on the nature of the planning–forestry interface. Thus, for example, local plan and development control officers may be relatively constrained by central policy guidance and the need to avoid planning appeals, whereas other professionals working within a planning department who mainly deal with land reclamation may have the opportunity to be more entrepreneurial and to consider issues related to land management. Equally, Forestry Commission personnel have a background in large-scale commercial forestry and a long-standing policy commitment to developing a commercial estate, while arboriculturists and landscape architects are more attuned to the nurturing and protection of trees (often ornamental specimens) within and around built-up areas. These backgrounds and professional cultures tend to produce different languages and assumptions, which can provide both opportunities and barriers for the accomplishment of shared objectives. Thus, while sustainable community forestry can partly be encouraged by improvements in policy and procedure, it will also depend on harmonising dialogues between different groups of professionals and other stakeholders.

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Questions and answers

Paul Selman presentation

Q **Steve Evison**

Did you look at process indicators in relation to social issues, did you develop indicators for the process of change in sustainability?

A **Paul Selman**

Its difficult to measure process indicators. There is scope for looking at process in terms of things such as health and people. But some of the things we are looking at will only be revealed over 5 to 10 years.

Jorge Rubiano presentation

Q **Gill Clark**

Is there a use for this model in conflict resolution because it could highlight different organisations visions?

A **Jorge Rubiano**

Yes it allows different visions to be expressed in a common language. The method has been applied in other areas, e.g. in medicine, where the treatment of a patient can differ depending on the variables considered by the physicians.. I think it could be used in trying to resolve conflicts because it will provide important information about different organisations.

Jon Pickering presentation

Q **Rhys Evans**

How can your model help to encourage people to have something to say when you come to them?

A **Jon Pickering**

The key output is to contruct a methodology and then go back to people and build upon it. I think it's important to involve people from the ground level in constructing the evaluation of terms of reference and then go back and ask if the outcomes have met their expectations. I am looking at the trade-offs between bottom–up and top–down approaches and looking at why people are involved from both sides.

Q **Juliet Harvey**

To what extent will people take your model and apply it to their projects?

A **Jon Pickering**

Again, the key output of the project is to construct a methodology by consulting local people, going back to those people and building on it. I think it is important to design a model that is user-friendly and practical, utilising language and terminology that people understand rather than academic or policy jargon. In this respect, I provide another channel for local communities to use their collective voice.

I try to simplify the process of community development, look at who is involved and why. It also comes back to the point about language and not trying to overcomplicate the words you use, making it accessible so others can use the research findings. The point of the model is that it is practical and can be used by policymakers, community development agents and local people themselves.

Jasbinder Ghag presentation

Q **Max Hislop**

I recognise the problems in the planning system that you have described in relation to community woodlands. I worked at Thames Chase and while I was there looked at coupling the Woodland Grant Scheme to planning and had some success with that. The money available from Woodland Grant Scheme is very little compared with that available for development. The Forestry Commission should become more involved with planning but the mechanism to deliver this is not well developed at the moment.

A **Jasbinder Ghag**

The planning system is currently not sufficiently connected to forestry and *vice versa*. There are issues to do with how to incorporate a non-statutory plan (CF plan) into a heavily regulated planning system. There is currently a clear 'policy-implementation gap' concerning the extent to which planners are adhering to tree related policies stipulated in the local borough plan and the Community Forest plan. Community forest plans are not high on the planner's agenda. However there is some evidence to suggest that planners are keen on receiving advice and consultation on forestry practices but this is currently a training gap that needs to be addressed. The Forestry Commission needs to engage with planners and local authority professionals. In several other European countries there is a better integration between these two separate systems.

Social dimensions of trees and woodlands

This publication highlights the deeper meanings that trees, forests and woodlands hold for people in all parts of the UK. The plates and figures below and on the following two pages are provided:

- **To emphasise the important social benefits of woodlands and trees to people**
- **To illustrate particular aspects of the projects/research discussed in Chapters 5, 6, 8 and 13.**

- Research on why nature is important emphasises the health benefits that can be attained from contact with natural resources.
- Community Forests are being developed in recognition of the benefits of providing naturalistic public space.
- Reconnecting young people to woodlands is important in improving their familiarity with these areas.

Figure 5.2 Engraved standing stone at entrance to Millenium Forest, Borgie

Figure 6.3 View of Blaengwynfi, South Wales Valleys

Figure 6.4 View of Fochriw, South Wales Valleys

Figure 8.4 Institutional scenario building (envisioning) using Weights of Evidence

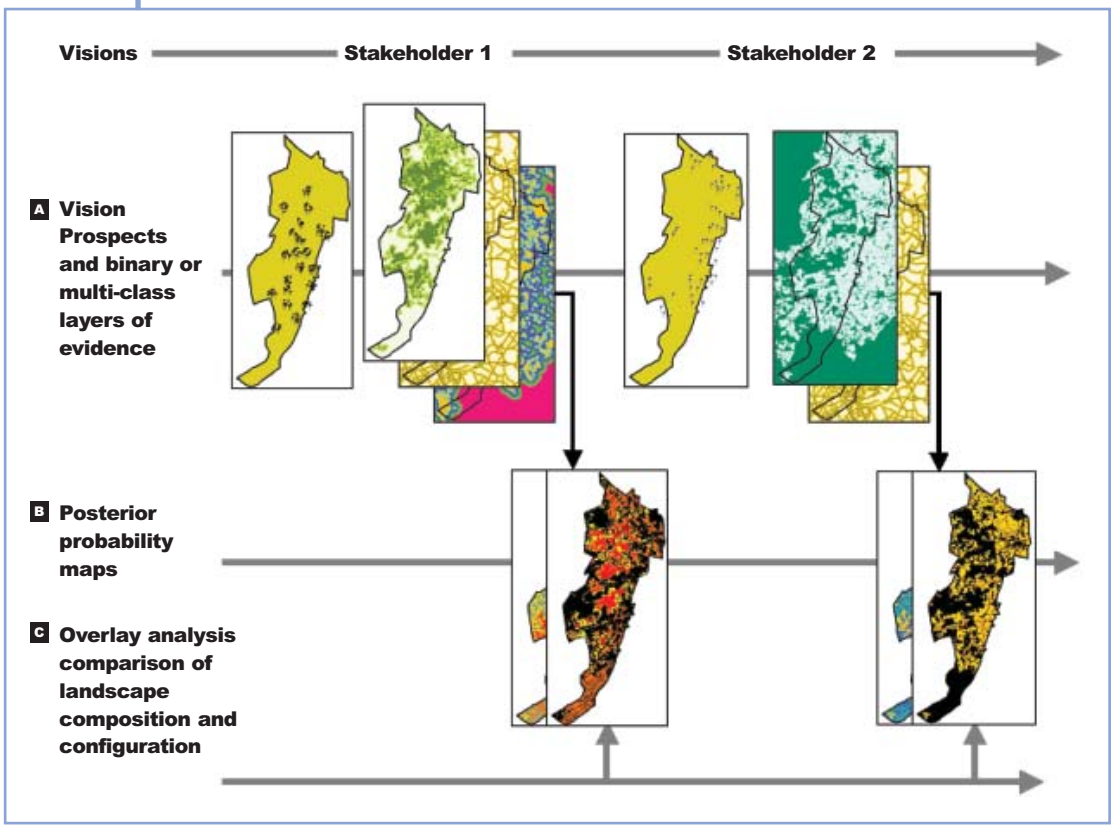
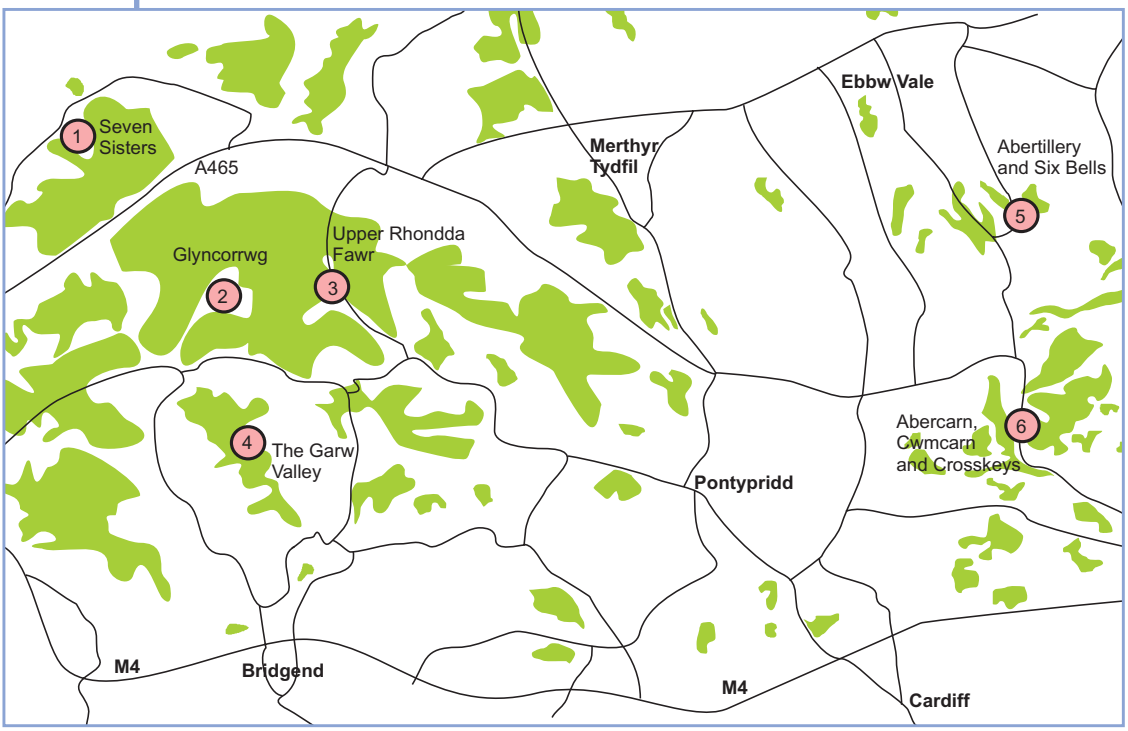


Figure 13.1 Map of the South Wales Valleys area



THEME THREE

Community involvement in decision-making and management

11 The Virtuous Forest: woodlands, community and identity in Scotland

Rhys Evans

There are over 100 Community Woodlands in Scotland. In 1995 there were less than 20 (Scottish Natural Heritage, 2001). Varying in size, location, terrain, formal constitution and organisation structure, from the Borders in the south to the northwest extremes of Sutherland, they are appearing across the breadth of Scotland. Each has as its focus a local woodland and in each case the local people involved in the Community Woodland (CW) are making claims about the virtues of their woodland – claims of heritage, claims of nature, claims of locality, claims of community and of economic development. These CWs therefore represent a growing body of landscapes which are being invested with new values, new uses and new roles to play in local identity. It is these new meanings which led to the title of this research 'The Virtuous Forest'.

The Virtuous Forest is a project which examines the various claims being made by community woodlands groups. In order to understand how these landscapes are becoming increasingly legible in terms of sustainable development, community involvement and as a valued public asset, the research suggests that these should be viewed as a set of discursive interventions at the level of public opinion and the public imagery about woodlands. It is possible to argue that community woodlands contribute greater symbolic value than economic value to a community, and the discursive approach taken in this research is one way of demonstrating this. In considering the symbolic and the economic, the study looks at the various means by which communities hope to generate economic regeneration and development through woodlands.

As this aspect of the research is currently under way, the report on which this chapter is based is necessarily an interim one. Before coming to grips with the discursive aspects of community woodlands, it was necessary to determine their extent, range, institutional positions and history in Scotland. The focus is therefore on these preliminary findings, and raises a number of questions which have arisen along the way.

What is a community woodland?

The term 'community woodland' is not an exact one. Firstly, each individual woodland is as unique as the community which creates it. Some are large and integrate private estate woodlands; some are tiny and stand alone. Others are created in partnership with the Forestry Commission (FC) and some are owned outright by the community.

A number of terms are used, somewhat inaccurately and interchangeably, to describe community woodlands. One term frequently used is rural development forestry (RDF). Scottish National Heritage (SNH) prefers the term but their definition tends to emphasise economic development and community involvement. They claim that 'it can be thought of as the "harder", more economic, rural end of the community woodland spectrum contrasting with the "softer", more amenity led, urban or urban fringe situation' (Scottish National Heritage, 2001). This definition does not then include community woodlands which are too small for effective economic development, even when located in remote rural places. More importantly, their report on rural development forestry (RDF) uses 20 case studies, only a few of which seem to demonstrate actual economic development impacts, weakening the case for the importance of the economic development strand as a key part of community forestry.

A report from the Departments of Agriculture and Land Economy of the University of Aberdeen (Slee *et al.,* 1996) claims that:

> A variety of terms have been used to describe styles of forestry which involve community participation in forest management. These include community forestry, social forestry and rural development forestry. The preferred term in this study is rural development forestry (RDF). The essential characteristics of this style of forestry include community involvement in forest planning and management, the recognition of the multiple benefits of forests and a focus on the use of forests to provide local benefits.

They thus prefer the term rural development forestry but are careful not to specify that 'local benefits' are necessarily economic. They claim that:

> The success or failure of community-based approaches to development can be measured by normal financial and economic criteria, but such measures only partially encapsulate the benefits of the approach. Consequently, the financial and economic estimates of the benefits and costs of RDF should be considered as elements of an evaluation process, but not, in themselves, as a comprehensive measure of value.

To avoid a focus upon economic development over other 'benefits', the term community woodlands is used here rather than rural development forestry, in order to emphasise the development of community identity, capacity and integration as central to the rationale for all community woodland projects.

An interview with a senior member of the FC indicated that they tended to use the term 'social forestry'. Their definition includes four aspects: development, recreation and access, quality of life, and participation and awareness (M. Sangster, personal communication).

This is a more balanced and useful definition of community forestry in that aesthetics and community involvement are at least equal partners with economic development. The term 'quality of life' in particular offers a way to see the contribution made by the symbolic value of the woods for both the local community and external perceptions of the place. Yet the term 'social forestry' slightly obscures the centrality of 'community' involvement in the forests. The term community woodlands reminds us of the 'bottom-up' aspect of community-led CW projects and for this reason, it is worthy of retention.

In its broadest sense, then, community woodlands are community-led initiatives which have invested community participation and community identity in specific woodlands. As will be detailed later, they can be constituted in a multiplicity of ways, held between a multiplicity of partners and deliver a multiplicity of benefits. The two key aspects of CWs are that:

- they are about forestry rather than other uses of rural land

and, through community participation in the management of the woodlands,

- they deliver perceived and actual benefits to the involved local communities.

Using this definition, it is therefore possible to see social forestry as an active practice, some of which takes place in community woodlands, and to see rural development forestry as a subset of CWs with a major focus upon economic regeneration and benefits.

Creating community woodlands

The whole process of creating a community woodland is fragmented, obscure and sits outside almost any singular legislative structure. The Scottish Executive is only now addressing a community Right to Buy in its draft Land Reform Bill, released for discussion in spring 2001 and introduced in November 2001. There is no Department for Community Woodlands – not even the FC manages all aspects of the phenomenon – and there is no single body able to render approval or disapproval of an application.

Instead, the process of setting up a community woodland is a general juridical one, requiring lawyers with a knowledge of the appropriate laws. A lawyer with previous experience of forming community woodlands is an asset. Generally, a sample constitution is altered to fit local circumstances and then legally registered. If a company, then this is done through Company House; if a partnership, it must be registered through a solicitor; if a co-operative then it will be registered through the Co-operatives Act.

Community woodlands can be simply registered as a co-management agreement between a number of partners – some of whom may or may not actually own the land or resource. Partners can include local landowners, community councils and other local government bodies, and people and landowners who do not live locally. Often the FC will be a partner in a community woodland, offering co-management rights to the community involved.

In a proportion of the cases, actual ownership of the land becomes assumed by the community. This could take the form of a co-operative owning and managing the assets, although this is infrequent. Sometimes ownership could be of the resource and not the actual land. Generally, the community interest is legally incorporated with a number of partners ranging from people on the electoral rolls to estate owners and the FC. The most formal way of creating a community woodland is to incorporate it as a Company Limited by Guarantee in which local residents are voting shareholders but do not gain financial reward from the shares. As an example, this is stipulated as the sole mode of organising community interests in the Draft Land Tenure Reform in Scotland legislation. This legal entity is well developed under the Companies Act and sets fairly rigorous criteria for a constitution, reporting and auditing. Of all the options, it demands the highest level of commitment of time from a community, both in the short and longer terms, and requires a certain degree of financial viability in order to satisfy the annual report and annual general meeting requirements. A small but significant proportion of CWs are formed as Companies Limited By Guarantee.

Charitable status is another aspect of CWs. This is awarded by the Department of Internal Revenue (IR) upon application, and does not depend upon company or other status. IR will, however, examine a group's constitution looking for non-profit status and for evidence of either 'education of the public' or 'relief of poverty'. Without a constitution stipulating either of these objectives, the application may be rejected. This, in turn, influences the claims being made for CWs, with, for example, economic development addressing relief of poverty or ranger-guided tourism addressing education.

One of the consequences of this complicated situation is that responsibility for community ownership of common property is not sited in any one particular place within the government. Although the Scottish Executive considers and grants support for community purchase of common property in specific cases, and has operated a Community Woodland Supplement and a Woodland Grant Scheme to support planting and management and some social and community benefits (Crabtree *et al.*, 2001), the majority of CWs are legally registered with the Courts and most then operate in co-operation with the FC's regional offices. In the FC, each region has a conservator who is responsible for the community woodlands within their area. What the conservators call community woodlands varies from a registered community interest in a wood, with tenure and management rights vested elsewhere, to a formal Company Limited By Guarantee. In this sense, actual trusts or companies are not differentiated from otherwise structured arrangements.

A positive consequence of the complicated bureaucratic landscape for CWs, however, is that there are such a large number of possibilities for creating a CW that a model can be found for most projects. This varies from a community just being interested in gaining a certain amount of amenity provision and community pride from a small local woodland to one wishing to enter into commercial development of a larger economically viable forestry project.

Generally, most communities will enter the community woodlands scene through initial contacts with their FC regional office who provide a series of publications on setting up a CW and who can advise on the appropriate level of cooperation.

The Forestry Commission

The Forestry Commission (FC), under various recent Acts and statements, actively supports a multi-user forest and community participation. Recent government policy has indicated strong support for, initially, a multi-function forest and, latterly, direct community woodlands, putting considerations of social forestry at the foundation of the policy process. Thus, FC policy now supports community forestry at the highest level. This is both a consequence of changing legislation and an increasing recognition that the old model of productive forestry is becoming increasingly financially unviable given the declines in fibre prices on world markets and the difficulties in producing high quality, fast-growing timber in Britain (Rural Forum, 1995; D. Clarke, 2001). There exists, therefore, a recognition within the FC that forestry in Britain is changing and that the change marks a relative decline of the existing systems of fibre production, and a relative increase in the importance of social and cultural benefits from the nation's forestry estate.

Of course, some institutional contradictions still remain. Forest Enterprise (FE), an agency of the FC, is tasked with raising as much revenue as possible from the woodland holdings of the nation. One result is complaints from local commentators that the FC tends to recognise community interests in FC-owned land as legitimate if those interests are in non-material forest assets such as amenities or recreation. However, economic benefit from logging activity on FC land itself still seems divorced from any consideration of the local communities within which the forest estates are located. Often, outside contractors who deliver higher efficiencies and who have an existing good track record with FE are used to perform the work, rather than local labour. Thus the various existing forms of forest employment in a local FC woodland do not necessarily deliver local economic benefits.

The Community Woodlands Association

A number of organisations have been active in promoting the interests of CWs over the past decade. Some, such as the 'Borders Group' have been meeting since the mid-1990s. Others are more recent.

Recently, a concerted effort has been made to form an overall Community Woodland Association (CWA) which would include all CWs in Scotland. The desire for such a body has been growing partly due to the increased visibility of CWs. Most CWs are run on a volunteer basis and the principals need to minimise the costs to their ability to otherwise earn a living, raise a family and manage their own property. A number have reported 'research fatigue' as more and more researchers become interested in this phenomenon. Others report 'form fatigue' as all initiatives involve a lot of complicated paperwork, some of which may be rejected, making the time and effort seem wasted. Additionally, it is thought that a parent body made up of member CW groups could act as a professional voice for the entire community, presenting position papers to government committees and lobbying governments for greater recognition and support for community woodlands.

As a result, people from various CWs have formed a steering committee for a CWA and have managed to gain a small amount of funding to cover a study of the members wants and needs in terms of an association. This is expected to lead to the formal creation of a CWA in Scotland in the near future. It is imagined that this organisation will stand as the first point of contact for CWs, as a collator and dispenser of advice and information support to existing woodlands and new applicants, and as a voice speaking for CWs in the institutional arenas within which they are set. Of course, the actual remit of the CWA will be set by its members upon incorporation, which is still to come.

Reforesting Scotland has played an important role in this process, although its formal status is neither as a community woodland nor as the official voice of CWs. It has provided an informal interim contact point for information about community forestry, a voice in political debates about forestry in Scotland and, as an already established 'actor', a launching base for those forming a CWA.

Initial thoughts and questions

The sections above attempt to illustrate the 'institutional landscape' of community forestry, the scope of the phenomenon and some definitions which can form a basis of enquiry. This next section looks briefly at a number of questions already raised by the research. Further fieldwork will be required to adequately address them, but they offer tantalising glimpses into some of the possibilities raised for communities, foresters and academic organisations.

Symbolic value and economic value

This topic became the centre of interest when encountering the rhetorics of CW development and their emphasis on local economic benefit. Coming from Vancouver Island, where extensive forestry is still by far the most important economic activity, the Scottish situation was bemusing. How could 100 or 1000 or even 3000 acres of woodland viably employ any significant percentage of a community? [100 acres = 40 hectares] Upon looking closer it became clear that while some economic benefits accrued, the symbolic benefits were equally if not more important. Community

woodlands often operate as a perceptual centre to the community through the revitalisation of community properties which have been abandoned or downgraded by the process of rural decline and government withdrawal of pubic amenities, and in this way spread the benefits of the woodland much more comprehensively throughout the community.

Many projects create public spaces for gathering or recreation, either parks, memorials or walking paths. For example, the Forest of Birse, near Aberdeen, erected a standing stone in the community park which was included in the community woodland. The process included a large volunteer effort to clean up and refurbish the actual space before installing the standing stone. The stone was installed and a ceremony held on Millennium night (31 December 2000) which reportedly attracted 600 people, a very significant percentage of the overall community (R. Callendar, 2000).

Additionally the 'school wood' was incorporated into the Birse Woodland Trust (BWT) and volunteers cleaned it and built paths through and around it. Schoolchildren were involved in the process and encouraged to see the space as 'their wood'. Thus, through the creation of public amenities and symbols of community, the Trust made a significant contribution towards community development in Birse. Both the creation of actual material symbols such as the paths and the stone, and the time and effort invested by community volunteers, can be seen as concrete examples of the way the BWT has contributed to increasing the social capital of the community. The time spent working together gives residents increased opportunities to interact and to build further networks of interaction, and the symbols offer a focal point in which to invest community pride.

Developing non-timber resources in the knowledge economy

Despite the above, much of the literature and rhetoric of the BWT gives a disproportionate emphasis to local control of economic factors. This is understandable given the institutional discourses of development which emphasise economic benefits over the symbolic. When pressed on the topic, however, many respondents offered their agreement that the symbolic impact is extremely important.

Although the harvesting of the forest resource might have only a small economic impact, there are other resources which could be developed. Given the spatial limits of the resource, some communities are attempting to devise ways in which they can secure substantial return from the forest without cutting tree stocks. The focus is on public benefits like amenities and wildlife, aesthetics and environmental sustainability. This typically resolves into developing a tourism enterprise, but given the isolated location of many places and difficulty of access, there are limits to how many tourists can be attracted. Additionally, there are legitimate concerns about managing a large influx of outsiders within fairly limited lands. For example, one CW's position is that they will improve the quality of the visitor experience but not encourage any more visitors.

One other possibility is the development of what one informant termed *non-market public benefits*. Rather than targeting the tourism and recreation sector, local woodlands groups can consider participating in the knowledge and information market. It is possible that communities which own or manage local woodlands can develop knowledges about the resources these woods contain and how to manage them, and market these knowledges to a wider economy. This might include knowledge about biological resources, ecology, practical community development models or issues such as managing access. Given the high level of grant aid to rural Scotland, it is possible that communities could obtain grants from government or NGOs to develop these knowledges, and the

skills to codify and deliver them. Rather than cut down the trees, the common property resources can be sustained as a reservoir of information. This type of information can be developed and exploited by members of the local community, and then marketed to government agencies and other external markets which need to study these knowledges. Apparently, this realisation is not restricted to CWs, as a few private forested estates are also reported to be beginning to realise that this is a valuable potential market and are working towards servicing it.

This prompts an interesting new way of seeing these community woodlands. These rural, sometimes remote, communities could possibly generate their value in the global knowledge economy due to their unique existence on the margins. The isolation and peripherality which was such a constraint under industrial productivist economies becomes transformed into an asset. Timber and other commodities are expensive to ship to centralised processing points, but information, knowledge and data can be transmitted anywhere very cheaply.

Harold Innes' (1952) model of a staples economy describes a system in which peripheral areas harvest and deliver bulk commodities to core areas which turn them into finished goods, and in turn ship these goods back out to the peripheral areas. Innes asserts that it is not just goods which are being exchanged, however, but ideas, values and information. He claims that goods carry with them information and that this information is not only perceived but also has an influence on society. As befits a postindustrial version of Innes' model, this new model of 'non-market public benefits' does away with the material goods altogether. By retaining the living systems which were formerly rendered into commodities, knowledge and information which is of benefit to the greater society becomes the direct exchange item out of which wealth is produced.

There is a danger that such a support scheme could make rural areas even more dependent upon government support. But rather than the grant creating a specific and often material asset in the remote area, one which needs continuing subsidy to maintain, under this scheme it is the environment itself and the knowledges generated within the community which are the focus of the grant. In this way, three important things happen. First, local residents benefit from knowledges generated locally. Secondly, the human capital of the locality is enhanced through the use of local people to research, manage and sustain the information base. Thirdly, the asset base is managed in an environmentally sustainable way.

Common property

Community woodlands represent an interesting type of common property resource. Though often referring to ancient feus and other types of historic *commonties* in their literature, they are a very postmodern response to the decline and disappearance of such common properties during modern times. Whereas historic feus are often focused upon material resources on a material common – pasturage, food-gathering, wood supplies and the management of them, to a large extent, community woodlands focus upon a *symbolic commons* – a place of community, a sign of the investment of local care, time and effort in a place, something which counters the perceived reduction of the role of local spatial community given the devastatingly increased mobility of modern life (Table 11.1). This is not to say that local communities cannot and do not benefit from access to and consumption of firewood, fencing or other forest products. Given their proportionate relationship with the cash economy, however, their significance lies as much, if not more, in their symbolic value. Thus a community woodland could be said to be a material container for the

Table 11.1 | The foci of historic feus and community woodlands

	Focusing on:
Historic feus	**Material commons**
	Firewood
	Mushrooms
	Grazings
	Building material
	Material for commercial manufacture
	Soil-enhancement materials (e.g. leaf mould)
Community woodlands	**Symbolic commons**
	A place to gather (clearings)
	An area to play sports
	A place to celebrate (weddings, community fetes, significant days such as Guy Fawkes or Hogmannay)
	A place for recreation
	A place to work with others to produce something special, e.g. tree planting, path-building
	A focal point of community attention
	Inclusion of the woodland as central to place-identity
	Presence of human activities such as foresters, woodsmen, wardens, giving a sign of community ownership and status

aspirations and affect of the local community. The material practices implemented are ways of making visible and maintaining the symbolic commons of the local community.

Communities of location and communities of interest

One feature of the globalised world of the 20th century has been the decline of *communities of location* and the increasing importance of *communities of interest* in metropolitanised life. Traditional communities are communities of location, especially in rural areas where distance and isolation contribute to enforcing a bounded sense of community. The bounds of distance meant that insider–outsider differentiation was often rigidly enforced and this produced some of the stereotypes of rural conservatism and backwardness. With the increased ease and speed of travel and transport, and the innovations of digital information technologies, spatial community has become increasingly irrelevant.

At the same time, the rise of mass culture has supported the increased importance of communities of interest (Soja, 1989, 1996; Maffesoli, 1996; Giddens, 1984). The environmental movement is an example of how spatially remote communities of interest can have an important impact on remote rural areas, entering the debate on legitimate uses of rural land and influencing consequent public perception and government legislation.

The various types of CWs can be divided into two categories:

- Trusts and companies limited by guarantee, which include all residents on the electoral roll as members.

- Co-management agreements and partnerships, which involve people who are not necessarily resident in the local area, for example partnerships with large NGOs and the various wildlife and environmental trusts which contribute their lands to agreements.

In this case, a community of interest could actually engage in activities which are opposed by the local community, even when creating and managing a CW. This has been experienced in the Highlands and Islands, particularly with the Enterprise Boards. Likewise, the participation of the FC in a CW may represent the presence of extremely influential participants located outside the community.

If we accept that communities of location represent a model of community ownership of common property, then one of the discursive interventions CWs can make is about inclusiveness and 'true' community. And that is what we find. The few formal CWT sources of literature studied so far stress that they represent the whole community, and often attach the idea of community to history, heritage and some illustration of continuity, for example in historic literature or church records. They also make references to democratic benefits, community enhancement and the importance of local knowledge and local control.

On the other hand, we would expect that communities of interest would stress the importance of their priorities, which might be:

- *environmental:* symbolic references to Nature, for example;
- *economic:* jobs, symbols of money flows;
- *heritage and history:* crofters, historic local events, livelihoods or circumstances;
- *moral:* righting old injustices, reversing the Clearances, etc;
- *national identity:* Scottish-ness.

And, indeed, initial research shows that there is evidence of this (Scottish Natural Heritage, 1995a, 1995b).

The particular interests of environmental groups, usually located in national capitals, are but one example of this. While they appear to be becoming increasingly aware of, and sensitive to, local communities and their needs, nevertheless, their institutional aims are to influence land use management so that their values become the dominant ones in rural places. Given the above, communities of location then provide a structure which can be most inclusive of the local community, and represent an important role which spatial community can play in enabling democratic access to local resources and the re-linking of rural spaces with rural residents.

Conclusion

The above represents an initial foray into the fascinating and increasingly important world of community woodlands in Scotland. As their numbers continue to grow and as they organise themselves into a corporate actor on the public and institutional stages, the impact of their assertions and aspirations will increasingly be present in new understandings of the Scottish landscape.

The diverse ways in which community woodlands can be constituted offer opportunities for a broad range of local communities to work together to provide material and symbolic resources for the reinvestment of pride, development and capacity in local culture. The investment made by these communities represents an important type of bottom-up development in Scotland and presumably represents one way in which devolution can be manifest in rural Scotland. By working together to create and maintain community woodlands, local groups will be increasing their social and cultural capital and increasing their chances of successfully maintaining and developing local cultures, creating local knowledges, and profiting from them.

At the same time, social forestry offers the FC an opportunity to demonstrate its value to the national and local culture in a time of declining timber revenues and ever-increasing limits on non-sustainable rural land use. For the foresters in the FC this represents both an opportunity and a challenge. As the public's affection for forests grows, the FC can be assured that its value to the nation will rise accordingly. At the same time, training in scientific forestry may not have adequately prepared many staff to manage the symbolic resources which can be strongly contested in the public sphere. For the FC, this phenomenon will require a change of orientation, new attitudes to the public and the acquisition of new facilitation skills.

This chapter has reported on the changing conditions, values and activities in Scotland's forest lands. Change makes for hard work whether on the part of community activists and volunteers who create the community woodlands or on the part of professionals who must respond to the change. Nevertheless, these changes would imply that forests are going to become more, not less, important in rural Scotland, and so those who love them and who labour in them can take comfort in their continued and perhaps increased significance for both local and national cultures.

Acknowledgements

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12 Public forests – public planning: helping foresters to involve people in forest planning

Max Hislop and **Mark Twery**

Introduction

Forest Enterprise (FE) is an agency of the British Forestry Commission and is responsible for the management of the forests and woodlands owned by the nation. This chapter describes the development of a 'Decision Framework' to guide Forest Enterprise managers when working with the public in forest design planning. The framework is based on participatory concepts, existing forest planning processes, an analysis of public involvement tools and discussions with forest planning teams. The result is a framework with three elements: a preliminary assessment system, to identify who should be included in the process; a flow chart detailing the process, to identify when stakeholder input is necessary; and tool sheets, to identify how involvement can be implemented. Forest managers can use this framework to help think through the 'who' 'when?' and 'how?' questions and thereby prepare a plan for involving the public in forest planning.

Forest Design Planning

Forest Design Planning is the way that FE managers make medium- to long-term plans to deliver sustainable forest management for each forest. Of the three levels of planning that occur within forest districts – strategic, design and site (Figure 12.1) – we chose to focus on Forest Design Planning because it is the most complicated, the level with the clearest statutory mandate, and the most logical place at which to start involvement.

Background

Changes in society

Over the past few decades the public's trust in, and respect of, scientifically trained professionals such as doctors, lawyers and nuclear engineers has declined (Koch and Kennedy, 1991). This trend is reflected in the public's response to high profile issues such as BSE, genetically modified crops, and recent professional misconduct cases.

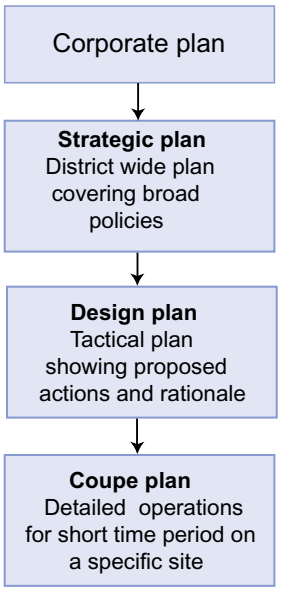


Figure 12.1 **Forest planning within Forest Enterprise**

Similarly there has been erosion of public confidence in the political process that relies on elected representatives to shape government policy. This decline in confidence is reflected in the number of single-issue campaign groups and public protests which have hit the headlines in recent years such as anti-road protests and the 'dump the pump' campaign.

Politicians and professionals (whether in the public or private sectors) have responded to these changes by attempting to make direct contact with the public and to include them in some way in the decisions that affect them. Consequently many organisations now include a 'consultation' phase in the decisions that they make and the use of the 'focus group' has recently become a byword for politicians to gauge public opinion.

Changes in forest management

In the last decade the public have increasingly recognised that forests are capable of delivering a wide range of social benefits that cannot be categorised as traditional industrial or environmental. *The UK Forestry Standard* (Forestry Authority, 1998) identifies key social aspects of sustainable forestry in the UK as rural development, access and recreation, quality of life in and around forests, increased awareness and participation, and community involvement. At the same time the public are increasingly prepared to voice their concerns about potential threats to the benefits they recognise in forests, e.g. physical changes to amenities, changes to right of access to land, loss of economic opportunities and loss of contact with forestry staff.

The changing role of foresters

Kennedy *et al.* (2001) identified the changing role of public forest managers since the middle of the last century (Table 12.1). The table indicates some of the skills that public forest managers require in the modern age. These include 'people skills' such as facilitation, negotiation and partnership working. It recognises that a broad range of expertise is required which balances the natural sciences with the social sciences and that this expertise will reside with many people. A team approach to forest management is therefore required.

Table 12.1 | The role of public forest managers (source: Kennedy *et al.*, 2001)

Mid-20th century views (1950)	Close of 20th century (1990)
Public forest managers are foresters. Foresters largely dominate public forestry planning, management and research. **Professional mystic potency era:** We manage 'for the good of the resource'. Trust us. We know 'good' when we see it, and it usually involves more efficient resource production. **Patron management:** Caring, knowing, benign, forester or wildlife biologist expert who manages public lands for the people.	Many types of professions are engaged in public forest planning, management or research, such as fisheries biologists, landscape architects, economists or ecologists. **Social value broker and facilitator era:** We manage for short- and long-term social values of sustainable ecological, socio-cultural and economic systems. **Partnership management:** Facilitate a more open, democratic process of public involvement, conflict management and broad, diverse partnerships.

Problem analysis

Complexity, uncertainty and fear

Forest managers are faced with complex decision-making processes. When making plans for the forests they manage they need to consider:

- the balance of strategic objectives (as outlined in the strategic plan)
- the appropriate levels of public involvement
- the identification and inclusion of all stakeholders
- the many participatory tools and techniques available
- the limitation of resources.

The complexity of the decision can lead to feelings of uncertainty (about what to do and the costs and benefits) and fear (of the planning process getting out of control). Providing clearer objectives in the form of policy guidance and more information in the form of operational guidance can help to reduce the uncertainty and fear.

Policy guidance

International agreements and the *UK Forestry Standard* give a clear mandate to involve the public in plans for managing public forests in the UK to a greater extent than they have been involved in the past. In 2000 FE responded to this new mandate by publishing several brochures for the public with a series title: *Forests for people, working with communities* (Forest Enterprise, 2000a, 2000b, 2000d). These brochures state the commitment to working with communities and how communities can become involved. Forest Enterprise has adapted Arnstein's idea of differing levels of participation (Arnstein, 1969) and presented five ways of working with communities (Forest Enterprise, 2000a).

Community control	Full community involvement	Partial community involvement	Consultation	Information

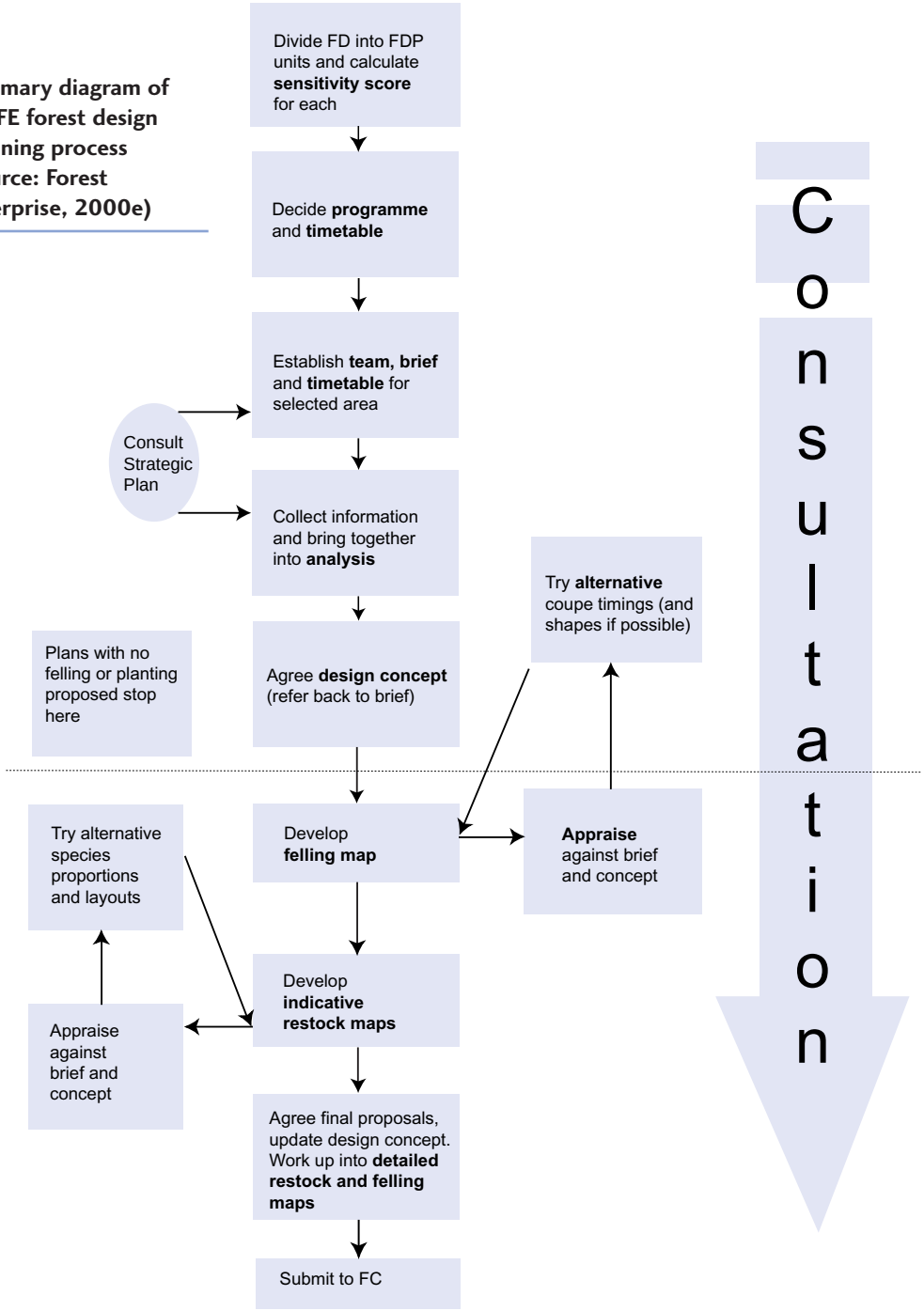
Operational guidance

New guidance in the form of Forest Management Memoranda (FMM) has been developed which is intended to support forest staff who have to meet these commitments. FMM30 (Forest Enterprise, 2000e) gives guidance to forest district staff on *Forest design planning* and FMM44 (Forest Enterprise, 2000f) outlines *Forest Enterprise's approach to stakeholder consultation.*

FMM30 contains useful details on many aspects of forest planning, but lacks specificity in public involvement, which is one of the areas where staff have the least experience and the most need.

Figure 12.2 shows a summary diagram of the forest design planning process, which indicates all the stages in the preparation of a Forest Design Plan (FDP). A large arrow that lies parallel to the entire process shows the need for *consultation* throughout the development of a FDP. Little additional guidance is provided to explain what is meant by 'consultation', let alone what is appropriate at different stages.

Figure 12.2 **Summary diagram of the FE forest design planning process (source: Forest Enterprise, 2000e)**



The need for additional guidance

These FE publications provide a basis for development of additional guidance. In discussions with managers it became evident that many require supplementary material in order to overcome some of the uncertainty and fear that inhibits greater uptake of public involvement approaches to forestry management. The guidance needs to assist foresters to reply to and implement the answers to these questions:

1. Whom to involve?
2. When to involve them?
3. How to involve them?
4. What resources will be needed?

Unravelling the complexity

In attempting to unravel the complexity of the decision-making process that forest managers are faced with, we hypothesised the following relationships:

- The greater the interest a person has in the decisions made about a particular forest the greater the likelihood that that person will get involved in the decision-making process.
- Different participatory tools work better at differing stages of a decision-making process.

We felt that if we could develop a way for foresters to consider the potential concerns of different groups of FDP stakeholders it would be possible to make plans for the involvement of those stakeholders in the planning process.

Stakeholder analysis

The starting point for our method of stakeholder analysis was a sensitivity classification for FE's forests that was developed and tested in 2000 (it has not been taken any further) which included a scoring system to assist forest managers to prioritise work. Scores were given for three factors: landscape, conservation and people.

We have adapted this approach and used some of the elements it contained as a way to analyse stakeholders and assess their likely interest in the FDP process. Initially we identified four broad categories of stakeholder that may have an interest in being involved in the FDP process. These categories (stakeholder types) are:

- professional community
- economic interests
- forest users
- neighbours.

These stakeholder types are not mutually exclusive. Any individual may be able to be categorised as one or more of the types. However, considering stakeholders in this way helps the forest manager to think through the kinds of interests, concerns and issues that a range of people may have, and not just to consider 'consultation with the locals'.

We also considered the different indicators that may help predict their level of interest in the FDP process. Table 12.2 shows the response indicators we identified for each of the four stakeholder types.

Table 12.2 Stakeholder types and their response indicators

Types of stakeholders	Examples	Response indicators
Professional community	• Government Agencies • Non-governmental organisations (NGOs)	• Conservation designations • Other designations
Local economy interests	• Councils, LEA • Tourist Boards • Business Associations • Wood using industries • Workers	• Forest employment • Regional unemployment rates • Forest industry employment • Tourist industry importance
Forest users	• Local recreation users • Tourists • Non-timber forest product (NTFP) gatherers	• Range of uses • Special places • Traditional uses • Conflicts with other users
Neighbours	• Abutting landowners • Local residents	• Proximity • Visibility of forest • Impact of woodland change on the use of their land

For example, the presence of conservation designations within the FDP area, such as a SSSI, is likely to increase the level of interest from environmental government agencies and conservation NGOs. Similarly, a FDP process in an area with potentially conflicting forest users (such as mountain bikers and ramblers) is likely to attract a high level of interest from those users or their representatives.

Analysis of public involvement tools

In the course of reviewing the literature on forest planning, public participation and decision science, over 40 public involvement tools were identified which could be used to involve the public in a decision-making process. The tools were analysed against:

- a model of decision processes
- level of stakeholder's interest
- numbers of stakeholders that the tool can involve.

Public involvement tools and stages in a decision-making process

We defined a generic decision process model based on a variety of sources in the literature (Oliver and Twery, 1999; Mintzberg *et al.*, 1976, Rauscher, 1999; see Figure 12.3). Public involvement tools were plotted against the six decision stages indicated in the decision process model (Figure 12.4). Some tools were found to be more suited to particular stages in the decision process than others.

Public involvement tools, level of stakeholder's interest and numbers of stakeholders

We also plotted public involvement tools against the levels of participation referred to in *Working with communities in Britain; how to get involved* (Forest Enterprise, 2000a) and the numbers of stakeholders that might be involved in the decision process (Figure 12.4).

Figure 12.3 **A generic decision process model**

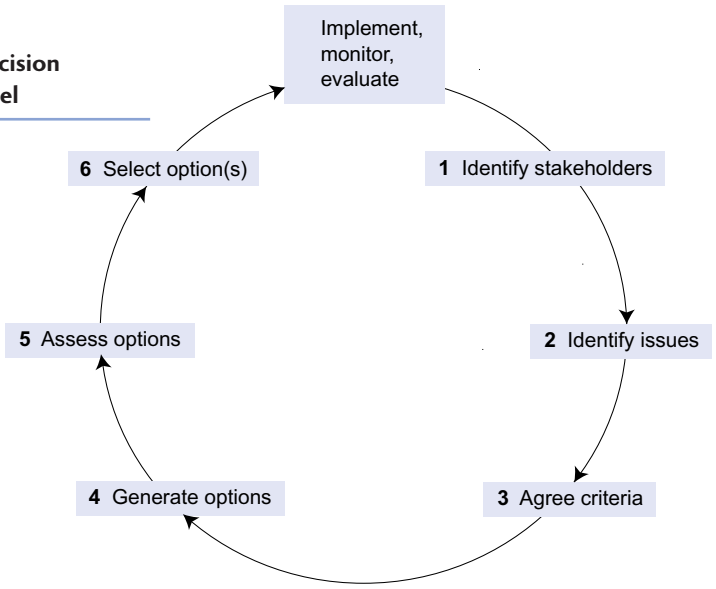
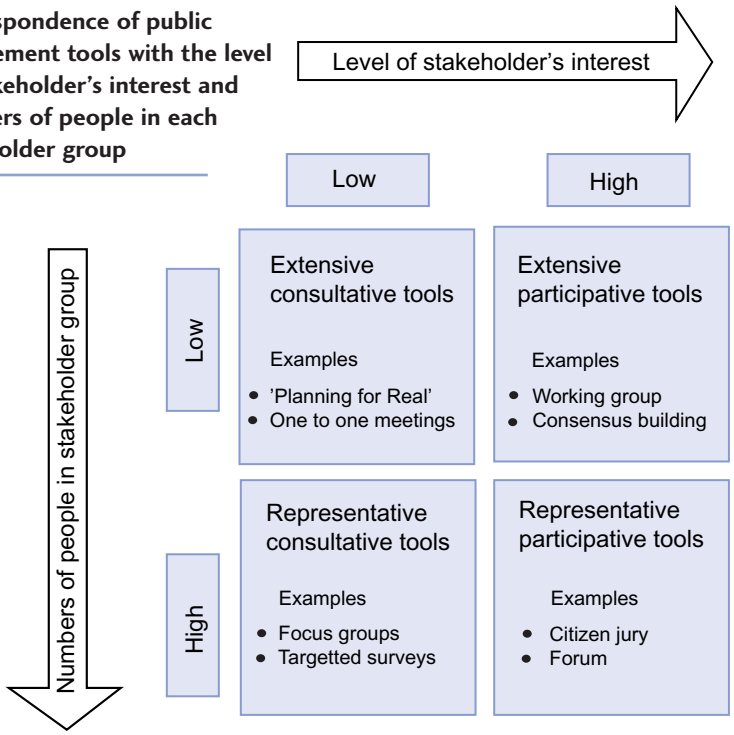


Figure 12.4 **Correspondence of public involvement tools with the level of stakeholder's interest and numbers of people in each stakeholder group**



The prototype decision framework

We concluded that the decision framework for public involvement in forest design planning would need to consist of three primary elements:

1. A *preliminary assessment system* to begin to identify who should be included.
2. A *revised flow chart* linked to existing guidance to identify when involvement activities are needed.
3. A set of *tool sheets* to identify how involvement can be implemented.

The entire framework is designed to be used by the district staff to help them identify for themselves whom to involve, which tools to use, when in the process to use the tools and what resources will be needed. At each stage there is considerable latitude for judgement by the district staff, including exactly which tools to use and how to apply them so that the best public involvement process can be designed to suit the particular circumstances.

The preliminary assessment system

The preliminary assessment system helps the manager to consider the question: *Whom to involve?* and allows an estimate of the potential level of their involvement, and recommends appropriate tools to engage with and involve those stakeholders. The system allows the manager to consider the question: *How to involve them?* by making an initial attempt to estimate which tools are most likely to result in successful involvement, through analysis of the types of stakeholders, the intensity of their concerns and the number of people involved. Each of the four stakeholder types is analysed separately because the appropriate types of involvement tools are likely to differ. The manager is provided with assistance to categorise tools to fit stakeholders.

The system provides score sheets for each of the stakeholder types indicators (Table 12.3). The score sheets pose questions for the manager to answer based on the response indicators outlined in Table 12.2. The resulting intensity score is used to find suggested public involvement tools on a recommendations table (which is based on the analysis shown in Figure 12.4). This is repeated for each stakeholder group.

This system provides the manager with the option to develop a *Public Involvement Plan* for tools to be used with a range of stakeholders, both now and into the future.

The revised flow chart

The flow chart is adapted from the original guidance in FMM 30 (Figure 12.2) and includes details of public involvement, and allows the manager to refine further the choices of tools to use, based on the decision stage to which the planning process has progressed (Figure 12.3).

The revised flow chart now has three columns (Figure 12.5). The second column is a representation of the original FMM30 flow chart. The other two columns replace the 'consultation' arrow shown in Figure 12.2. In addition they:

- add detail to the process including stakeholder input;
- indicate the decision stage as identified in the generic decision process model (Figure 12.3).

Table 12.3 | An example of a score table from the preliminary assessment system (forest users stakeholder type)

Forest users	Examples of forest users: dog walkers, cyclists, picnickers, horse riders, walkers, mushroom and berry pickers, car rallies, bird watchers

- **Step 1: Circle the appropriate number in each row for each question.**
- **Step 2: Add the score for each question along the row and enter the sum in the total column.**
- **Step 3: Find suggested tools in the recommendations table by cross-referencing scores and expected numbers for each type of stakeholder.**

Stakeholder group (score each group separately)	Do any of the groups have traditional uses of the FDP area?		Do any of the groups value the FDP area as a 'special place'?		What concern have user groups expressed about management of the FDP area in the past?			What level of conflict would you expect amongst users or between user groups?			**Total**
Who uses the FDP area?	Yes	No	Yes	No	H	M	L	H	M	L	
Community group/ 'Friends of ...' group	3	1	3	1	3	2	1	6	4	2	
Local people, daily use (e.g.dog walkers)	3	1	3	1	3	2	1	6	4	2	
Day trippers	3	1	3	1	3	2	1	6	4	2	
Tourists	3	1	3	1	3	2	1	6	4	2	

The revised flow chart provides the manager with the information necessary to decide when in the FDP process it may be necessary to involve stakeholders.

Tool sheets

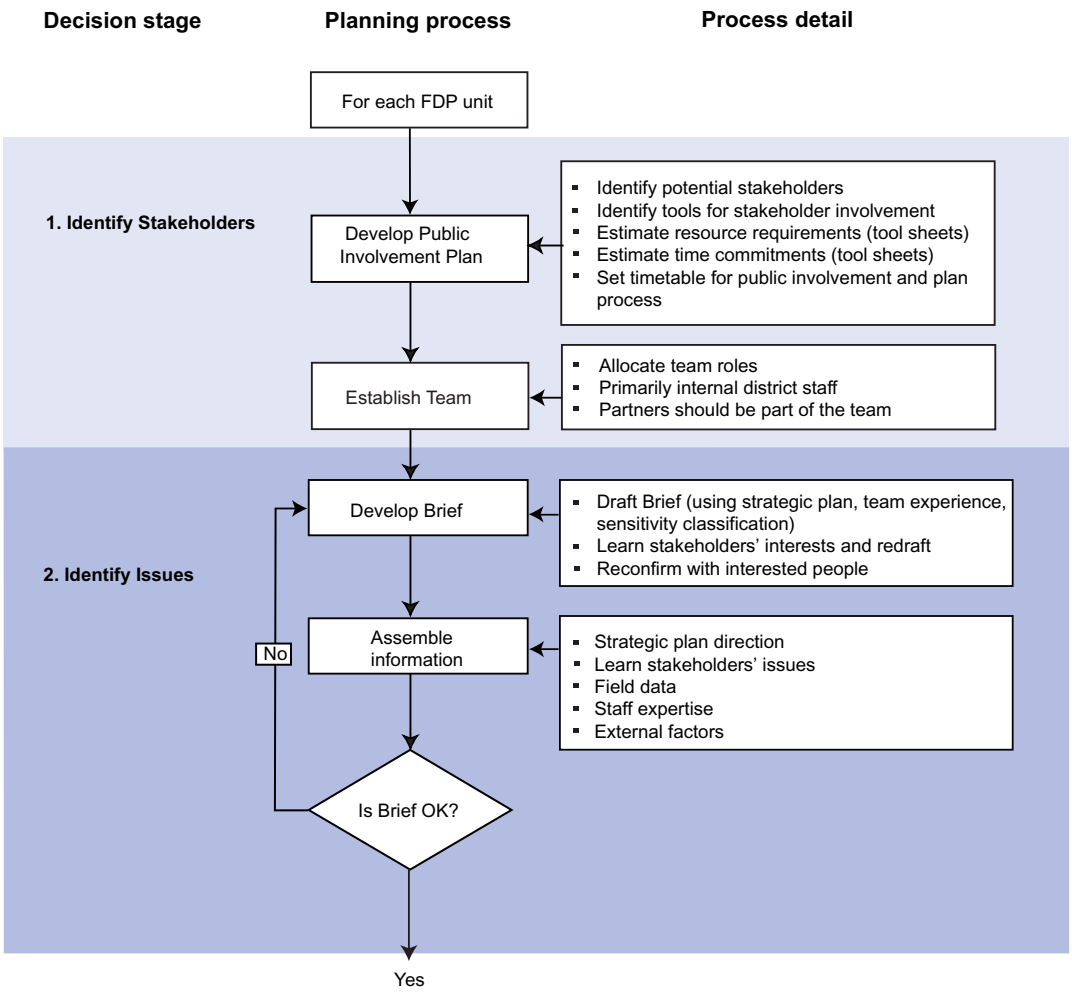
The tool sheets provide a set of reference materials for the manager to use when considering the question: *What resources will be needed*? and assist in making final selections of which methods to implement. The tool sheets provide information on what resources (skills, time and equipment) are needed for each, as well as a short evaluation of each technique and references for further information. Together they provide an efficient means for a manager to evaluate options. They provide the manager with the information necessary to judge how to balance the two sides of the question, *What can I do with what I have?* or *What do I need to get to do what I need to do?*

Each public involvement tool was assessed for its appropriate use at each of the six decision stages shown in Figure 12.3 and the resulting Figure 12.4 assists the forest manager to relate the public involvement tools to the forest design planning process shown in Figure 12.5.

Conclusions

One of the strongest lessons learned through this process, by listening to forest managers and through reading the literature, is that the process of public involvement is not easy and each situation requires its own solution. For this reason mechanistic approaches to public involvement are inappropriate. The framework we have developed is intended to be a guide to forest managers so that their confidence is increased when working with the public in forest design planning. The framework is mechanistic only in so far as it helps forest managers to think through the public involvement process and identify for themselves a solution to their particular context.

Figure 12.5 **Part of the revised forest design planning flow chart**



Fear of the unknown among managers is an understandable reaction to the mandate to involve the public in planning. Any new challenge involves some fear, and people management skills are not often well developed among members of the forestry profession. Fears need to be reduced by increasing knowledge about working with the public. We are hopeful that the framework we are developing will help provide a beginning to the process of evaluating how much skill, time, equipment and money will be needed to accomplish successful public involvement in forest design planning.

The framework is still in development and will be field-tested in some FE forest districts in 2002. The development, implementation and effectiveness of a public involvement plan derived though the framework will be assessed and the results will be used to refine it before it is more widely disseminated. In the meantime several publications are in preparation which will describe the prototype framework more fully.

In time, as foresters develop their understanding of public involvement processes, and gain confidence in designing a process appropriate to the context in which they find themselves, the framework described here will become superfluous.

Acknowledgements

We wish to thank all the Forest Enterprise District Staff who assisted us in the development of the Decision Framework by giving so freely of their time. Funding for this work has been provided by the Scottish Forestry Trust, the Policy and Practice Division of the Forestry Commission, and the USDA Forest Service, Northeastern Research Station.

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13 Valleys woodlands for valleys people

Antony J. Wallis

Background and introduction

The South Wales Valleys comprise an area bounded by the M4 in the south, the Brecon Beacons in the north, Monmouthshire in the east and rural Carmarthenshire in the west (Figure 13.1). It is typified by steep valley sides and narrow valley floors which carve through an upland plateau which rises to 600 m. During the 19th and early 20th centuries, the Valleys communities expanded rapidly in linear fashion along the constricted river valley floors, in the exploitation of indigenous minerals and the production of iron and coal. Today some 1.7 million people live in and around the Valleys area.

Immediately following World War I, when many of the country's woodlands had been denuded for the war effort, the Forestry Commission was established to create a strategic reserve of timber for Great Britain through a programme of afforestation of primarily coniferous species. In these early days great importance was attached to the social role, especially generating employment. Many early acquisitions of land were in the South Wales Valleys, on both the valley sides and the upland plateaux. A period of further expansion followed World War II, and today some 27 500 hectares (over 100 square miles) of land in the Valleys is managed by Forest Enterprise (FE), making the Valleys forest the largest urban forest in Europe. Visually, the Valleys are dominated by the forests and woodlands created over the last 80 years. Many Unitary Authorities contain substantial areas of woodland cover, for example nearly 30% of the land area of Neath Port Talbot County Borough is managed by FE.

While the young forest was expanding and growing, the industrial base of the Valleys was in gradual decline, so that today both iron and steel and coal production are a mere shadow of their impressive past. Consequently many of the Valleys communities now experience some of the highest unemployment and social deprivation in Britain.

The priorities for the forest estate have also evolved in recent years in recognition of the changing international environmental priorities evidenced by summits such as Rio and Helsinki. While timber production is still important – and the Valleys forest produces some 150 000 tonnes of timber annually – there has been an increasing emphasis on conservation, heritage, landscape and recreation. Most recently it has been recognised that they have an important part to play in the evolving social agenda, particularly where forests are in close proximity to centres of high population and especially areas of high deprivation.

Having painted a brief background to the evolution of the communities and the forests in the South Wales Valleys, the rest of this chapter explores how FE intends to engage communities in the future design and use of neighbouring forests, for their social, economic and environmental benefit.

The social agenda: setting the context

Following devolution, the forests and woodlands managed by FE Wales are now owned by the National Assembly for Wales (NAW). This encompasses some 6% of the land area of Wales with a substantially higher percentage in the Valleys. The NAW corporate plan, 'Betterwales.com', and other supporting policies such as 'Sustainable Wales' have provided key guiding principles which have been incorporated in terms of woodland creation and management into its Wales Woodland Strategy (Welsh Assembly, 2001). 'The principles of sustainable development, social justice and

equality of opportunity will apply to all the objectives of the Strategy'. The following principles are extracts or adaptations of the Strategy and set the context for the pilot community engagement project in the Valleys:

- **Sustainability.** The Assembly is committed by statute and choice to sustainable development. The woodlands of Wales have a key part to play in achieving the triple goals of social, economic and environmental development.
- **Social inclusion.** Through community involvement, local people can help woodland owners ensure that opportunities are provided for economic development, recreation and preventative health care through greater access to fresh air and exercise close to where they live.
- **Quality.** Welsh woodlands must deliver quality outputs whether through recreation, timber production, community involvement or their visual and aesthetic impact.
- **Partnership.** Only through effective partnerships between the public, private and voluntary sector will the social, economic and environmental objectives of the Strategy be achieved.
- **Integration.** Woodlands have a part to play in community regeneration, linking across programmes of the Assembly at national, regional and local level.

These principles also complement the objectives of the NAW 'Communities First' initiative.

The FE Wales community consultation project

The project objective

To research, test and evaluate methods of delivering community aspirations for their forests.

It was decided to undertake the project in six pilot areas across the Valleys. This is an estimated 10% of the total number of community consultation areas which would be needed to cover the whole of the existing Valleys forest estate and a range of conditions in the Valleys communities as set out below.

Criteria for pilot community selection

- Choose project areas that are situated within the South Wales Valleys.
- Existing FE forests must be in close proximity to communities.
- Incorporate as many Unitary Authority areas as possible.
- Target mainly areas of high social deprivation.
- Choose areas with different local issues, for example:
  - Closed or open valleys
  - Communities of different size
  - Current or past mineral activity and industrial dereliction
  - Recreation provision or potential
  - Tourism potential
  - Conservation interest
  - Negative influences – fires, tipping, vandalism, trespass
  - Extent of current woodland management.
- Avoid geographical overlap with a Cardiff University research project – Forestry, Community and Land in the South Wales Valleys.

The pilot communities

Table 13.1 shows the six project areas, their perceived characteristics and comments or anticipated opportunities arising from community involvement.

Table 13.1 Characteristics and anticipated opportunities for the six pilot areas

Pilot area	Characteristics	Comments/opportunities
Abertillery Blaenau Gwent CBC	Most deprived status Under-managed woodlands Poor access to woodlands No recreation provision Lack of FE knowledge Dominant in landscape	Social inclusion Identify aspirations Access Woodland management Local projects Partnerships – derelict land
Abercarn, Cwmcarn and Crosskeys Caerphilly CBC	Forest Drive and VC Visually dominant, steep hillsides Major local sawmill Good public roads Mature, thinned woodlands Planted ancient woodlands Consult large communities	Partnerships – recreation and tourism Continuous cover Restoration to broadleaves Woodland employment
Seven Sisters Neath Port Talbot CBC	Small defined communities Most deprived status Active coal mining Little native woodlands Less dominant woodlands No recreation provision Limited previous contact Negative influences	Social inclusion Local ownership and stewardship Postindustrial planting Comprehensive survey Forest recreation Active regeneration groups
The Garw Valley Bridgend CBC	Most deprived status Closed valley Woodland Park underused Visually prominent forest One side of valley wooded	Perceived lack of use Derelict land opportunities Partnerships – recreation, tourism, woodland development Visual amelioration
Glyncorrwg Neath Port Talbot CBC	Most deprived status Closed valley Limited employment opportunities Forest Park links, but no forest recreation Forest fires Dominating forest	Reclamation land planting Forest recreation, jobs etc Tourism – Forest Park profile Active community groups Review repeated burnt areas Woodland aspirations
Upper Rhondda Fawr Rhondda Cynon Taff CBC	Most deprived status Neighbourhood renewal Woodland Park Dramatic landscape Rhondda gateway Industrial archaeology Negative influences Negative perception of FC past planting	Active community groups Partnership opportunities with community, public and private sectors Tourism potential Archaeological trail Cycling, horse riding Differing aspirations Woodland restructuring

The engagement process

Planning

Prior to engaging each community, it was necessary to undertake background research both into the community and into the woodland in terms of its opportunities and constraints. The background information would include identifying the statutory bodies, local representatives and local interest groups for each community.

The community consultation process

Consultation was carried out in a variety of ways including leaflet, meetings, open surgeries and questionnaires.

- *Leaflet.* An A3 bilingual glossy leaflet was produced, with a generic message, but customised front cover and photograph relating to each of the six pilot areas. The leaflet contained a clear message and questions without the use of jargon, with a targeted use of photographs to convey key messages. The leaflet was delivered to each property in the community.
- *Community group meetings.* The objective was to meet community groups at times and locations when they normally met with the aim of minimising disruption and ensuring maximum attendance. Groups targeted in each community included: senior citizens, community or town councils, youth groups, sports clubs, women's groups, specialist interest groups and every school. In the case of schools, an art competition was held with one or more classes, for which prizes were awarded to the winners and the participating school. At the meetings, FE Wales Rangers, supported by foresters and other Forest District staff, acted as facilitators. The purpose of each meeting was to inform the group about the consultation exercise and then by a process of questions and facilitation, give them an opportunity to input into the future design and use of the forest. Notes of the aspirations and comments were taken at each meeting on a standard pro-forma for later evaluation.
- *Guided woodland walks.* Unfortunately the outbreak of foot and mouth disease occurred just after starting the first pilot in February 2001, so that no woodland walks were possible. There may be opportunity for a few walks towards the end of the pilot, in conjunction with open surgeries, in order to test their efficacy.
- *Open surgeries.* It was decided at the outset that the main emphasis would be on engaging community groups, so that if a later public meeting or surgery was dominated by one or two individuals, it would neither colour the whole of the consultation process nor influence the data already collected. Such surgeries were however considered necessary to ensure that in addition to responding to the leaflet, everyone had the opportunity to contribute. Open surgeries were publicised in the local media by posters and by advising the community groups previously engaged.
- *Project area videos.* A professionally produced 8-minute video relating to one of the project areas was made in the belief that the vivid imagery showing views and features that people know may be more readily understood than maps and script. This is currently in the process of distribution with feedback forms in order to analyse the efficacy of this engagement technique.
- *Questionnaires.* The purpose of questionnaires was primarily seen as a means to benchmark, before and after the engagement process, the community's knowledge and understanding of FE and use of the forest. It was not considered that questionnaires could be used as a major technique in the engagement process, due to difficulties in closing the feedback loop and

informing participants of the outcome of their suggestions. The questionnaires are primarily postal but some are face to face and by telephone in order to evaluate which, if any, is most effective.

Engaging other stakeholders

It is important that all key stakeholders are consulted in the forest planning process. This includes FE's statutory consultees, namely the Forestry Commission, Unitary Authorities and the Countryside Council for Wales. Recognising that a number of Unitary Authority departments may wish to have an input into the process, reflecting the cross-cutting themes of many NAW policies, Woodland Panels have been set up by FE in all the Unitary Authority areas of the Valleys. Each panel considers major policy themes so that a concept forest plan of key sensitivities, constraints and opportunities can be developed.

Elected representatives – NAW Members, Councillors and Community Councillors – are also kept fully informed during the process. They are showing an increasing interest in being actively involved.

Interim analysis from community consultation

The pilot project has yet to be completed, but the consultation exercise has already produced a number of important results which are worth noting. In essence they reflect and support many of the changes in policy and emphases identified in the Wales Woodland Strategy. These can be summarised as follows:

- Less harsh landscapes: reduced clearfelling, move towards continuous cover or other lower impact silvicultural systems. Greater use of thinning to reduce crop density and increase light penetration.
- An increase in native deciduous species, particularly broadleaves, providing seasonal and structural diversity.
- More open space, and more internal views from the forest looking out.
- Improved access for various recreational activities – mostly quiet pursuits.
- Increase in local jobs through tourism, recreation and woodland products.
- Environmental improvements for the community, e.g. light, landscape and water run-off.
- Potential for partnership projects in the community using the forest as a resource.
- Opportunity for local 'ownership' and representation through Volunteer Community Rangers.
- Relationship building with the community and other stakeholders – vital for effective and responsive stewardship of the forest.

The implementation process after consultation

Since the pilot project has yet to be completed, this section sets out latest thinking on how the information collected from both the community engagement process and woodland panels can be incorporated into the new forest plans and also into active management.

It is considered essential that communities feel fully involved in the detail of the forest plan process. Having therefore obtained considerable information from the extensive consultation exercise, this is analysed and given to the forest plan designer along with the key themes, policies and concepts emanating from the woodland panels. The designer, armed with this information and other relevant information including archaeological and conservation data, rights of way, crop data (e.g. age, species, growth rate, thinning history), soils, topography, water courses, exposure and

legal constraints, can then produce a draft forest plan. This can then be brought back to the community for comment and amendment, before concluding the formal process with statutory consultees. It has yet to be decided how best to convey the information to the community in a relevant and meaningful way, but possible tools include photomontages, bird's-eye views and 3D imagery.

In addition to the forest plans, the consultation process will have created a number of key partnerships for the generation of projects and future management opportunities which will need to be taken forward on a sustainable basis, ensuring that both the partnerships and projects are robust. A key focus for this in the Valleys is the current availability of Objective 1 funding, i.e. European funding made available to regions whose GDP is less than 75% of the EU average.

In implementation, it is vital that communities see change taking place, not only in attitude and relationships, but in tangible changes on the ground. Whilst the forest planning process is by its nature relatively long term, forest planners and designers will have in mind the need to deliver some of the aspirations and changes in the short term.

Next steps

- *Report to the National Assembly.* The pilot consultation exercise was launched by the Assembly in March 2000. An interim report is being presented to the Assembly early in 2002, setting out the results of the project, lessons learned and a costed plan of how to take the process forward to the estimated 60 other community groupings in the Valleys.
- *Roll out to other valleys communities and the rest of Wales.* FE Wales is committed to reviewing all its forest plans, through community consultation over the next 5 years. The findings and recommendations from the pilot project will enable a methodical, logical and effective means of consultation to be implemented. Inevitably, as the engagement process is further tested, there will continue to be refinements, so that continual review and revision of the most efficacious means of engagement will be essential.
- *Build on partnership potential with community groups.* It is essential that as the consultation process rolls out to new community groups, those already engaged continue to be involved. There will need to be an ongoing commitment from FE to maintain strong links with the communities, through projects, dialogue, volunteer rangers and staff committed to the local area.
- *Develop new community woodlands potential.* Despite FE's extensive estate in the Valleys, there are many communities in the Valleys and around the larger conurbations along the South Wales coast and elsewhere in Wales where FE has little or no land holding. There are considerable opportunities to develop new community woodlands in partnership with others in these areas and particularly adding value to reclaimed derelict land for community benefit. FE is looking to work in partnership with public bodies, agencies and the community for the establishment of sustainable woodlands in these areas.
- *Restructuring FE Wales – responsive to the social agenda.* FE Wales is committed to playing its part in the delivery of sustainable community benefits, particularly in the social, economic and environmental regeneration of deprived communities. From the pilot consultation exercise, it is

already clear that FE needs to increasingly target its resources to the point of delivery. Consequently it is currently looking to restructure its organisation, so that it will be responsive to the needs of the social agenda by strengthening its presence in communities.

Reference

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14 Working with communities: what does it mean for agencies?

Alexander T.T. Smith

Introduction

This chapter provides an outline of anthropological field research which is being conducted during 2001–2002 on the practices employed by public agencies seeking greater engagement with rural communities. The purpose of the research is to study the interface between, on the one hand, the Forestry Commission and its constituent agencies (Forest Enterprise and Forest Research), and on the other, its clients and stakeholders, particularly in southwest Scotland. Because of the recent formation of the Scottish Parliament, the question is raised as to whether devolution provides a context that charges such practices with additional significance since many agencies now accountable to the Parliament must cultivate a distinctly Scottish voice.

In the chapter the following questions are asked, which are central to the proposed research:

1. How does public consultation effectively contribute to the articulation of an authentic, transparent and accessible Scottish policy agenda?
2. How might these practices contribute to constructing and legitimising political authority at the local and national levels in post-devolution Scotland?
3. How do they contribute to the formation of national identity?

The study includes anthropological methods to investigate these questions in relation to the Forestry Commission (FC) within a devolved institutional landscape. Recognising that the work of the FC can be placed in a wider social, historical and political context that draws on national and international examples and developments, the study questions whether public consultation and a closer engagement with rural communities carries additional resonance in post-devolution Scotland.

The research will contribute to broader debates on devolution, regionalisation and governance due to its concern with the relationship between the need to engage more closely with rural communities and the ongoing structural transformations taking place in Scottish institutions. This study is informed by the growing and significant anthropological literature exploring nationalism, identity and, especially, 'the state' (Borneman, 1992; Bourdieu, 1998; Darian-Smith, 1999; Ferguson, 1990; Gupta, 1995; Herzfeld, 1993; Shore, 2000; Taussig, 1997; Verdery, 1993).

Why anthropology?

Put simply, anthropologists are interested in identifying participants' understandings of their social world and its rules of operation, in order to appreciate how their behaviour and attitudes influence their culture. Typically, anthropologists engage in prolonged ethnographic fieldwork among the groups they study. Shore (2000), who recently completed anthropological research with European Union civil servants, has observed that anthropologists 'study social action *in situ* and from a personal yet cultural perspective', which calls for 'a commitment to "being there" in the presence of the people one is studying':

> In this respect, the 'subjective' dimension of the fieldwork encounter (including one's own emotional and intellectual engagement) constitutes a major part of the research data … [because] quantitative approaches alone can never succeed in grasping the subtleties or complexities of social reality.

The defining characteristic of anthropological research methods, this commitment to participant observation, demands an intense immersion by the anthropologist in the social and cultural worlds of the people he or she intends to study.

Finally, this research can be viewed in relation to the work of several other anthropologists who have recently engaged in research on a variety of private and public institutions in post-devolution Scotland (Cohen, 1996, 1997, 1999; Hearn, 1996, 1997, 1998, 2000).

Why the Forestry Commission?

The Forestry Commission (FC) is an organisation of particular interest. Established in 1919, the FC is a long-standing public institution with its own history and traditions, and continues to exert considerable influence in rural Scotland. Yet, in keeping with the present Government's stated policy intentions to encourage community participation in decision-making and promote social inclusion, the FC has made genuine efforts to engage and consult rural communities. Of particular significance in Scotland is *Forests for Scotland: The Scottish Forestry Strategy*, launched in November 2000 after extensive public consultation by the FC.

Post-devolution Scotland provides a challenging institutional context in which the FC must now operate. Indeed, governing pre-devolution Scotland was already a complex and multi-layered business: one anthropologist observed a 'spectacle' of agricultural and governmental institutions impinging on the lives of hill sheep farmers in the Scottish borders (Gray, 1996; 1999). Following Scotland's enthusiastic support for devolution in the 1998 referendum, this image of entangled institutions was further complicated on 1 July 1999 by the establishment of the first Scottish Parliament in 292 years (Jones, 1999).

Partly in response to the changes prompted by the creation of the Scottish Parliament, the FC devolved its internal administration to three 'National' Offices in England, Scotland and Wales, while continuing to locate its UK Headquarters in Edinburgh. It now interacts on a number of levels with a range of other agencies in addition to those with which it was already working. For instance, the National Office for Scotland is now accountable to the new Scottish Parliament/Executive, but it also maintains close relations with other agencies and quangos like Scottish Natural Heritage (SNH). One example of inter-agency engagement at the national level in Scotland was the inclusion of a representative of the FC – Scotland's largest landowner – in the Land Reform Policy Group, which was originally set up by the Scottish Office (now the Scottish Executive).

Within this context, public expectations of institutions like the FC can radically differ at local and national levels. The study aims to explore at both of these levels the interface between the FC, its various clients and other stakeholders. Throughout the fieldwork, potential exists for regular and ongoing feedback to the FC, and for sharing questions and ideas raised during the research at conferences and workshops and in reports.

Why Dumfries and Galloway?

Fieldwork for this research extends from summer 2001 to winter 2002. This time is roughly and evenly divided between Edinburgh and southwest Scotland with a base in Dumfries, the administrative centre for the southwest and thus the location for the Area Offices of the FC, SNH,

the Scottish Executive and other agencies, as well as the Dumfries and Galloway Council.
Southwest Scotland is of analytical interest for three reasons.

1. The Forestry Commission has had a strong presence in Dumfries and Galloway since its earliest days; forestry continues to contribute significantly to the local economy.
2. Dumfries and Galloway is one of only two regions in Scotland that voted against the Scottish Parliament having tax-varying powers at the 1998 referendum. It might therefore be reasonable to expect in this part of rural Scotland a range of attitudes towards the Parliament and its associated institutions.
3. Southwest Scotland considers itself 'invisible' in the new Scotland because of a local perception that 'rural' interests are often equated with the Highlands and Islands by urban policymakers; it is an area in which many consider themselves marginal to the articulation of a rural policy agenda in Scotland. The 'invisibility' of Dumfries and Galloway is certainly reflected in the social science literature of Scotland, with three exceptions worth noting here. Campbell (1991) has published an excellent study of land ownership and rural society in southwest Scotland prior to 1914, thus constituting a welcome historical resource pre-dating the founding of the FC. In addition, a recent sociological study of identity constructions among the landed elite drew briefly on the southwest (Bechhofer *et al.*, 1999; McCrone *et al.*, 1998), as did Jedrej and Nuttall (1996) in their ethnography of urban-rural migration in Scotland.

Fieldwork in Dumfries is focusing on the interface between the FC and its clients, as well as other organisations like SNH, the Dumfries and Galloway Council, and civic groups including the Royal Society for the Protection of Birds and the Scottish Landowners' Federation. In addition to structured interviews with members of these agencies, regular, semi-structured interviews are taking place with a core group of informants drawn from these and other relevant organisations.

Participant observation is also being conducted in the following ways:

- public meetings
- local festivals
- social and other events sponsored by or of interest to the FC
- surveys of local and national media, including newspapers, radio, television and the internet.

Together with legislation, annual reports, promotional publications and other government documents, these texts will form the basis of an analysis of the role public consultation plays in official and popular constructions of political and legislative authority, as well as national identity.

Devolution

Following the Dumfries-based fieldwork, the plan is to work closely with the FC at the strategic, policy level in Edinburgh. Using research methods similar to those employed in southwest Scotland, valuable data will be generated which can be compared and contrasted with the rural-based component of the study. Most importantly, the interface between the FC and various other government institutions and civic organisations will be analysed at the national level.
These institutions include the Scottish Executive and the new Parliament, which now 'competes for

legitimacy and prominence in a crowded governmental space' with both Westminster and Scottish local government (Parry, 1999). To this space can be added the various administrative levels of the European Union/Community, and those civic organisations, institutions and traditions that survived the Act of Union in 1707 and the subsequent 'adjournment' of the medieval Scottish Parliament, which enabled Scotland to function with considerable autonomy (Paterson, 1994).

How government institutions in Scotland will come to function within this institutional context is still very much an open question. However, contemporary Scotland presents a unique and innovative opportunity to study the practices involved in re-establishing national identity in a Western governmental setting. This is because the proposition that Scotland is a nation has been largely undisputed since the nineteenth century (Alter, 1994), particularly by Scottish analysts. McCrone (1992) argues:

> It is indubitably clear that Scotland survived the Union of 1707 as a separate 'civil society' and as a nation, and that, if anything, its sense of difference and identity has grown rather than diminished.

The research positions national identity as a meaningful category in Scottish politics and this raises the question of how Scotland should be governed and administered, and who should be responsible for this. Scotland may now have a Parliament but public consensus on a range of issues does not yet exist. Compounded by a perceived need among some to demarcate a sovereign space of legislative decision-making apart from Westminster, public agencies and civic organisations may well engage to win 'the right to define and dispose' the (public) interest of Scotland (Cohen, 1997).

Authenticating a unique, Scottish policy agenda may not just involve much closer engagement with rural (and urban) communities. Such an agenda could evolve with the benefit of an indigenous (Scottish) political theory and scholarly tradition, distinctive legal and educational systems, and sophisticated documentation. But *the modern Scottish Parliament and its associated institutions are now transforming in the full play of public scrutiny and debate.*

These are just some of the issues to be considered during the fieldwork. They draw attention not just to the political claims Scotland 'makes' but also the processes by which political claims 'make' Scotland (Hearn, 2000). Working more closely with rural communities might make sense across Britain for reasons that appear largely taken for granted, but what does it mean for public agencies like the FC, in part engaged in formulating a distinctly 'Scottish' interest in the post-devolution context?

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Questions and answers

Rhys Evans presentation

Q **Gill Clark**
What can the Forestry Commission gain from this work?

A **Rhys Evans**
I would rather ask: What does the Forestry Commission wish to gain? I think that forestry is becoming more popular and will be in a position to gain a higher profile, one that approaches people's current affections for farming.

Q **Paul Milbourne**
How are you researching this?

A **Rhys Evans**
I am interviewing representatives of community woodlands in Scotland, analysing policy documents and reviewing publications. I am also looking at case communities and how they work with community councils, landowners and the Forestry Commission.

Max Hislop presentation

Q **Bishnu Upreti**
There are many conflicts between users and foresters. Your toolbox did not show how to manage conflict.

A **Max Hislop**
If there is a conflict situation then some participatory technique might be useful to help resolve that. The toolbox we have devised is to help foresters; it does not advocate which tool to use. It is to be used as a guide and gives foresters an idea of the range of options available which they might want to consider using.

Q **Robin Grove-White**
I thought it was an interesting presentation. What role do you see for social research in relation to this model? The categories of stakeholders in the flow chart are questionable from the point of view of a social research question; they are derived from a forester's perspective.

A **Max Hislop**
These are the results of a short piece of work with limited experience. You can put different stakeholders into the model. The main questions would still apply such as: Who are the stakeholders? When should they be involved? How should they be involved? This model has to be tested and social scientists can help us in this process.

Antony Wallis presentation

Q **Mike Cherry**
Have you considered issues of access for socially deprived urban people?

A **Antony Wallis**
We are trying to engage in partnerships to involve 'the excluded' in Cardiff and Swansea. We are looking at how we can create community woodlands in Newport and Wrexham.

Q **Mike Cherry**
Would you still use the community participation process?

A **Antony Wallis**
Yes, definitely. It is no use having what the community does not want.

Comment **Paul Selman**
Thank you for your inspiring talk. I think we have to be careful of a new institutional mind-set which says that there is only one participatory approach. There are different interpretations of community participation. I am concerned that this might become the only model.

A **Antony Wallis**
I agree, but we are trying to find out what communities want. The higher socio-economic groups knock on our door but not the other groups. So we need to find ways of reaching these groups and discovering what they want if we are to be more inclusive. It's a dynamic which will evolve, and we will review how this pilot has been carried out.

Comment **Rod Leslie**
In the Forestry Commission we are testing and changing very rapidly. There is no rigid best model. In the past we used to have public meetings when we wanted to find out people's needs, or to hold a discussion. Now we need to be ready to experiment and change. Each community is different and we have to think anew each time.

Q **Alex Dauncey**
You talk mainly about consultation. Is there institutional fear in Forest Enterprise for going further up Arnstein's ladder and giving more control to communities?

A **Antony Wallis**
It depends what people want. We try to find this out and help to deliver what they want. People in the Valleys do not want ownership; they want to tell the Forestry Commission how they want the woodland to be managed.

Alex Smith presentation

Q **Alex Dauncey**
I am fascinated by the ideological underpinning of this work and how you might possibly find a way that forestry could be a tool in building Scottish identity. Does identity exist or are you building it?

A **Alex Smith**
Forestry is not integral to Scottish identity and just because we are interested in forestry does not mean other people will be. Scotland's governmental institutional context will be a forum in which the debate about Scottish identity will take place. The Forestry Commission is part of that forum and therefore potentially part of that debate. I am interested in how national identity is expressed through institutions.

Q **Lawrence Kitchen**
Did you consider entering communities and carrying out your research without telling people, so that they did not know that you where doing research?

A **Alex Smith**
These are important ethical issues for anthropologists. We concentrate on going into areas with our cards on the table and try to build trust with local communities. I think it is considered questionable these days to study groups without telling them that they are being researched.

Q **Juliet Harvey**
What will the Forestry Commission gain from your PhD?

A **Alex Smith**
There is scope for me to develop a relationship with Forestry Commission staff in southwest Scotland. My assistance comes free in a sense. In terms of the possibilities this work presents, we can talk about public participation and how it might affect the way in which agencies transform as a result of this type of work.

Open discussion: day one and day two

Chairs Victoria Edwards and Gareth Wardell summed up each speaker's talk very briefly. Speakers came to the front so that they could answer questions directly.

Q Paul Tabbush

I want to ask about the public participation methodology, the modelling approach. It seems to be a reductionist approach to research which is expert driven, based on individual choice, and following representative democracy. Should we be seeking more contextualist approaches to research which are inclusionary, involve participative democracy and look at social meanings and values?

Comment Max Hislop

Yes, some would call it action research – you go out and involve people and adapt.

Comment Paul Selman

The idea of including public voices can seem quite radical. It's the new rationale – almost standard practice; it will achieve some things very well. We need practice and research that will be radical.

Comment Robin Grove-White

One of the challenges for the Forestry Commission is to understand the meanings that exist in people's minds. There is, now, a body of social research about how people experience the environment. If models are established without reflection on the meanings people associate with woodlands and what they value about them then they will not get the benefit of what is out there. Social research can illuminate what you do and add intelligence.

Comment Steve Evison

We need process indicators; it's not the point you reached but how you got there. Who is coming to each meeting, for example? Initial discussions with people are often quite superficial and we need to go beyond this to find deeper meanings.

Comment Paul Selman

I would reinforce that. There is research going on to do with LEADER partnership projects, which sometimes reinforces social exclusion by bypassing some groups.

Comment Jon Pickering

In my research I am looking at who is already participating.

Comment Victoria Edwards

There is a New Forest consultative panel with so-called 'representatives' of various groups but are they representative and do they feed back to their organisations?

Comment Kate Studd

There is a danger in the reductionist approach; there is not much talk of capacity building among the staff. How much will the Forestry Commission have to explain to its staff how and why they are doing this participatory work?

Comment **Max Hislop**

We have identified the need for new skills for foresters; we need a different type of person than in the past. We need to develop skills in facilitation and participation. The Forestry Training Services are going to develop a training course on involving people in forestry.

Comment **Antony Wallis**

We need more people on the ground. We have used our ranger resource but there is a gulf between them and other staff; capacity building within the organisation is vital to this. Some will take up the challenge but some will not. We cannot afford to leave our staff behind.

Q **Victoria Edwards**

Are any other organisations involved in capacity building with staff in relation to public participation?

A **Robin Grove-White**

The Environment Agency is actively looking at this.

A **Hilary Miller**

Staff in the Countryside Council for Wales are engaged in this.

Comment **Bill Slee**

I am worried that economics is being thrown out. The Forestry Commission is in danger of neglecting some of these issues. There is still a strong case for economics and looking at economic values. If we ignore these we ignore the real world around us.

Comment **Marcus Sangster**

The Forestry Commission has a large programme of economic research.

Comment **Alan Stevenson**

We have to be aware of professional elitism and be careful not to fall into the trap that we are poor communicators. In the brown booklet *Working with communities in Britain* we brought in a professional communicator to write the words. We need to communicate effectively to make progress.

Comment **Victoria Edwards**

Forestry Commission staff have said to me that they now have to act as facilitators, negotiating all the time.

Comment **Nigel Lowthrop**

I think we are forgetting private woodland owners who are sometimes undertaking innovative projects.

Workshop outline and discussion groups

Four workshops were convened at the conference. Participants in each workshop considered one topic of current importance in connection with social science research into woodlands and the natural environment. They debated and discussed these issues, raised questions for further research and suggested possible approaches for carrying out that research. At the end of the workshop sessions, each chair reported back to all the conference delegates the main points that had arisen in their discussions.

The workshops were held on the second day of the conference and focused on stakeholder analysis, environmental values, public participation in environmental decision-making, and social sustainability. The wide variety of delegates made positive contributions to the workshop discussions. They outlined their own ideas and experiences and debated how research could be taken forward to improve the current knowledge base and work towards solutions to existing problems. Rapporteurs took notes in each session and these have been produced as outlines of the main points and suggestions raised and discussed.

Workshop 1

Stakeholder analysis

Chair: Bill Slee *Aberdeen University*
Rapporteur: Paul Tabbush *Forest Research*

Participants

Alison Dyke *Reforesting Scotland*
Paul Finch *Forest Commission*
Alex Dauncey *Forest Enterprise*
Innes Mclaggan *University of Central Lancashire*
Kate Studd *University College London*
Paul Selman *University of Gloucestershire*
Jim Dewar *Forest Research*
Bill Birch *Yale University*
Robin Grove-White *Lancaster University*
Steve Evison *Rural Resources*
David Hills *Liverpool University*
Simon Hewitt *Forestry Commission*

Introduction

The term *stakeholder* is widely used in many arenas of contemporary policy debate and in policy implementation and practice. In relation to forestry, the term is used by organisations from the World Bank to the Canadian Forest Service to the Overseas Development Institute. In the UK, the term communities of interest is often used to identify what others call stakeholder groups. Until relatively recently, UK forestry policy was not highly participatory, perhaps in view of the strategic reasons that underpinned the development of forest policy. Vetting of forestry grants by regional advisory committees, whose representation was broadened in the relatively recent past, is an indirect form of stakeholder involvement. Equally, the ability to comment on forest grant applications is another form of stakeholder involvement. Since the late 1980s in Scotland, and more recently in England and Wales, the development of Indicative Forestry Strategies has opened up the consultation process further. In the emerging arena of peri-urban and remote rural community/rural development forestry, stakeholder analysis and involvement has come increasingly to the fore. The final stage in the emergence of a more open and consultative approach has been the development of national strategies which have included substantial consultative elements and have allowed stronger stakeholder representation.

It is almost inconceivable to think of stakeholder analysis as something independent of stakeholder involvement. In consequence, there are considerable overlaps between stakeholder analysis (presumably the identification of stakeholders), stakeholder involvement and public participation. In major areas of policy development, there has been a shift towards the recognition of the need for all affected parties to have the opportunity to engage in processes of policy formation (see, for example, http://www.epa.gov/stakeholders/), although it is recognised that the term stakeholder involvement is shrouded with imprecision. The rush towards stakeholder participation is not unproblematic. Some of these problems have been unearthed in research projects; others are self-evident, and arise from trying to handle multifunctional forestry in a postindustrial society with its complex and competing value systems.

The major problems include:

- Seeing a way through the fog of participatory rhetoric
- Identifying the legitimate stakeholders and how are they defined

- Balancing/trading off the predilections and wishes of different stakeholder groups, both lay and professional
- Balancing market and non-market benefits
- Avoiding 'capture' and dominance of projects/proposals by local elites
- Gleaning the views of the disadvantaged/excluded
- Sustaining energy and input among local stakeholders
- Accommodating change (the problem of inertia and gerontocracy in community groups).

Workshop participants focused on a number of questions and issues that they considered were particularly important and these are connected to the above outline of major problems.

What is a stakeholder?

The first issue was 'what is a stakeholder?' It could include:

- a member of a community of interest (local, regional or remote)
- a non-governmental organisation (NGO) or interested group (including local groups)
- a public body including quangos, local, regional, national or international government bodies.

The group suggested that when analysing stakeholders there needs to be awareness of who the communities of interest are or how foresters engage with communities of interest (and what problems does this throw up?). They thought that the latter question was more challenging for the Forestry Commission in its dealings with various stakeholders.

An example was raised by the chair which emphasised the difficulties of which stakeholders to engage with. This revolved around the *Donside Piper* (local paper in Scotland) headline story from Friday 15 June 2001 called 'Fence Battle'. The story described a private proposal to plant a large area of native pinewoods, to which there had been numerous objections on the basis of damage to capercaillie (as they often kill themselves on forestry fences). The stakeholders listed in the article included Scottish Natural Heritage, the Royal Society for the Protection of Birds, four councillors from Aberdeenshire (one environmental (Independent), one landowner (Conservative), two others (one Independent and one Liberal Democrat)), the Forestry Commission, the Institute of Terrestrial Ecology and the Scottish Executive. The question raised by the group was: 'Who was missing from the above list?'. They highlighted the fact that there was no mention of the local community in this list and this could have repercussions for the outcome of the proposal if local views were not taken into consideration. The article exemplifies the importance of forestry issues in that area and highlights disputes about timber production versus conservation.

Stakeholder engagement and involvement

Other questions connected to stakeholder involvement were raised and included:

- Who is (and who should be) the balancing agency?
- What procedures for reaching a decision on levels and weights (of viewpoints/values) should be put in place?

- How do we balance lay versus professional interests?
- Can there be a guiding algorithm/checklist?
- How are the views of the excluded heard?
- Is stakeholder engagement a milestone in a business planning decision or an ongoing process?
- How can momentum be sustained?
- How can elite capture be avoided?
- How readily can change (in landowner strategy or stakeholder view) be accommodated?

One of the other issues raised was: 'Why do we need stakeholder analysis and engagement?'. Workshop participants suggested that important considerations in this regard revolved around the need to build social capital through public identity, social networks and social trust. Organisations also need to build legitimacy in what they do, and involving stakeholders could be an important step in that process. They can learn from stakeholders about anything of particular importance to people who may be affected by a decision which the organisation takes. Inclusory processes are currently an important political issue and there is a need to have regard for excluded and minority groups.

Stakeholder analysis and involvement is a process in which organisations can rebuild links between people and forests and help to reconnect people to greenspace. Institutions and organisations can also learn important information from stakeholders about their needs and the issues they consider to be important. This could lead to a reduction in conflicts if appropriate action is taken by organisations. An important consideration is 'Whom do you ignore at your peril?', which suggests that major complications can arise from not involving stakeholders. The excluded will have no sense of ownership of a particular decision or project and this could cause problems if they felt that their concerns had not been taken into account. Institutions and organisations often fear opening Pandora's box and not being able to control or deal with the issues that arise from stakeholder involvement. The workshop participants suggested that there needed to be some way of ensuring benefit to those involved and acknowledgement of responsibility from the organising body.

Research needs identified

- The need to map stakeholders was emphasised in order to find out who had a stake and what it was in. A collaborative process for mapping stakeholders could be used to ensure that a whole range of stakeholders was considered. This could also allow the stakeholders already involved to name other possible stakeholders who may have been left out of the process.
- The group suggested that there needed to be a clear view of the purpose of stakeholder engagement before any exercise was undertaken. There was also concern expressed about apathy among large numbers of possible stakeholders; there is a need to consider how they might become engaged and involved.
- It was argued that clarification was needed of the different stakeholders, for example what is the importance of:
  - insider/outsider stakeholders (concerned with the level of participation and engagment)
  - primary/secondary stakeholders (connected with the level of the individual/collective stake)
  - power/influence of stakeholders
  - importance of particular issue to stakeholder.

Different stakeholders can bring various things to a consultative or participatory exercise such as money, a block vote, volunteers, and claims of rights and knowledge about a particular subject. Organisations involving stakeholders need to be aware of these things and how they might influence the participative process. The relationship between power, governance and decision-making control was also discussed.

Questions were raised about the appropriate level of, for example, decision-making control by stakeholders.

- How should the public good (woodlands and forests) be distributed?
- Which of the stakeholders is representing the wider public good, so that the process does not become side-tracked by vested interests?

It was suggested that decisions about such questions would depend on what was at stake in a particular situation and what the opportunities were for trade offs. One of the issues also considered to be important was the question of whether current stakeholder involvement was an organ of representative democracy. Which representatives of various organisations and interested groups were approached to speak for the wider public? It was debated whether there was need for a more participative democratic approach in which a wider cross-section of society could have an input into decision-making.

The participants also considered the amount of stakeholder involvement that is necessary or desirable and suggested that this would also depend on the size and importance of a particular project or decision. It was highlighted that there are often political, legal and ethical obligations that have to be met before a decision is made. The issue of excluded groups and how they might become involved also needs to be addressed. It was argued that there is no prescriptive template that can be followed for every occasion and that involvement would have to fit the purpose of the project or event.

Summary

The resource requirements needed (costs and benefits) for involving stakeholders was considered. It was argued that the cost of not involving people could be large through conflict, which could delay decisions and subsequently organisations carrying on with their work until the conflict was resolved. Costs could be reduced over time as experience in stakeholder involvement increases, conflicts are avoided or reduced and mechanisms are set in place, which make the process easier. There are possibilities for the Forestry Commission of tapping into new resources and using existing staff resources to greater effect.

The group considered the question of 'what have we learnt?'. This raised some interesting points. It highlighted a suspicion among social scientists of a reductionist approach (to environmental management) where nature is to be 'controlled' by humans through the application of scientific rationality and the free-market, based on the preferences of 'rational' consumers, rather than a contextualist approach based on participative democracy issues of justice, equity and inclusion. A positive theory suggested by participants was that stakeholder participation could build social capital but there also needs to be awareness that stakeholder engagement raises different problems in the public, private and voluntary sectors, again emphasising that one approach will not fit all purposes.

Workshop 2

Environmental values

Chair: Paul Millbourne *Cardiff University*
Rapporteur: Liz O'Brien *Forest Research*

Participants

Lawrence Kitchen *Cardiff University*
Louise Sharpe *Forest Enterprise*
Steve Robertson *Edinburgh University*
Jasbinder Ghag *University of Gloucestershire*
Alan Gee *Environment Agency*
Mike Cherry *Black Environment Network*
Rhys Evans *University of Aberdeen*
Alan Stevenson *Forest Enterprise*
Hugh Miller *University of Aberdeen*

Introduction

This workshop was concerned with the ways in which trees, woodlands and forests are understood and have values attributed to them by society. In approaching this topic, a key concern was to position trees within a broader context of shifting attitudes towards nature and the environment. A number of key themes were discussed, including:

- The complex and contradictory meanings and values attached to woodlands.
- The symbolic roles played by woodlands in shaping individual, collective and place-based identities.
- Connections between understandings of woodlands and other forms of nature.
- Appropriate research methods for capturing people's understandings of woodlands and nature.

The complex and contradictory meanings and values attached to woodlands

Defining values

Participants felt that a single definition of values was difficult to produce because values are:

- Multiple
- Shifting
- Contested
- Context specific.

There are institutional values, public values and individual values. Some of the factors that underpin values include historical and cultural issues, exposure to forests and trees, art and literature, type of forest and distinctions between trees and forests. There are values attached to both commercial woodlands and to recreation woodlands.

Values can change over time as a tree grows, as people's views change and the landscape changes. The group suggested that value equals importance to people and emphasised that there is a need to have more information on what it is about woodlands and trees that people think is significant. In the Cardiff University

South Wales Valleys project forestry was seen as having an amenity value by local communities; but to Forest Enterprise it was also seen as having monetary value. When Forest Enterprise came to harvest the timber the local people resented this and said: 'Where have our trees gone?'. This emphasises the significant role that trees can play in people's lives as part of a landscape, which they consider to be important.

The group considered important questions to be:

- How are values expressed?
- Where are they expressed?
- What values make people act?

It was suggested that awareness is needed of amazing extremes from tree haters (they are dirty, dangerous and drop bugs on people) to tree lovers (they are spiritual and visually beautiful). Trees can be frightening for people in urban areas because they may have little familiarity with woodlands. It was argued that the connection with woodlands has been lost in urban areas and studies should look at the differences in how and why people value woodlands from both an urban and rural perspective. For some ethnic minority groups the lack of woodland use may revolve around safety issues or them wanting to distance themselves from a rural and poor past in their home country.

The group debated whether new technology such as visualisation software could be harnessed, although there was concern expressed over whether computers could convey the feelings of being in a woodland. Visualisation software could be used to find out people's perceptions of what their landscape could look like.

Capturing the range of values people hold for woods and trees could provide a better understanding for the Forestry Commission of what it should be providing. There is a need to recognise that capturing values is a complex issue in which many different methods have been used in the past from economic to psychological and sociological studies.

The importance of woods and forests to health and well-being were also stressed: this could be illustrated through various recreation activities, feelings of well-being when among trees and stress reduction from time spent away from the urban environment.

Symbolic roles played by woodlands in shaping individual, collective and place-based identities

The group suggested that mythology, literature and art are important and culturally powerful and could strongly influence the values people hold for trees and woodlands and link identities (both individual and community) with the landscape. Childhood literature can help to create imaginary perceptions of woods and trees, which can have a significant effect on how people view woodlands in their adult life. One of the points raised was whether individual trees were valued disproportionately by the public as they often have their favourite tree which they frequently visit.

It was emphasised that everyday direct experiences with trees are not necessarily in forests or woodlands but in gardens, streets, parks and other public places where trees were often viewed as being a symbol of nature. The group argued that for people to value woodlands they did not have to have any particular knowledge about trees or the environment, as woodlands can be appreciated in many ways and on different levels.

Some of the main questions raised were:

- Do trees represent nature?
- What is the significance of individual trees and the meanings that are attached to them?
- Are trees and woods taken for granted and not thought about until they are going to be removed, when protest suddenly arises?
- Do we have a tree culture in Britain or have we lost the connection with woodlands, particularly in urban areas?
- Are the values people have for woodlands related to their life experience?
- Should we be making new meanings for woods and can people grow to value things that they have dismissed in the past?
- Can people's experience of woodlands change their values?
- Do people see woods as separate from the environment and general landscape?

All of these questions were considered to be important and it was thought that further research would be needed to look at these issues in greater depth.

Connections between understandings of woodlands and other forms of nature

It was argued that an important distinction should be made between trees, woodlands and forests and that the current focus of attention has been concentrated on woodlands and forests and more attention should be paid to trees and their significance. Previous studies of public perceptions have found that forests tend to be associated with large plantations which are usually coniferous, while woodlands are thought of as smaller, local and consist mainly of broadleaved trees. In opinion polls related to forestry the public generally state a preference for broadleaved woodland or mixed woodland as opposed to forests dominated by conifers.

When the Forestry Commission was 'threatened' with privatisation in the early 1990s the public were suddenly galvanised into action to protest and make their voices heard in opposition to the proposal. This concerned, among other things, the issue of whether there would be access to woodland if the public forests were privatised. Whether this concern was connected to access to land in general or to land with trees on is unclear. Forests and woodlands are components of the natural environment and it was suggested that people did not see woodlands as separate from the rest of the environment or landscape but viewed them as an integral part of it.

Research needs identified

The group recognised that research should take stock of existing knowledge such as:

- Recognition of the breadth and depth of research presented at this conference.
- The need for a more comprehensive and systematic review of values.
- The identification of the strengths and weaknesses of the current knowledge base.

Appropriate research methods for capturing people's understandings of woodlands and nature

- Representations of forestry could be studied through discourse analysis focusing on the spoken or written word and how meaning is constructed.
- Content analysis of how woods are reported and represented in the media in order to understand the communication of meaning.
- Large scale surveys (quantitative).
- Localised in-depth studies (qualitative).
- Combining different research techniques to discover differences in meanings between woodlands, forests and trees.
- Research at multi-levels looking at the local agenda and national agenda and relating this to geography, scale and type of tree cover.
- Longitudinal studies, possibly in connection with education, in which public opinion is taken, then information and education provided, and then opinion taken on whether this has had an impact. Have past attempts at educating the public alienated certain groups by, for example, the language and terminology used?
- Consideration of local opinion and opinion from outside the local area.
- What is the role of public service forestry and what contribution can different sectors make to what people want, e.g. NGO owned, community owned and privately owned woodlands?

Other research issues raised

It was considered that local distinctiveness was becoming a much stronger driver for research and a series of localised studies in different areas of Britain could be undertaken. It was suggested that any study needed to include:

- Different geographical areas
- Urban and rural perspectives
- Different types of forests
- Different localised socio-economic, political and cultural factors
- A combination of qualitative and quantitative methodologies
- Role of trees and meanings attached to them in public and private spaces
- Size of woodland
- Age, gender, class, ethnicity.

Summary

The discussions illustrated the difficulties and complex nature of trying to research environmental values. Positive suggestions were made as to how this subject could be tackled in the future and the various methods that might be applied. Capturing economic values, for example by contingent valuation studies and thus willingness to pay techniques, was not covered by the group discussion. This was possibly because it was thought that other methods were needed in capturing the range and depth of values people have for woodlands and trees. The group also raised the question of whether research could help us to identify how we could improve the image of woodlands and forests.

Workshop 3

Public participation in environmental decision-making

Chair: John Colvin *Environment Agency*
Rapporteur: Alexander Smith *Scottish Executive*

Participants

Nigel Lowthrop *ECONS*
Hilary Millar *Countryside Council for Wales*
Neil Ravenscroft *University of Surrey*
Marcus Sangster *Forestry Commission*
Richard Siddons *Forest Enterprise*

Introduction

Workshop participants focused on public participation and debated how this might be encouraged, the difficulties involved in this process and the implications for research into this area. Discussion began around the following series of topics and questions:

- What are the potential links between forestry and local communities that could create employment, involving training, marketing, the assessment of local needs, funding, and the promotion of good management practices and an understanding of environment?
- How can education be enhanced through the involvement of children of all ages in local woodlands through links with schools, junior wardens, youth clubs, outdoor pursuits and the national curriculum?
- What is 'the public', particularly in the light of 'postmodern' debates about conceptual fragmentation and tribalism amongst social/interest groups rather than those organised by locality?
- Can partnerships succeed when stakeholders are 'unequal' in terms of their respective bases of power and funding, and why/why not?
- How does an agency maintain continuing interest from communities and other stakeholders in ongoing processes of consultation and decision-making?
- How does an agency help communities to become more involved with detailed decision-making, assisted perhaps by education that promotes an understanding of woodlands, and capacity building?
- How can community participation in the development and implementation of forestry policies proceed when stakeholders change according to the type of decision being made and its 'level' (for example, at the local, regional, national, or global levels)?
- How does an agency interact with large geographic communities?

These provoked much stimulating discussion, including the important points set out below.

Complexity of public participation: who should be involved?

Some scepticism was expressed about whether agencies, academics and others recognised the true complexity of issues surrounding community consultation. With spontaneous protest groups springing up in many settings, some kind of crisis of democracy and government has occurred. While some still favour old-style town meetings as a vehicle for democratic participation and debate, others believe these occasions, like focus groups, often run the risk of being hijacked by activists. It was debated whether there was such a thing as 'real' participation, as opposed to 'fake' window-dressing and whether 'real' participation could be achieved that included everyone or was more inclusive than is currently the case.

It is quite difficult to identify the different stakeholders in contexts like a devolved Scotland or international policy-making, let alone the values and meanings that underpin popular thinking about community participation. It must also be recognised that on some issues, communities and stakeholders do not necessarily want to participate in consultation. It was considered important to look at a variety of ways of involving communities from 'planning for real' events to workshops and surgeries, so that they could be included in and informed about future management and further debate.

World-wide debate concerning participation

There are significant differences between societies in the developed world on the one hand, and the developing world on the other, where stable democratic traditions and institutional structures do not exist. This point is particularly salient in reference to social research and methodologies for community participation in the development and implementation of forestry policy. Much of the international debate surrounding forestry issues, especially when pertaining to environmental concerns, is dominated by the concerns of stakeholders operating in developing countries.

There are also important differences between various regions of the United Kingdom, which means that certain kinds of initiative could prosper or fail depending on where they are launched. Agencies must be careful not to place too much emphasis on local level policies and third-world rhetoric without any testing of its validity. Participants warned against appropriating from the developing world a 'language' of consultation that may not be particularly well equipped to address problems specific to Western settings.

Setting up a dialogue with communities

One of the issues raised by the group was 'how to set up a dialogue with the public and sustain it'. They suggested that this would require considerable effort on the part of the particular agency involved. Participants also debated whether a particular focus needed to be created or whether this depended on the particular project that was taking place. This suggests that there needs to be clarity in the objectives of a particular project and consideration of why there is a need for public involvement and how this should or could take place. There are also considerations connected with power and how it is used in constructing and managing a participation agenda.

An important problem is when to involve stakeholders in consultation. Often, communities feel they are being consulted too late, and that the real decisions have already been taken by agencies. Sometimes this problem is exaggerated by agencies that build up community expectations and then abruptly leave. There is therefore a challenge for public agencies to bring stakeholders and others into the consultative process at the very early stages of policy development.

An example was given of a private woodland owner who had initiated significant public involvement in decision-making in connection with his woodland. He stated that this had been an organic process and was built up over time as trust was established. It was suggested that there was a role for social entrepreneurs who could be key in building trust. Organisations and agencies could utilise these key people and build complementary and alternative partnerships with the public.

Research needs identified

To ensure that the messages an agency sends are consistent there is a need for:

- Detailed objectives so that everyone can focus clearly in the early stages of consultation.
- Exploration and review of how established objectives can be revisited and refined during the consultative process so that agencies do not stick to a predetermined formula once it has been established.
- Investigation of different agencies approaches to participation. What is their message and how accessible and flexible are they?
- Building trust takes time and resources on behalf of all interested parties, and involves sending consistent messages. This is particularly difficult for central government institutions, where a change in government will often precipitate a more general shift in policy and administrative emphasis.
- Assessment and examination of approaches to build trust between communities and agencies.
- Investigation of different approaches used for setting up an effective dialogue with the public.

Summary

The following suggestions were made for developing guidelines by which community consultation might successfully proceed:

- Set objectives
- Use existing toolkits
- Avoid following a pre-formulated 'recipe'
- Reflect and learn during the process
- Be communicative in imaginative ways
- Find ways to work creatively and overcome blockages.

By engaging in such a dynamic process, trust might be built between communities and public agencies. In addition, statutory authorities should nurture social and ecological entrepreneurs in communities, who might in turn become advocates for government policy.

Workshop 4

Social sustainability

Chair: Gill Clark *Scottish Executive*
Rapporteur: Jon Pickering *University of Cardiff*

Participants

Joy Braithwaite *Welsh Timber Forum*
Sue Hunter *University of East Anglia*
Max Hislop *Forestry Commission*
John McLoughlin *Collite*
Paul Sherrington *Forestry Commission Wales*
Antony Wallis *Forest Enterprise*

Introduction

Workshop participants engaged in a broad ranging discussion of how social science research could contribute to our understanding of forestry and social sustainability in rural and urban communities. A summary of the workshop is set out below, highlighting research issues and questions raised by participants. The summary is split into two sections: section 1 summarises the outcome of workshop discussions on the broad issue of social sustainability; section 2 sets out suggestions for future research.

Section 1: Workshop discussion

Social sustainability: overarching issues and definitions

A number of issues relating to definitions of social sustainability, and what this meant in terms of research, policy and practice were discussed. For the purposes of Forestry Commission (FC) sponsored research the workshop agreed that it would be appropriate to follow the existing FC focus on four key features of sustainability: quality of life; recreation and access; participation; and development. However, when considering joint work with other agencies or academic institutes it was agreed that it might be useful to take account of other interpretations of social sustainability, and other issues encompassed within these. Key themes and issues covered in the discussion are set out below.

Social sustainability: measuring, defining and linking to broader issues

The first key theme: How do we measure and define social sustainability, and how does it link to broader issues of social inclusion and other aspects of social policy? raised the following questions:

- What are the differences between social sustainability in an urban, urban-fringe, rural and remote rural context?
- Do we need to consider social sustainability research issues separately as they relate to Scotland, England, Wales and Northern Ireland, or can we apply the same principles/research questions to England and to all devolved administrations?
- Will the different approaches of the devolved administrations to forestry issues affect how researchers and policymakers deal with forestry within the broader agenda of social inclusion?
- What datasets are available to provide robust statistical data on how forestry might contribute to the economy/GDP at different levels – local, regional and national?
- How can we measure non-market benefits of forestry, for example, contribution to quality of life, and how these support social sustainability?
- How does environmental education link to issues of social sustainability?

- How can we avoid the research agenda being diverted to a focus on how we measure, count or define social sustainability, when it could be argued that resources could be better applied to practical action on this issue?

Social sustainability and the forest/timber economy

Workshop participants agreed that social sustainability had to be considered within the broader economy whether that related to regional/rural economies or to the economies of inner-city boroughs or small towns. However, it was agreed that it might be helpful to maintain a research focus on the potential that specific outputs from the forest economy had to make to social sustainability.

Participants agreed that forestry alone could not deliver social sustainability in a rural or urban context, and agreed that it was important that new research or policy developments should not raise local community expectations on this issue. For example, it was noted that it might be helpful if community development work could be accompanied by information on the realities of highly competitive international timber markets and the streamlined and again very competitive local (regional/GB) forestry contracting industry.

Forest outputs which had the potential to contribute to social sustainability identified by participants included:

- *Direct and indirect jobs.* These range from jobs in forestry to jobs in other industries such as tourism. On this issue, however, the potential for direct forest industry employment (such as chainsaw operator) was identified as limited in scale and scope.
- *Indirect high quality jobs in the forest industry.* Participants were keen to identify higher quality jobs which could be linked to the forest, such as visitor interpretation or environmental education.
- *Forest products.* These range from firewood to high quality timber cladding and furniture. Participants asked if we knew enough about linking producers and consumers, in particular issues surrounding direct marketing.
- *Niche market products.* Examples are charcoal and wattle fencing. However, in relation to niche markets the participants recognised the challenges facing entrepreneurs, and consumer willingness to pay for locally produced 'sustainable' products, as opposed to cheaper products in local chainstores. Targetted training support was also suggested to support niche market activities.
- *Local marketing groups.* Even with the challenge of economies of scale facing local producers, participants felt that local marketing groups were worth while, and merited support from local enterprise companies, and possibly applied/action research projects.
- *Health and well-being.* These include benefits obtained through exercise and enjoyment of the outdoors, and the cultural appreciation of forestry and woodland.

Implementing social sustainability initiatives

Workshop participants discussed the issues surrounding implementing social sustainability initiatives, involving local communities, and the resource implications and benefits of partnership working. These were to be addressed by other workshops and therefore discussion on these issues was limited, but participants emphasised that social sustainability initiatives would not succeed without adequate resources being committed to partnership working. Different options for partnership working ranging from working with communities on volunteer ranger projects to liaison between the devolved administrations were discussed. Participants agreed that any type of 'social forestry' project made heavy demands at an agency and grass roots level, and that assistance should be provided to those with the responsibility for managing this type of change at a policy and practice level.

Section 2: Implications for future research

Social sustainability: setting a research agenda

Workshop participants discussed the type of research which would make the most useful contribution to a debate on social sustainability; the outcome of the discussion is set out below.

Action and applied research

It was agreed that research that met the following criteria would provide the most useful and usable information for policymakers, practitioners and research respondents themselves. It was also agreed that, ideally, research commissioned under the social sustainability theme should be:

- Client focused.
- Action or applied research.
- Written in plain English (or two reports produced for separate audiences: one for a popular/lay audience and a second for an academic audience).
- Of benefit to clients and participants, i.e. research participants should feel that research is worth while and producing research output that is of benefit to clients.

Research needs identified

Specific research themes and topics were suggested by workshop participants. However, participants agreed that these should not be viewed as a definitive list, merely a starting point for discussion. If social science was to become a more important part of the research programme, participants suggested that it would be helpful to have more information on how the Forestry Commission (FC) compiled the research agenda, and to have an opportunity to contribute to this process.

The following were suggested as themes/topics for future research:

- Research to identify indicators in order to be able to demonstrate the progress of the social forestry agenda/initiative within FC.
- Research to survey attitudes towards FC and FC woodlands. Recent research has shown positive attitudes towards FC, and more could be done to promote the generally positive relationship between FC, rural and urban neighbours to FC forest and woodland, and the general public.
- A scoping study to review ways in which FC could carry out joint research with agencies and academic institutions.
- A review of best practice and project failure at home and abroad relating social forestry research and practice to identify how forests are being used to contribute to social sustainability. Participants emphasised the importance of case studies of projects which did not succeed in order to learn from failure as well as high profile success.
- Addressing the themes of social inclusion and multiculturalism – research to identify the importance of making forests accessible and open to all, and to increase access to groups who currently do not venture into the countryside.
- Robust valuation of non-market benefits to ensure these can be taken into account in forest policy.

- A review of forestry law/The Forestry Act to consider any changes that may be required to take account of the increased FC/FE focus on social forestry.
- A review of procurement law as it applies to forest management to identify whether (within the law) any preference could be given to regionally based contractors for forest management projects. However, in relation to this issue, participants recognised the long-distance nature of the forestry contracting business: for example, successful 'local' contractors from Argyll could win competitive tenders to harvest forest in Kielder; and 'local' contractors in Kielder could win competitive tenders to harvest Sutherland.
- Action research through international exchange – the possibility of exchange schemes whereby, for example, foresters engaged in social forestry projects in Canada could carry out work exchange with FC or other agency staff in the UK.

Summary

The issue of social sustainability raised many questions among the workshop participants. They agreed that the forestry industry had a role to play in this area although there would be limits to what could be done. Collaboration with other organisations could improve the situation. In addition, participants asked if consideration could be given to research dissemination. They suggested that the two-day seminar had been very useful in terms of research dissemination and networking, and hoped that there would be further opportunities for this type of seminar in the future.

15 Looking to the future: exciting times ahead

Following an enthusiastic request from the conference participants for future research seminars on the important topics discussed during this two–day event, future meetings are to be considered. Thought will be given to whether any future seminars should be aimed at a broader audience to develop networks of contacts, or to maintain the current focus on academic research. The timeliness of this conference has been important, both as a starting point for debate and for the dissemination of current research.

A new vision in which forestry provides an increasing contribution to society is presented, covering issues such as health, building social capital, opportunities for access and recreation, cultural identity, education and social inclusion. The concepts of social forestry, rural development forestry and community forestry are matched with the developments in forestry policy over the past decade. From the Rio Earth Summit and the Helsinki and Lisbon conferences on the protection of forests in Europe to the development of the UK Forestry Standard and publication of the Forestry Commission's country strategies mounting recognition has been given to the social element of sustainable forest management. The evolution of the social forestry concept clearly reflects an increasing societal interest in the importance and purpose of trees, woods and forests in our everyday lives.

Key points

A number of key points have been raised through the conference papers and discussions and these include:

- The relevance of social science research to forestry at both a strategic and practical level.
- Recognition of diverse and plural publics with differing needs.
- The interrelationship between the nature of woods and forests and social values and perceptions.
- Recognition that the public interest should be negotiated through an exploration of values and public engagement processes.
- The importance of engaging with publics at many levels to be inclusive and generate enthusiasm.
- A need for interdisciplinary research to bring together relevant expertise.
- Realisation of the changing institutional context of forestry and the need to adapt to new challenges.

Exciting and challenging times are ahead for those involved in research and management of the environment. Integration and collaboration is advocated in building new relationships between scientists, other specialists, organisations and society.

The research and ideas presented at this conference outline some of these approaches and highlight opportunities for developing forestry policy. They also emphasise the need for further research.

There is enthusiasm within the forestry sector to engage with many different publics and provide opportunities for people to get involved with woodlands and forests in their area. How is this to be achieved? Integrating research across disciplines will be important, as well as increasing knowledge and understanding of people's values and providing practical solutions to current problems. These proceedings demonstrate the vitality of current research and the variety of disciplines interested in the interactions between people and trees. The real achievement over the past few years is that forestry is open to new challenges and is actively playing its part in pursuing sustainable development objectives. As Robin Grove-White suggested in his discussion on the need for social research in forestry:

Aim high and the rewards will be great.

Terms used

There are a number of terms used in this publication for which we provide below a definition or explanation. These terms, while they may be familiar to social scientists, may not be as familiar to other scientists, researchers, practitioners or organisations.

Bayes's theorem A method of evaluating the conditional probability of an event. Bayesians argue that many methodological puzzles stem from a fixation upon all or nothing beliefs and that these may be resolved by applying 'degrees of belief' to a hypothesis.

Citizen An ordinary member of the public with no specific interest in the decision-making process, other than in discharging her or his civic responsibilities.

Deliberative democracy Founded on the basis that citizens can collectively reflect on goals and purposes, think critically and make value judgements.

Discourse Systems of knowledge and their associated practices. These include systems of language with a characteristic terminology.

Epistemology A branch of philosophy concerned with how we know what we know and our justification for claims to knowledge.

Governance The formal and informal institutions through which society works. These include formal functions of government and informal organisation and regulation of collective affairs within society through voluntary organisations, churches, society groups.

Lay knowledges/local knowledges The above refers to information on, for example, the social and environmental characteristics of a particular area which are obtained and acquired by people through experience. It is suggested that there is no singular knowledge instead there are local knowledges.

Lay public(s) Individual or group with no specialist knowledge relevant to the decision-making process. It is suggested that there is no single public, but that there are many different publics, e.g. women's groups, ethnic groups.

Normative A normative statement is one about what is right or what is wrong, desirable or undesirable in society. It is a value judgement made from a particular political or moral perspective.

Public engagement/participation A process where people individually or in groups can exchange information, express opinions, become actively involved in decision-making.

Social capital Concerned with the improvement of health, skills, knowledge, community spirit and social networks.

Social exclusion Inadequate social participation, lack of social integration and power. Lack of resources to have the living conditions and amenities customary to the society a person belongs to.

Stakeholder A person who will be affected by the outcome of a decision-making process.

List of delegates

J. H. Baker	Natural Environment Research Council
Kevin Bishop	Cardiff University
Joy Braithwaite	Welsh Timber Forum
Bill Burch	Scottish Forestry Trust
Jacquie Burgess	University College London
Mike Cherry	Black Environment Network
Gill Clark	Scottish Executive Central Research Unit
John Colvin	Environment Agency
Tony Cowell	De Montford University
Huw Davies	Forestry Commission
Jim Dewar	Forest Research
Alison Dyke	Reforesting Scotland
Steve Evison	Rural Resources
Victoria Edwards	University of Portsmouth
Rhys Evans	University of Aberdeen
R. A. Farmer	Forest Enterprise
Paul Finch	Forestry Commission
Richard Gable	Forestry Commission
Jose Garcia Perez	University of Central Lancashire
Alun Gee	Environment Agency
Jasbinder Ghag	University of Gloucestershire
Martyn Giles	Forestry Commission
Rob Green	Countryside Agency
Robin Grove-White	Lancaster University
David Halewood	Liverpool University
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Judy Ling Wong	Black Environment Network
Nigel Lowthrop	ECONS
Fiona Mackenzie	Carleton University
Terry Marsden	Cardiff University
Ryan McCluskey	Forest Enterprise
Ron Melville	Forestry Commission
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Kate Studd	University College London
James Swabey	Forest Enterprise
Paul Tabbush	Forest Research
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Bishnu Upreti	University of Surrey
Antony Wallis	Forest Enterprise
Gareth Wardell	Environment Agency
Jon Westlake	Forestry Commission
T. Willison	Scottish Executive Rural Affairs Dept

The meanings associated with trees, woods and forests in modern society are complex and wide-ranging and go beyond concerns with economics and timber production. People's appreciation of nature and woodlands is related to cultural, spiritual and ethical values. The need to explore these issues led Forest Research to organise a two day conference at Cardiff University in June 2001. The conference focused on social science research into woodlands and the natural environment.

This publication provides the presentation papers, workshop discussions, questions and answers and plenary discussion from the conference. The presentations focused on three main themes:

culture, values and meanings of woodlands and trees

monitoring and modelling approaches to forest management and sustainability

community involvement in decision-making and management.

The main aim of the conference was to outline the future direction for social forestry research and develop a broader perspective on issues connected with people and the environment. It provided the opportunity for a broad cross-section of government and non-governmental organisations, academics, practitioners and researchers to exchange knowledge, experience and ideas in this important subject area.