# Public and institutional perspectives on forest and trees: a view from Vermont

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Report for the Forestry Commission and The Scottish Forestry Trust on a project undertaken in Vermont, USA



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# Summary of main research findings

This research project undertaken in Vermont, USA sought to provide greater understanding of the values people have for forests and trees. Qualitative data were collected through a series of group discussions with members of the public and interviews with key representatives from a variety of forestry and environmental organisations within the state. Brief reference is made to a similar larger scale project being undertaken in northwest and southeast England.

# Synopsis of Institutional perspectives

There is an increasing realisation between forestry and environmental professionals in both Vermont and England that the future of forestry may involve creating forests near to where people live, particularly in more urban settings. As one forester explained 'small forests are a big deal'. If these forests are a resource for communities and if they provide a sense of ownership to people then they can truly have an important impact on local communities.

There was also an acknowledgement or realisation that in many ways state and federal organisations in both Vermont and England are often still having difficulties involving the public in any sort of effective decision-making processes. New structures and ideas for finding out people's needs and concerns will be required, as well as a much clearer idea of who to engage with, from locals to tourists. The standard approach for the state and federal government still appears to be public meetings that often provide people with only a few minutes to air their views. No wonder people voice their opinions strongly with so little time available, or decline to attend, put off by the task of speaking in front of tens or hundreds of other people. One of the things that state and federal organisations find difficult is that there is no single agenda which they can tap into; rather, they have to deal with the competing factions of industry, recreation and conservation bodies. The typology in Box 1 outlines the main emphasis which the organisations involved in this research placed on public involvement in forestry.

Organisations	Attitudes to involving the public in land management decisions
Private forestry organisation	Private landowner rights are of chief importance. The public needs to be educated to understand why landowners manage in a particular way.
Federal and state forestry organisations	Difficulties in juggling multiple objective management. People should have a say but agencies find it difficult to provide effective opportunities for this to take place.
Conservation Non-Governmental Organisations (NGO)	Conservation is the main objective, people need to understand why conservation is important.
Community/conservation NGOs	Communities should decide what is important in their area. Conservation will only be effective if it is community led.

#### Box 1. Typology of organisations

State and federal forestry bodies in Vermont, like the Forestry Commission in Britain, have undergone cultural change within their respective organisations, with a move away from a focus dominated primarily by timber production objectives to a much wider view of the benefits that forests provide. This view still tends to underestimate the layers of meanings people associate with forests and trees.

One of the approaches to sustaining traditional working landscapes in Vermont is through the use of conservation easements. A conservation easement is when the development rights for a piece of land are bought, possibly by the state or a land trust. This designation lasts in perpetuity and means that the land will never be developed, for example, into a residential development. Organisations, particularly state, federal and environmental bodies, considered this to be a positive way of enabling working landscapes to continue being worked. Within the creation of the easement the type of management can be stipulated such as timber production, agricultural production or ecological reserve, for example. A management plan is then generally agreed between the land trust and the landowner. Easements provide opportunities for future protection or restoration of sensitive habitats within Vermont.

The institutional framing of issues surrounding the forests in Vermont is extremely important. While the organisations in this research all claim to be working for forest health and often for public interest, their focus and management objectives can be very different. What is clear is that the variety of organisations in Vermont concerned with forests and trees often think from very different perspectives and can bring a range of creative solutions to their work. Conflicts can arise between these organisations, though, and often revolve around timber production and wilderness issues, particularly on public lands. As in England, it is acknowledged in Vermont (by a variety of environmental, state, community and federal organisations) that public lands should provide benefits that private land may lack, such as wildlife, aesthetic, spiritual and recreational opportunities.

### Synopsis of public perspectives

The main discourses from the public groups revolved around appreciation of the state's distinct character and therefore a concern that it should not be unduly changed by development and sprawl, loss of cultural identity and the spread of organisations such as Wal Mart, which seems to have occurred throughout so much of America. Environmental discourses surrounded the importance of forests for wildlife, biodiversity and maintaining public health and well-being.

- Public views of timber production differed for public and private land. On private land, private landowners were viewed as having the right to manage as they saw fit as long as there was no extensive clearcutting. On public land, recreation and public access, spiritual, aesthetic and well-being values were viewed as having far greater importance than timber production.
- Forests and trees are important to the public in Vermont not only on a personal basis as a place to enjoy nature, recreational activities and escape from every day routine life, but there was also awareness of the importance of forests in attracting money to the state and in contributing to Vermont's distinct character.
- None of the groups were asked to discuss global issues. The Vermont (public) respondents did not talk about global concerns. English groups spoke, without prompting, of worries about global warming and possible changes to the climate and what that might mean for the landscape. The destruction of habitats such as the rain forests was mentioned in England but not in Vermont. This difference might be due to recent debate in the media in England over these issues. In Vermont this

subject might not have arisen due to respondents belief that the researcher was primarily interest in Vermont only.

- In Vermont individuals sometimes spoke of how their parents had passed down knowledge and skills about the environment, although education generally was not a topic that was often raised by the groups. English respondents differed from the Vermont groups in the importance they placed on education and local knowledge in their discussions. This was particularly true for those in urban areas in England who were well aware of the lack of opportunity for young people to experience any form of green or natural space. The English groups saw it as essential to pass on any knowledge they had about plants and trees to their children and grandchildren so that they would have an interest and respect for the environment.
- Forests in Vermont were often described as 'comforting' and 'reassuring', terms that were not used in England. Because forests in the state are so ubiquitous the public seem to feel more comfortable with using them and being in them. The groups in England, when speaking of childhood experiences, talked about the exciting and scary element of being in a wood. This way of talking about woods did not occur in Vermont, possibly because the respondents found forests comforting rather than scary and were more at ease in them.
- Safety for women carrying out recreational activities alone was not considered to be a big issue in Vermont while in England the majority of women expressed unease about visiting woodland alone. The rural nature of the state and generally low levels of crime might explain the feelings of greater ease for women in Vermont. The extent of the forest cover in the state might also mean that people are more familiar with using them on a regular basis.
- What emerged from the discussion groups was the close relationship between people's views of forests and trees and the wider sense of what it meant to live in Vermont at the beginning of the 21st century. People's views on this subject did not stand apart from the larger dimensions of their everyday lives. Concerns about forests and trees were woven into other discourses on the development of areas and subsequent loss of forest cover and the changes of cultural identity within the state.

# Implications for policy development

The implications of the research from both countries are relevant to State and Federal bodies in Vermont and the Forestry Commission in England. The issues debated are wide and varied and cover a range of policy areas. However further work will be needed in this area in order to cover a wider range of respondents from different backgrounds.

#### Improve public involvement

- *Build long-term relationships between organisations and publics*
- > Extend involvement to those who are not part of a pre-existing group

While increased effort is being made to involve the public in decision-making, and particularly the management of public land, there is still a long way to go to try to reach a wider cross-section of society and move away from reactive conflict (Germain *et al.*, 2001). The public still often views the process of involvement as inequitable. There is no easy answer to the question of public involvement. Awareness has increased among a variety of organisations in both Vermont and England that without meaningful public involvement acrimonious conflict over management decisions will continue. Building long-term relationships between organisations and publics will be particularly important in taking forward effective involvement. Networks and partnerships between organisations were generally good and improving but there is a need to extend this further to different publics, particularly those who are not part of a pre-existing organised group.

#### Re-connect people to nature and the land

- > Create green space/forest close to where people live
- Create more opportunities for young people to explore and have contact with forests through adventurous and fun activities

The loss of connection to the landscape for urban and sometimes rural dwellers was seen as significant in both countries by organisations and members of the public. Not only because it reduced public understanding of those who have to make a living from the land but also because the future use of the landscape might change in ways that would have an impact on conservation, recreation and management. As one person described it: 'we don't see ourselves as members of the forest'. Creating opportunities for people to use green space near to where they live is therefore of great importance. This is particularly the case in urbanised countries such as England. The findings from both studies suggest that contact and use of forests as a child has an important influence on a person's use of these areas as an adult. Concern was repeatedly expressed, particularly in England, that children today have less contact with forests especially in undertaking unstructured activity in which they are allowed to roam, explore and develop through adventurous play. Young people need a variety of opportunities for exploring different environments and challenging themselves.

In Vermont the Starksboro (Appendix C) community's idea of an open day when the public could visit local maple syrup makers could be extended to other areas within the state and to other types of management such as agriculture and timber production. This provides an opportunity for people to connect to the materials and products they use and establish greater understanding and awareness of those landowners and managers who are involved in productive activities in connection with natural resources.

#### Provide accessible public land

- > Involve publics more closely over management decisions on public land
- Recognise the importance of public land especially if opportunities for accessing private land are reduced

One of the issues made clear in this study was the importance of public forestlands providing benefits that private lands lack, due to the pressure of commercial management and public access limitations. State and federal managers in Vermont need to ensure that they are providing opportunities for users that they may not be able to experience on private land. With the increase in land posting (page 20) in Vermont, it becomes more important that there are a variety of public lands that the public have access to. People's attitudes to public land management differed from their attitudes to private land management. The public expects greater input and involvement in how public lands are managed in both countries.

#### Improve education and learning

- Explore new ways of learning from publics/communities about their local needs/wants and about what they know of their local environment
- > Target education at schoolchildren and familiarise them with different environments

The importance of using different public knowledges in decision-making about management should be acknowledged. Organisations often view the public as having little understanding of the workings of the landscape and believe that through education the public can be taught to understand what the organisation is doing. Organisations, in both countries, need to be open enough to learn from different publics and see education as a multi-way rather than a one-way process. The urban public groups in England saw education as particularly important in familiarising people with nature when they may have little opportunity to access any sort of green space on a regular basis.

#### Provide attractive settings for social interactions

Recognise the social nature of a lot of forest use and allow for a wide variety of social activities to take place in woodland settings

People talked about enjoying quiet moments alone in forests but they also often spoke about the value of visiting places with friends, partners or family. Activities such as recreation and picnicking and settings such as forests that allow for different types of social interactions to take place are important. More argues (2002: 61) that 'in the context of our current societal ills, they are activities that strengthen both individuals and families, and, therefore, should be encouraged rather than discouraged as a matter of policy'. This is particularly important in England where certain groups such as women were reluctant to visit forests alone because of worries about their safety. Therefore they often only accessed these areas when in the company of others.

#### Acknowledge the wider benefits of forests and trees

- > Well-being is a crucial element in forest use
- Public views of forests are related to wider issues over changes in society, concerns about environmental change and loss of green space

The Vermont and English research highlights the numerous values people have for forests as part of the landscape. Organisations need to be more aware of the range of these deeper meanings and how they are often related to wider issues of importance or concern. It is often easy for forestry and

environmental bodies to believe that the public will value what they do. Organisations need to be aware of the complex nature of diverse values when they consider different types of management or think about involving the public in decision-making.

There needs to be an extension of opportunities for people to comment on why particular places are important to them, the results of which could be incorporated into state and federal forest plans in Vermont. This could be done through qualitative comment sheets or questionnaires that allow people to describe what they value about a particular area.

# Introduction: Vermont and England in context

This report is the result of a three-month research project undertaken in Vermont, USA. The overall aim of the research has been to provide a better understanding of the way people value forests and the meanings they associate with them from both a public and institutional perspective. For a detailed discussion on the importance of understanding people's values see O'Brien (2003). A similar but larger scale research project has been undertaken in England and this raises the question of whether lessons can be learnt from these two very different study areas. This report considers a number of issues:

- What are the values and meanings people associate with forests in Vermont along the urban rural continuum?
- What role do forests play in the Vermont landscape?
- What impact does this role have on its citizens and a number of its organisations?

The research was undertaken in two parts. The first part involved interviews with forestry and environmental professionals to investigate institutional perspectives of the interactions between people and forests. The second part comprised a series of interviews and discussion groups with members of the public to explore, describe and examine the values and meanings they associate with forests and trees in Vermont.

The analysis of the data is presented in a series of themes that also relate to wider issues that featured prominently within Vermont society and which impacted on its culture and identity as a state. Reference is also made (in the synopses at the beginning of the report) to particular similarities and differences highlighted between the Vermont and English studies. The main research findings are described into two sections: Institutional Perspectives and Public Perspectives.

### Vermont and England: differences and similarities

Vermont and England are very different with contrasting landscapes, cultures, and vastly different percentages of forest cover and population size. There are, though, a number of similar forestry-related issues which are currently important in each area, for example:

- Both have a legacy of forests used for recreation.
- In both areas there is a change occurring in institutional and public views of the importance of timber production particularly on publicly owned land.
- Parts of each area are known for their scenic beauty and constitute an attraction to large numbers of tourists.
- In both places there is increasing focus within the respective forestry and environmental sectors on public benefits, issues of public interest and public participation in how and why forests are managed.

Although the significance of forestry to the economy is greater in Vermont than it is in England, trees and forests are important to publics in both of these countries for many reasons other than economic ones.

### Vermont: landscape and land uses

Vermont is predominantly rural with a population of 608 827 (Census Bureau, 2002). It is one of the New England states and famous for the colours of its autumn or fall foliage, small villages and white steeple churches which attract tourists from all over the world. When Europeans first arrived in the USA in the 1600s, 95 per cent of Vermont was forested. This was reduced to approximately 25 to 30 per cent by the 1880s before cover started to increase again and once more the majority of the landscape reverted to forest as farmers moved west (Klyza and Trombulak, 1999). Today the state is 78 per cent forested. Maple–beech–birch form the most extensive forest type in Vermont and this has been increasing in acreage since the early 1970s with sugar maple being the most extensive species (USDA, 2002). There has been a decrease in dependence on traditional land management such as agriculture and to a certain extent forestry; at the same time there has been an increase in service related industries particularly those related to tourism.

Approximately 12 per cent of the forests in Vermont are publicly owned, by state and federal government (Figure 1), and they are generally managed for multiple objectives (Klyza and Trombulak, 1999). The federal government in the form of the US Forest Service owns and manages the Green Mountain National Forest which accounts for half of the publicly owned land.

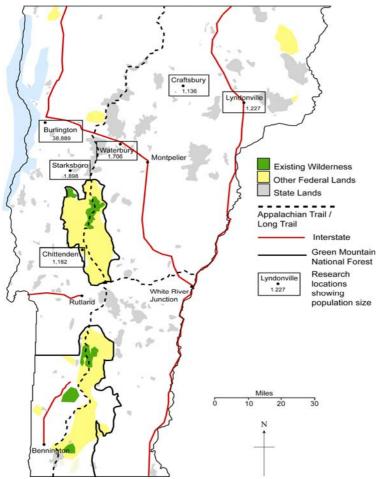


Figure 1. Public lands and wilderness areas in Vermont, USA

Albers (2000) describes the main forest types in Vermont as:

■ The Northern hardwoods consisting of beech, birch and maple that occur all over the state below 2500 feet (762 metres).

 Coniferous forests of mainly spruce and fir at a higher altitude.
Higher still are the alpine areas on the highest peaks of Camel's
Hump and Mount Mansfield.

 Transitional zones where a mix of trees can be found in different combina-tions.

The northern part of Vermont is also home to part of the Northern Forest: a recognised forested area that covers approximately 26 million acres (1 hectare (ha) = 2.47 acres) of boreal and northern hardwood forest. The Northern Forest stretches from Lake Ontario to the Atlantic and includes the northern parts of Maine, New Hampshire, Vermont and New York (Dobbs and Ober, 1996; Tam, 2001; Northern Forest, 2002). Tourism has a major input into the Vermont economy; the focus for tourism is centred on mountains, skiing, the pastoral landscape and extensive forest cover. The Burlington Free Press estimated that 1.1 billion dollars are contributed to the economy from fall foliage related tourism. Although the population of Vermont is small, significant populations from large metropolitan areas in New Jersey, Boston and Montreal, for example, can make the trip to the state within a few hours. The landscape of Vermont provides ample opportunity for people interested in recreation and hunting to enjoy their pastimes. The main recreational activities are hiking, biking, skiing and snowmobiling. Hunting is also a popular activity but is currently declining, continuing a trend that has been going on for the past two decades (Crawford, 2002).

# Research methodology and methods

### Project aim

The aim of the project was to provide greater understanding of people's values for forests and trees from both an urban and a rural perspective, and in addition assess forestry and environmental organisations views of the key issues in forestry.

### **Objectives**

- 1. Explore, describe and examine the values that people hold for woodlands and trees and assess why this is the case, through a series of discussion groups and individual interviews in Vermont, USA.
- 2. Examine and explore forestry and environmental organisation discourses of public interactions with forests and key forest and conservation management issues.
- 3. Provide recommendations for policy development for state and federal government.

### Methods

A qualitative approach to the research was used to assess the interactions between forests and people. The qualitative research approach can be characterised by the challenge of obtaining in depth understandings of the meanings and definitions people give to particular situations. Rather than rely on survey questionnaires that limit people's response to a particular question, the qualitative approach explores through interviews and discussion groups the meanings and experiences people associate with trees and forests. Deliberative approaches such as discussion groups are founded on the basis that citizens can reflect on various issues and topics and make judgements through reasoned dialogue with others. Data were collected using small discussion groups, individual semi-structured interviews, literature searches, census data collection, local newspaper articles and reports from various organisations. Meetings and events were attended such as the Northeast Kingdom Mushroom Society meeting and their First Annual Mushroom Festival which was a three-day event. The Northern Forest Gateway Communities Workshop was also attended. This mixed methodological approach provided a variety of ways for respondents to describe the values they have for woodlands in their own words and terms, and in a number of different settings. A purposeful sampling strategy was undertaken; this technique is based on information-rich cases rather than a sample size that represents the wider population. The topics discussed are outlined in Appendix A. A qualitative computer package (QSR NVivo) was used for the management and analysis of the data.

#### Institutional interviews

The representatives interviewed from diverse organisations in Vermont were chosen because they were able to give an overview of the current forestry situation in the state and to raise issues they considered to be important, relating to both public and private forests, how they were managed and for what purposes. Professionals were interviewed from the National Community Forestry Centre, the Northern Forest Centre, Vermont Land Trust, Forest Watch, Greenleaf Forestry, Vermont Family Forests, Vermont Council on Rural Development, Department of Forests, Parks and Recreation, and the US Forest Service. (See Appendix B for a short summary of each organisation).

#### Public interviews and groups

A number of individual interviews and small group discussions were undertaken in six different locations within the state, chosen to represent the urban rural continuum in Vermont (Figure 1). The discussion groups lasted between 1.5 and 3 hours. This type of research approach is important because it gives people an opportunity to talk in their everyday language about not only the topic (forests) under discussion but how it relates to other wider aspects of their lives. Burlington is located on the eastern shore of Lake Champlain in the northern part of the state. It is the biggest city in Vermont with a population of just less than 40 000 people. Lyndonville and Craftsbury are both situated in the Northeast Kingdom (which covers the counties of Caledonia, Essex and Orleans in Northeastern Vermont), an area traditionally more dependent economically on forestry. Both of the areas have populations below 1300. Chittenden town is inside the Green Mountain National Forest boundary and is unusual in having over 60 per cent of the town land owned by the Forest Service. Starksboro is a small community which has been involved in creating indicators to determine local forest health. Staff from the Green Mountain Club in Waterbury are included in the public discussion section rather than the institutional section as all the members of staff participated in the group discussion which revolved around people's personal experiences. (See Appendix C for a brief description of each area).

# Institutional perspectives on forests and trees

A number of key issues were raised in the organisational interviews. These are outlined in Appendix D, and the three main themes related to these issues are described in more detail below.

### Land ownership: public and private

#### Who should own land?

Within Vermont land is owned by federal, state and municipal government as well as by companies and private individual landowners. Significant debate revolved around the concept of land ownership, specifically related to the amount of land that should be publicly owned versus privately owned land. The majority of Vermont's land is in private ownership, approximately 83%, although the last decade has seen increased purchasing of land by the state and the use of 'conservation easements' to prevent land being developed for purposes other than forestry, agriculture or conservation (Albers, 2000). A conservation easement is when the development rights for a piece of land are bought, possibly by the state or a non-governmental organisation (NGO) land trust, so that the particular piece of land is never developed, for example, into housing.

So the biggest question is who should own the forest, how much of it should be owned publicly, how much owned privately? How much should be an ecological reserve for scientific purposes, how much should be under active forest management? So that has been the overwhelming question. *Northern Forest Centre* 

In Hurley *et al.'s* (2002) study on the dialogue surrounding the Vermont Agency on Natural Resources (ANR – a state agency) land acquisition plan they found that when it came to public land the timber industry worried that they would lose timber rights on land due to pressure from environmentalists. The timber industry viewed property as conferring exclusive dominion on the owner of the property and therefore tended to disapprove of easements as they sometimes placed restrictions on how the land should be managed. The public/private debate about ANR's land acquisition plan emphasised the tensions between the forest industry and the state over who should own land and what it should be used for (ANR, 1999; Haight and Ginger, 2000). As Hurley *et al.* (2002: 296) suggested it raised 'concerns about property rights, extractative livelihoods and ecological prerogatives'.

#### **Conservation easements**

As mentioned above, easements separate development from property rights. Within the creation of the easement it is decided by the land trust what management will be allowed to take place; this may include timber production, agricultural production, or management as an ecological reserve. Conservation easements emphasise the metaphor of property as a bundle of sticks in which each stick can confer different rights such as timber, access or water.

Easements are a way to enable working landscapes to continue being worked (Vermont Agency of Natural Resources, 1999). The rights of private landowners to manage their land as they see

fit is a very strong concept in Vermont. Some concern was expressed over one particular easement that took place in the Northeast Kingdom. The easement came about when a private company (Champion International) decided to sell its land. The Conservation Fund purchased 300 000 acres from Champion in a number of parcels in Vermont, New Hampshire and New York; this was declared 'the largest multi-state conservation project in U.S. history' (Tudish, 2002: 34). The Conservation Fund held the land temporarily and then resold it. In Vermont 26 000 acres was purchased by the federal government, 22 000 acres by the state and 84 000 by the Essex Timber Company. One of the conditions of the Essex Timber Company easement was that the land had to be used for timber production; the majority of easements of this type would allow for timber production but not require that it take place.

Well the thing about that easement is they are required to cut wood after so many years; they have to cut forty per cent of their net annual growth they are required to harvest. That's just to keep, the big thing about that piece like you said, the local environment they wanted to have some of that resource to provide for the local economies, the wood cutters and the mills. *Greenleaf Forestry* 

This type of easement is unusual and there is uncertainty as to whether it will ever be repeated in the future. Generally the main focus of an easement is to separate development rights from a particular property (Van Zile, 2002). There was also debate about whether the timber production requirement would be enforceable in the future and what would happen if the company did not log the specified amount of timber outlined in the easement.

We shouldn't require logging in perpetuity on that land if for instance a higher economic return to the landowner can be gained from managing as wilderness. Perhaps the public would be willing to pay something to that landowner to provide wilderness values, for habitats or water quality. *Forest Watch* 

#### Development, sprawl and fragmentation

There were a number of reasons for the concerns expressed over the fragmentation of land. These included the sales of large parcels of land which where then sometimes 'parcelised' into smaller units before being sold. Smaller parcels of land would often mean that productive management was no longer viable and some believed that part of the traditional working landscape would be lost in this way. Another issue related to a significant number of landowners who were currently in their sixties and seventies and reaching retirement age. The questions raised by this ageing ownership revolved around whether they would pass the land on to their children or whether they would be forced to sell the land to pay for property taxes. Concern was continually expressed over increased development within the state and the sprawl of existing towns spreading out into the countryside. Vermont Act 250 was introduced to limit inappropriate sprawl. It was acknowledged that without a vibrant and innovative economy curbing sprawl would be difficult to achieve.

The great danger from my point of view is much more the break down of traditional forests and their cutting up for housing development or for sprawl. And you can mandate against sprawl and you can regulate against sprawl but if you don't build an economy that works against sprawl you're only doing half the battle. *Vermont Council on Rural Development* 

### Management of land for multiple objectives

#### Timber production

Logging, particularly clearcutting, was an area of considerable debate and had became a topic frequently written about in the newspapers (Perkins 2002; Sobieraj, 2002). The national debate generally revolved around the large forest fires that swept parts of mid-west USA in the summer of 2002. In August 2002 President Bush made a proposal that would make it easier for timber companies to remove wood from fire prone forests and this caused a storm of controversy as environmentalists argued that it would lead to an increase in logging and the possible cutting of large mature trees. The construction of arguments by differing sides over this topic revolved around protection of the forest and forest health issues. Each party suggested that they were putting the health of the forests first.

In the Northeast Kingdom the forestry industry is particularly important and parcel sizes are generally larger than in the rest of the state. This part of Vermont also faces rural poverty and often a reduction in the younger population as people move from the area to look for work and educational opportunities elsewhere. With the downturn in the markets for paper and pulp and increased mechanisation of forestry there were worries that employment and traditional management in the area was being, and would continue to be, reduced.

I've got the two counties Essex and Caledonia and the average (parcel) size is probably two hundred acres. In the rest of Vermont the average size would be forty to fifty acres. Not as much has been developed so consequently large parcels are still intact and used for timber production, in other words that's the only reason why those people own it. In other parts of the state they have other objectives: privacy or recreation. *Dept of Forests, Parks and Recreation* 

The wages to be made in the forest industry were considered to be higher than other available jobs in these badly hit areas, such as service related jobs in the tourism industry. This has implications with the further decline of forestry and the possible increase in tourism throughout the state.

The best paying jobs no question are forest ones in the (northern) region. But the number is declining significantly. And that has been a major question. What is going to be the economic future of the region? How much of it will be in forest products and manufacturing and how much will be in tourism which is also forest dependent, but which uses the forest in a very different way? *Northern Forest Centre* 

The practicality for landowners of trying to remain solvent creates tensions, and while there may be good intentions to manage the land with a strong stewardship ethic when times are difficult or when increased funds are required to stay in business, different management approaches may be undertaken.

Woodland management is constantly a balance between trying to do good forest management and economics... A guy just looks at his woodlot and says I just want to do good forest management. But I also want as much money out of it as I can get. And that can make some tension with the job because of that. *Greenleaf Forestry* 

It was suggested that the public's perception of logging was skewed and that often people knew little about the landscape and how management affected it. However, rural populations were generally considered to be more familiar with the concept of the working landscape than urban populations who were thought to value forests not so much for economic reasons but for wildlife and aesthetic reasons.

People don't like logging. But they don't realise that when they are walking down this beautiful trail and this nice graded slope and how they walk through the woods they don't realise that they are walking on skid trails that were created to give access for timber. So take away all of those trails and people would be walking through brush and up and down. *Greenleaf Forestry* 

The heavy cutting law which came into being in Vermont in 1997 caused controversy and arguments between industry and environmentalists (Dillion, 2001). Also known as Vermont's Act 15, it requires landowners to obtain a permit if they plan to clearcut on more than 40 acres of land. A study by the Forest Resources Advisory Council in 1996 concluded that clearcutting was increasing in Vermont particularly in the Northeast Kingdom where forest land was being 'liquidated: bought, stripped of trees, and quickly put up for sale again' and this report led to the introduction of the Act (Dillion, 2001: 50). A number of environmental organisations protested that the law still does not do enough to prevent heavy cutting. In a state with such a large amount of privately owned land, regulations or the lack of regulations can have a big impact. There is a very strong ethos within the state of landowners managing as they see fit on their properties and a marked resentment towards any outside interference.

Although we have some regulations that protect the public safety and welfare, particularly relating to water quality issues, for the most part landowners can do whatever they damn well please on their land. *Dept of Forests, Parks and Recreation* 

State and federal government and many private forest owners produce forest plans. These provide a framework of how a particular area of land is to be managed over a period of time such as five to ten years. A forest plan is produced once every 15 years for the Green Mountain National Forest (GMNF – publicly owned by Federal government) which outlines how the forest is to be managed. The plan generally takes four to five years to produce after consultation with interested organisations and diverse publics. There has been no new timber production on the GMNF over the past four years. Logging was stopped because of worries about an endangered species of Indiana Bat. Appeals and litigation against logging on public federal lands, throughout the USA, seem to be considerable and can have a big impact on the time staff spend on either management or addressing and dealing with these appeals.

#### Value-added processes and forest certification

Conservationists and environmentalists stressed the need for creating markets for value-added products so that landowners could earn reasonable money from making quality products sold in local areas, thus leading to sustainable management rather than exploitation for short-term profits. Products labelled with the Vermont image and brand are very attractive to people. There appear to be opportunities for producing the value-added products that organisations talk about, particularly if the marketing of those products is effective.

We are facing tremendous challenges to be innovative, to have great designs, to have great custom responses and to capture people's imagination to market what's special about Vermont to an international (to some extent elite) clientele for the highest value-added return. *Vermont Council on Rural Development* 

Certification was not seen as an easy process or a cheap one. But many believed that slow progress was being made even with the different certification systems in place such as Forest Stewardship Council (FSC) and Sustainable Forest Initiative (SFI) being used by various organisations. Certification was certainly not seen as a process to make money quickly; it was generally considered to be a very long-term investment with little immediate reward.

#### Tourism

Tourism was acknowledged as extremely important for the economy of Vermont although concerns were raised about the industry and revolved around a number of issues. These included inappropriate expansion of tourist areas, the low paid nature of service industry jobs, the development that often goes hand in hand with tourism and the impact of second homes which can price local people out of the market place for buying houses in the area in which they grew up.

Both, I guess, certainly tourism while celebrating the natural beauty and innocence and purity also builds hotels and McDonalds and everything and long strips. You look at Stowe and the mountain road which used to be a pretty pristine place and many places like that. I guess every economic sector has its cost social, community wide and ecological cost. *Vermont Council on Rural Development* 

In trying to maintain Vermont as some sort of idealised representation of small town America with small town American values, Kylza and Trombulak (1999) believe the state is in danger of catering to rich elite groups only. Those with the opposite view considered tourism to be a way of helping communities, in creating jobs where traditional industry was declining and in bringing much needed economic improvement to an area.

There is an awful lot of, I guess you wouldn't call it grinding poverty, but there is a lot of poverty in Northern New England. Any tourism we could get would be good and hopefully that would be something that was year round. *Dept of Forests, Parks and Recreation* 

Tourism was not seen as the only way of adding value to the economy of Vermont. The quality of life a state such as Vermont can provide for its residents attracts individuals to the area to live and possibly to set up their own businesses.

...those amenity based economies are much bigger and much more stable and much more powerful than tourism based economies that so many of us associate with public lands and wildernesses. *Forest Watch* 

The word 'flatlander' is sometimes used to describe a person from out of state who was not born in Vermont. Change and growth within the state can be a source of worry for local people who feel that their traditional way of life and culture are being threatened. While driving through the state one can often see signs saying 'Take back Vermont'; this originally referred to disapproval of the state allowing civil unions (marriage between same sex couples) to take place. Alongside that view others added their concerns about change and the loss of traditions. These views are counterbalanced by the 'Take Vermont Forward'; signs, a movement which approves of the liberal and environmental values of the state.

#### Wilderness

The concept of wilderness is particularly strong among the environmental movement in America and is an issue which fuels many debates. The definition of wilderness by the US Forest Service is of an area that has been 'untrammelled' by humans. Cronon (1996) described the concept as paradoxical in that the view of wilderness leaves no place for humans, because the place where humans are is therefore the place where wilderness is not. The concept has also been described as elitist in that only certain sections of the public (the able bodied, those with transport for example) will be able to access these areas for the enjoyment of a wilderness experience. The organisations interviewed agreed that wilderness was a managed landscape even though the concept suggests no management and no human activity.

#### Land posting and public access

'Vermont is the only state whose constitution actually guarantees the right to hunt and fish on unposted private land' (Albers, 2000: 299). The posting of land involves the restriction of public access to the land by the landowner on his or her private property. The landowner may decide to deny all public access or to make it clear that the public needs to ask permission if they wish to hunt or recreate on the owner's land. According to the majority of organisations in this study land posting was increasing. In order to post their land (and therefore stop people going on it) the landowner has to receive permission from the state. Because there has been a freedom for Vermonters to go onto private land there are worries about the increase in posting. It was suggested that the increase was due to urban attitudes as private property boundaries are often strictly enforced in urban areas. Other reasons may be that landowners do not want people on their property or when adverse incidents occur such as damage to property landowners may post the land to make sure it does not happen again. There was a fear that with increased posting there would be a loss of public recreational and hunting opportunities, making it more important that state and federal lands provide the benefits that private lands do not.

#### Building networks, consensus and relationships

In the complex world of land management and conservation it is increasingly acknowledged that partnerships between organisations and communities are important in working towards long-term sustainable land management. For some organisations these networks, partnerships and relationships were seen as core to the very success of their organisation. It was also suggested that a shared vision and consensus would be required for organisations to be effective.

<sup>...</sup>without the community shared land ethic, you can do the economics and the information and you will get some progress. But you won't get great progress. There has to be a community based, community shared land ethic by everybody not just the

land owners and the loggers but architects, builders and customers they need to buy into it. *Vermont Family Forests* 

#### Connection to the land for urban and rural populations

Differences in urban and rural attitudes to the type of management that should take place in forests were emphasised by a number of respondents. Concern was expressed over the loss of connection that urban dwellers can have with the natural environment. The whole concept of familiarity, knowledge and having a relationship with the landscape was viewed as crucial to having or gaining a stewardship land ethic.

It's very sad that this connection is lost. Well it can't be lost. I mean, because if that connection is lost it just has to be re-established. Because it's essential to a healthy community, I'm convinced of it. I really think that the American culture is in a decline because of our lack of connection with the natural world. *Vermont Family Forests* 

The importance of communities having access to green space near to where they live whether that is in urban or rural areas was acknowledged. It was often suggested that people need access to space where they can feel a sense of belonging and ownership. Every community needs small patches of forest not necessarily for productive purposes but as somewhere for people to reconnect with nature in a society often occupied with indoor activities such as television and computers. The need for children to experience the outdoor environment was considered extremely important. It may be difficult if connections are not made with children to engage with those people, as they become adults. Safety can be an issue and concerns over child safety in the summer of 2002 in America was very high on the agenda because of a number of abductions of young children that had had a particularly high profile in the media (Balazar, 2002). Without the freedom to roam and explore and create adventures in woodlands it was thought that a vital component of childhood would be lost.

And the thing that is really interesting, and we have done in many of our workshops when we do stuff on forests, we often ask people what their earliest experiences of the forest were. And those are so powerful to people. It's just amazing, almost always what happens now is that folks will talk about that and then they will reflect and realise that this generation is not having that experience. And there is a huge amount of concern about the issue you raised. What are the implications of this? What are we doing to ourselves and what have we done to ourselves and what is going to happen? *National Community Forestry Centre* 

#### Public involvement in land management decision-making

It has become increasingly important to involve the public in how land, particularly publicly owned land, is managed. This is not only to reduce conflicts over management but also to provide people with a sense of ownership over decisions and to engender a desire for environmental protection. It is also often seen as a way of educating the public about what a particular organisation does and why it manages in the way that it does. The state forester recognised that education could be a two-way process as he described the knowledge that citizens could bring to a debate. Many organisations found that they had difficulties, particularly state and federal bodies, in determining what was in the public interest and what would be of public benefit. As public bodies these organisations are held accountable, by the public, for a wide range of management decisions on forest lands.

You utilise the public to identify the resources; its been surprising often when we go into these public hearings on a specific piece of property how much the public knows about that resource just because they live there and they travel there. As a manager we might not recognise something significant but the public does. So we use the public to identify the resources that we may have overlooked to identify the past history and past uses of an area, what they feel should be the overarching goals of public management of those areas. *Dept of Forests, Parks and Recreation* 

The Forest Service is currently in the process of creating a new forest plan as previously mentioned. This process involves engaging with a variety of interests and stakeholders. Public meetings are one of the ways of engaging with local communities and allowing them to voice their concerns. There are limitations to this type of approach as highlighted below.

The people who come to our meetings have strong opinions and are not listening and we have talked about that. And we have these meetings and they are set up for seeking to understand and we are hoping people will listen to speakers and ask questions. But that's not what they are doing. They are thinking about how they are going to make their statement and they are not going well, some of these meetings. *US Forest Service* 

These types of meeting can lead to conflict as groups often only get a few minutes to air their views. Constructive debate can be difficult if large numbers of people are present unless they can be split into smaller groups and given adequate time to deliberate over the issues at hand.

# Public perspectives on forests and trees

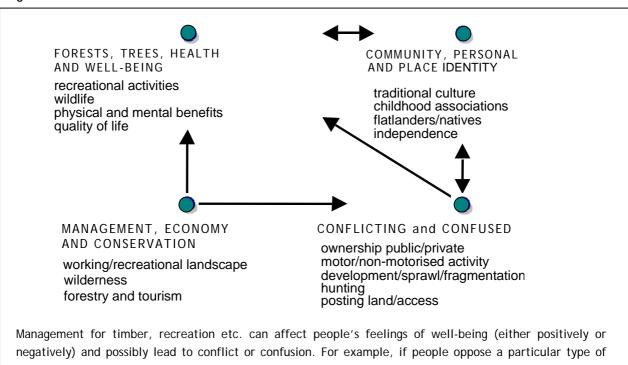
How citizens view forest and trees is important for those who manage woodland habitats. Cultural and symbolic meanings can be particularly strong for many people and often little opportunity is given for them to explore and express in detail their views on these matters. Table 1 shows the areas of Vermont in which interviews and discussion groups took place.

Area of Vermont (VT)	Working	Retired	М	F	Age 20-35	Age 35+	Native to VT	Non- native
Lyndonville Rotary Club (rural)	20	8	19	9	2	26	24	4
Craftsbury (rural)	4	0	2	2	2	2	1	3
Burlington Group (urban)	5	0	1	4	2	3	2	3
Green Mountain Volunteers - Waterbury (rural)	0	4	2	2	0	4	1	3
Green Mountain Club - Waterbury (mix of both urban and rural respondents)	10	0	5	5	7	3	2	8
Starksboro activist (rural)	1	0	1	0	0	1	0	1
Chittenden Dammers (rural) snowmobile club	0	2	1	1	0	2	2	0
Total respondents	40	14	31	23	13	41	32	22

Table 1.	Interview	and	discussion	aroup	details
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The data were analysed by coding the text to different categories which allows for the major concepts and themes to be identified and interpreted. The public perspectives on forest and trees in Vermont revolved around the four main themes that are outlined in Figure 2.





negatively) and possibly lead to conflict or confusion. For example, if people oppose a particular type of management such as clearcutting they may protest to the landowner. Conflict can also impact on people's sense of well-being by reducing their enjoyment of a particular area. Conflict may also affect people's community or personal identity if their local forest is affected and their feelings of connection or ownership to an area are reduced. Community involvement in management or conservation work might enhance people's feelings of well-being.

### Forests, trees, health and well-being

The forested character of Vermont was seen as a very important component of people's quality of life both for those who were born in the area and those who had moved from other states. The Burlington group talked about moving to Vermont and taking lower paid jobs than they would expect to get in other states and how they had done this deliberately to enjoy the recreational opportunities available, to meet like-minded people interested in the environment and to appreciate the slower pace of life.

It is also the mindset of people that go with the mountains and forests. In Connecticut I always felt like a fish out of water. I was very outdoor and recreationally oriented and I never fitted in. When I moved to Vermont I found the kind of people that I'm at home with and I feel at home here, there are kindred spirits of people who appreciate the same thing and have the same values. *Burlington Group* 

The feelings of well-being people talked about related to their physical, mental and emotional health. The Burlington group talked of the forests as comforting, reassuring and a refuge. People described exercise as secondary. Other effects seemed to be more important, such as preserving 'sanity', experiencing the calming effects of being out in nature and escaping from the city to a place where the mind could wander: 'it's a kind of therapy'. Being in the forest was also called a spiritual experience. One respondent described how 'it's like the forest is wrapping its arms around me'. The reassurance and comfort of the forests seemed to be an important issue for a number of the groups in both urban and rural areas. The whole concept of contact with nature was considered important. No matter how much humans had influenced the landscape of the area and shaped it to meet their own needs, the forests surrounding the respondents were sometimes described as natural even paradoxically when there was awareness of the impact of humans on the landscape. In fact Vermont's past agricultural history was seen as a source of interest and respondents spoke with enjoyment about seeing dry stone walls in the forests and other evidence that highlighted the state's past farm heritage.

All groups talked about particular trees with which they were fond. Birch seemed to have resonance for quite a number of people, not only for its colour and leaves but its distinctive bark. Maples were seen as particularly significant for Vermont as they were so plentiful and as the tree that is most prominent when the autumn colours arrive.

Maple tree represents a lot for the state of Vermont. Of all the trees it's probably the highest of importance not just for the maple syrup industry but for what it represents; it's a strong tree and it has such beautiful foliage in the fall. *Chittenden Dammers* 

People were carrying out a wide range of recreational activities. Vermont is a recreationalist's paradise and offers year-round opportunities from skiing, snow shoeing, snowmobiling to hiking, mountain biking, horse riding, hunting, fishing and trail running. There appeared to be two main groups of recreationalists: those carrying out what were often viewed as the

traditional Vermont activities of hunting, snowmobiling and fishing and those involved in nonmotorised activities such as hiking and skiing. There can be tensions between users although many saw the need for sharing trails and acting as responsible users. While a number of respondents did not favour the use of snowmobiles, almost without exception they admitted how organised the Vermont Association of Snow Travellers (VAST) were and the enormous amount of work their members did on over five thousand miles of trails throughout the state. The out of state people tended not to hunt or snowmobile but generally preferred quiet enjoyment of the forests. Winter sports were seen as very important because of the length and severity of the Vermont winter. These sports are not cheap though. One of the Burlington group who was a single parent talked about how she could not afford to do a lot of activities and was trying to save money in order to be able to take up cross-country skiing.

The groups saw a variety of wildlife, both those living in the city and those in rural areas. These included deer, moose, muskrat, fox, wild turkeys, the occasional bear, and birds such as piliated woodpeckers. This contact with wildlife was an important element of a trip into the forest and respondents talked with pleasure of the encounters they had. The Lyndonville Rotary respondents talked about loving the woods that surrounded them but also of taking them for granted and not often thinking about them. It was only when they were asked to discuss what the forests meant to them that they considered how important they were both for themselves personally but also collectively for the economy of the state.

We depend on trees for tourism, without them the whole state is dead. Lyndonville Rotary

A number of the respondents picked wild edibles in the woodlands such as berries and mushrooms and highlighted the importance of passing on knowledge from generation to generation. This type of social family activity was reminisced with affection. They noted changes that had taken place sometimes due to the management of a particular area which could affect their activities. They also spoke sometimes about passing on knowledge to their own children. One of the Craftsbury respondents talked about growing up in the woods and how being in them was always due to some practical purpose such as checking fences or hunting. It seems that you did not go into the forests just to be in them and enjoy them; that came as a welcome by-product of being in the forest for other practical reasons.

My father took me out a lot on areas because he grew up down the road. So we hunted in the same lands and he took me to secret little fishing spots. It was kind of weird because when he was a kid it was a lot different. And we would go up after a logging operation had come through, where he had fished every year and there wasn't fish there anymore. So that's like that was a big change for us. *Green Mountain Club* 

Well basically I'm mean growing up in the Kingdom and that everything had a practical purpose. If you were in the woods there was a reason it wasn't just... But if you were clever and liked to spend time in the woods then you figure out a practical purpose to be there. *Craftsbury Group* 

### Community, personal and place identity

Respondents were mixed between people who had been born in Vermont and those who had moved from outside the state. Vermont was thought to have character brought about by its distinctive landscape and low crime rates, its lack of billboards, its lack of extensive shopping malls and large-scale developments. Although only a small percentage of the land cover of the state is in agricultural production, cultural associations with the farmed landscape are very strong because it gives the distinct look of open views within a wider forested landscape. Native Vermonters were proud of their state and its independence. There were some tensions between those born in Vermont and those from out of state, often known as 'flatlanders' (page 19). The quote below emphasises the Northern Forest identity in which people in the northern parts of Vermont, New Hampshire and Maine feel that they have more in common with each other than with the people in the rest of their respective states.

From our perspective, Chittenden county is different from the rest of Vermont, its not Vermont in our opinion. They have a totally different view on anything. Flatlanders are anyone from out of state although we will give some leeway to those from Northern New Hampshire and Maine. Once a flatlander you're generally always a flatlander. It doesn't matter if you've been here for fifty years. We are a different breed. *Lyndonville Rotary* 

Chittenden county is the most developed area of the state; it incorporates the biggest city Burlington, and is home to approximately a quarter of all those who live in Vermont. Some locals felt that outsiders who moved to the state did not always appreciate the local culture and traditional uses of the area such as hunting, snowmobiling and logging. This was not a simple dichotomy (an us versus them situation). Rather, there were many mixed feelings about the differences between these groups. Areas such as the Northeast Kingdom have a distinct identity that is different from elsewhere in the state. In this rural area (rural even by Vermont standards) communities still derive economic benefit from the forest although there has been a shift towards an increased amount of money coming from tourism and snowmobiling. The communities in these areas are facing a transitional period of change. Large industrial landowners rather than small businesses, which can be found elsewhere in the state, dominate the Northeast Kingdom. Land here is a resource to be used and the health of the rural economy is key in enabling local people to find employment. The lack of job opportunities were acknowledged as well as the realisation of changes brought about by increasing technology.

Growing up, it was either forestry or farming or working construction and then you would need something to do in the winter and you could always cut wood in the winter. It was real seasonal. I'm not really all that old but there is a big difference between what my kids do now and what I did, a huge difference. There was no computer there was no on-line you know. Where I was living there were no other kids, the nearest kid was six miles from me growing up so it was different. Mine [kids] at times feel kind of trapped in the valley. *Craftsbury Group* 

A number of pulp and paper mills are teetering on the brink of collapse because of their age and lack of global competitiveness. Tourism is not as widespread in this area but is seen by some as a possible way of keeping the rural economy from collapsing. People in the Kingdom are used to hardships and struggling to make ends meet. But any transitional period creates uncertainty. One community in Island Pond is taking matters into its own hands. After the closure of the Ethan Allen furniture plant in 2001, which was the main employer in the town, a group of former employees negotiated to purchase the plant building and start their own woodworking company (Brown, 2002; Robinson, 2002). This move shows a willingness to adapt to unfortunate circumstances with vision and practical initiative.

One of the Craftsbury respondents who had grown up in Maine talked about how their experiences of growing up in a rural area and being able to roam the forests had given them a particular identity and a life-long interest in the environment. The educational importance of nature and woods was also described by this group with an emphasis on how much can be learnt outdoors, taking notice of the land, the seasons and the animals that use the forests.

We grew up on the outside of town and my friends were ten miles away so the woods are your play ground and my brothers and I spent a lot of time running through the woods and setting up tree houses and playing in the swamp down behind the houses. I see how that shaped all three of us. I think if we had grown up in town we would be really different people today. *Craftsbury Group* 

While those in the rural parts of the state tended to view the landscape as a working one, in the more urban areas people tended not to have the same connection to the land (in a work sense) as their rural counterparts, and the benefits of forests were often seen as unrelated to their extractive uses. Moving closer to urban areas, talk revolved around protecting what was left of the nearby forests while in rural areas people focused more on what they wanted to secure rather than protect. There are views that the influx and influence of those from urban areas and from out of state are diluting the Vermont culture, particularly its rural culture, with different attitudes, an increase in second homes, a rise in land prices and a keen desire to protect the environment as it is.

# Conflicting and confused space

This theme related not only to conflicts between different users or different views of how the forests should be managed but also related to safety issues, development, land ownership and the posting of land. Wilderness advocates were against motorised sport as it was thought to be totally against the ethos of the wilderness concept. Those involved in motorised sports saw the wilderness groups as extremists and worried about wilderness areas being located near to populations who were used to using the forests for a variety of recreational purposes.

I find it interesting that some people are such extreme environmentalists they feel that Vermont needs these major wilderness areas and I am opposed to this extreme. *Chittenden Dammers* 

Like the organisations interviewed, the public groups generally agreed that the amount of posted land was increasing either as a protest against hunting, motorised sport or possibly in protest to wider issues such as the heavy cutting law and the restrictions imposed by Act 250.

I am going to be very blunt about it. We have out-of-staters move in, buy a farm, buy a parcel of land and post it. It does not make the native Vermonters very happy. I've been hunting on the land since I was seven years old. All of a sudden some guy from New Jersey buys it and I can't hunt there anymore when I've been hunting there fifty years. Posting land does not please Vermonters. *Chittenden Dammers* 

Although it was often assumed that people from out of state were the ones posting land, one native Vermont resident in the Lyndonville Group talked about why he had felt the need to post his land. He obviously felt strongly about the traditional rights of access to land within the state but recent experiences had forced him to reconsider his land and how it was used.

For years my wife has wanted to post our land but I've been against it because I'm a native and she has moved up from Connecticut. So she has a different attitude, she's a flatlander. But last year we felt so bitter, the taste of what happened to us in terms of killing deer out of season. And one time we looked out of our yard and there were sixteen hunters across our field going down to the woods. And they hunted thorough this wood so they could see each other as they went through it, that's not hunting. So we have it by permission only. And they better hope they see me because I would give permission but my wife will not. *Lyndonville Rotary* 

The posting of land was often viewed as a clash between different cultural values and a lack of appreciation of the traditional activities that have typically taken place within the state. Knowledge of who owned land was often limited and was not generally considered an important issue, particularly for the urban group except when it was related to an increase in posted land which often reduced people's access base for recreational activities. One of the key issues in the state revolved around preserving public access to forestland.

The Champion land sale mentioned previously was also a matter of discussion. The groups noted how it had been a controversial issue and was still considered to be a sticking point for many people within the state. Those in the Northeast Kingdom where the sale took place found that they now had designated federal land in their area which caused some resentment.

The Champion land sale was a complex deal. The state and federal government took a percentage of it and the conservation groups took a per cent. There is still some unhappiness about it. There is a wilderness area they want to set aside but recreationalists think there is too much restriction and the environmentalists think there is too few restrictions. But some of the area will be for what its always been used for so it will be logging. But the remedy might not exactly be the solution everyone thought of because you might start attracting a lot of people up here. So you know now they have a federal piece of government in northeastern Vermont which was not there before. They are very wary about it because there is great suspicion of the federal government especially in this area. *Lyndonville Rotary* 

Safety was not a straightforward issue. A few of the women in the discussions sometimes talked about feeling unsafe particularly in recent years, while the majority felt there was no problem and they were happy not only to hike alone but also to camp alone. One respondent did feel that a distinction could be made between trail systems that linked into a long distance trail system, such as the Appalachian Trail, and the other trails within the state. She believed that these longer systems tended to attract outsiders hiking from end to end who might be 'fugitives from civilisation'. She also described a frightening encounter on the trail in the summer of 2002 but went on to say that she would have no problem walking on other mountain

trails within the state. One respondent spoke of her relatives and friends worrying if she went out walking alone. This type of response might explain the conditioning, to be wary or afraid, that one of the other women talked about which made her feel somewhat vulnerable.

Unfortunately I have had some very scary experiences on the trails in Vermont. I had a very serious one this summer from someone who was clearly deranged and armed to the hilt and I had to report him to the FBI, the state police and Green Mountain National Forest staff; it was really a very serious situation. I was with another female and fortunately we were able to get out of the situation. *Burlington Group* 

I could always communicate with them, a place I feel really safe and I still like to walk in the woods at night and I love doing that and I feel safer in the woods than I do at the mall actually. *Craftsbury Group* 

The Green Mountain Club has held courses specifically for women in order to increase their confidence and ability in exploring trails alone and to improve navigational skills.

#### Management, economy and conservation

There was little talk about specific management of the forests in Vermont although it was generally acknowledged that there had to be a balance between management for timber, recreation and conservation. The groups tended to feel that with management on private land they had no particular right to say how it should be undertaken. Private landowners were viewed as having the right to manage their land as they saw fit. Seeing forestland lost to development though was viewed as a much greater concern.

Question: When you think of the forests surrounding you, what is the most important thing about them? Male: That they are there. Male: That's it in a nutshell. Female: And that they don't get developed. I don't mind seeing proper forestry applied, selective cutting. But clearcutting, it amazes me that there are these areas where they go to put in a housing development and they level the whole thing and then they come in and plant new trees. *Green Mountain Volunteers* 

One of the Craftsbury group who worked as a logger had spoken of the limited range of work options available for those growing up in the Northeast Kingdom and the attraction of logging was that little initial investment was needed to start work.

I picked up a chainsaw when I was twelve years old and by the time I was fifteen I couldn't think of anything that cost that little money that a man could make his living in. That's what I saw was the investment you know, compared to like a tractor-trailer. *Craftsbury Group* 

Making maple syrup (known in Vermont as sugar making) was viewed as an important activity particularly in Starksboro. For the past decade a number of people in the community have attempted to link the contribution that forests make to the economy in order to raise awareness. Every spring there is an open house for all the sugar makers in Starksboro, approximately twenty-two, a map is produced and people are told they can go and visit and learn about the process of making maple syrup. The Starksboro respondent described this as an

important way of making the connection between people and the working environment. In areas where tourism and recreational based activities were an important part of the economy there can be problems with wealthy out of staters buying expensive houses in some areas. With the increase in house prices locals could find it difficult to purchase their own properties.

Male: I think the guy is a doctor and he just moved to Vermont and I think it was 750 000 dollars for that little log cabin.Female: That's huge.Male: Your talking about a house that cost 50 000 to build.Female: That's obscene. *Craftsbury Group.* 

The concept of wilderness areas raised issues concerning boundaries; where does wilderness begin and end and how different is it from the rest of the surrounding landscape? The ambiguity of the concept is highlighted in the next quote. Staying off trails and hunting seem to give people greater feelings of being in wilderness. The Champion land sale also emphasised opposition to wilderness particularly by those who felt the landscape should remain open to traditional uses such as logging, hunting and snowmobiling.

It's interesting because you guys don't hunt you have to go to a wilderness trail to get that kind of experience. I can go out of my back yard and get that kind of experience because I'm not on the trail. So it's weird because it's a designated wilderness but in other areas you can have that feeling perhaps more. *Green Mountain Club* 

# Discussion

As done in a number of recent studies (Henwood and Pidgeon, 2001; Bishop *et al.*, 2002; O'Brien, 2003), this research has moved away from the quantitative environmental evaluation approaches that have dominated the study of values over the past couple of decades. Instead a qualitative approach has been used to draw out the deeper meanings and experiences people associate with natural landscapes with a particular focus on the forests of Vermont.

This study has explored how local people and forestry and environmental professionals view forests and forest management. It has provided a review of some of the values and meanings that people in Vermont (with brief reference to a similar study in England; Appendix E) associate with trees and forests in their local and wider environment. While there are similar concerns between professionals and the public there are differences in how these are constructed and the significance accorded to them. It also emphasises how the meanings and values the public associate with trees and forests are linked to wider issues of concern over development and planning, private and public ownership of land, concerns about violence in society and health and well-being. These issues are wide ranging and complex and cut across the boundaries of politics, economy, culture and science. Therefore, the supposedly simple decision of the places people choose to go for recreation in their spare time links into a much broader set of issues about the cultural context of the society people live in and the symbolic nature of the environment.

We are currently moving beyond a deficit interpretation of the public that views citizens as uninformed with little knowledge. As Irwin emphasises (2001: 96): 'public groups can be expected to bring more than blank sheets of paper to environmental debate: memories of previous incidents, moral judgements and forms of local knowledge can all play a part in local understandings of environmental issues and in the very constitution of those issues'. Institutions often talked about the public's perception of logging which was often at odds with the views of private owners and organisations. This institutional perception was often based on a 'deficit interpretation' as organisations suggested that the public discussion groups in this research (and similarly in the English study) revealed many reasons that might explain people's aversion to management activities which they viewed as destructive. Organisation often failed to appreciate the range and depth of these views.

These include:

- The symbolic importance of trees as representing life, the natural world and a healthy environment.
- The longevity of trees and how they can provide continuity between the past and the future.
- The personal memories associated with individual trees or particular forests which often included memories from childhood.

- The importance of forests for a variety of reasons beyond that which is connected with economic activity.
- Ethical considerations about how the environment is/should be managed.

The public in Vermont realised the quality of the environment their state provided and outlined the contradictions between wanting progress, easy access to the facilities and amenities of modern life and the importance of conserving a particular way of life. Understandably the small communities in Vermont want to preserve their identity but change is occurring and communities with a clear vision of where they want to go and communities who want to resolve differences can build capacity for change. What at first seemed to be simple dichotomies between flatlanders and native Vermonters, logging and wilderness, development and strict planning regulations, economic growth and landscape protection turned out on deeper examination to reveal layers of meaning which highlighted the ambiguity, diversity and complexity of people's perceptions of the forested landscape of Vermont.

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# **Appendices**

# Appendix A: Topic guides

#### Organisational interview protocol

The topics listed below differed for each group depending on the objectives and priorities of each organisation. Questions were adapted accordingly and response was made to interviewees when they brought up topics they considered important.

- Aims and objectives of organisation
- Key issues for forestry in Vermont
- The impacts of tourism
- Productive management and conservation are they mutually exclusive?
- Working landscape versus conserved landscape concept of wilderness
- Economy, jobs and skills
- Partnerships and networks

#### Discussion group protocol

Similar to the organisational interview protocol, the topics in each discussion could change according to what citizens considered to be important areas or issues that they felt needed to be raised.

- Wilderness, designated wilderness, the concept of wilderness
- Forests and woods public/private ownership, social/lonely/contemplative space, freedom/confinement
- Safety being alone, comfortable space
- Wildlife seen and experienced
- Seasons and weather in Vermont
- Recreational activities and conflicts between different users
- Well-being feelings, moods, memories and associations, experiences, thoughts and emotions, health and well-being physical, mental and emotional (engagement of body and mind)
- Vermont character, development, sprawl

# Appendix B: Organisations interviewed in Vermont involved in forest management and conservation.

#### USDA Forest Service

The mission of the US Forest Service is focused on working in partnership with organisations/communities, the wise management of forestlands, sustainable use of both urban and rural land and the provision of public benefits to Americans. The Forest Service is an agency of the Department of Agriculture and has responsibility and the authority to manage the multiple natural resources of the national forests, which includes 191 million acres of federal land. In the late 1980s, the forest service, along with many other federal agencies, began to propose ecosystem management as a new working paradigm. Specific to the forest service, a feature of the ecosystem management paradigm is the assumption of economic, ecological and social interactions as a precondition for management (USDA Forest Service, 2002).

#### Federal land in Vermont

The Green Mountain National Forest is a publicly owned forest run by the US Forest Service in Vermont. There are two sections to the forest, a southern section and a northern section.

#### State land in Vermont

#### Department of Forests, Parks and Recreation

State and private programmes assist the US Forest Service in their endeavours through financial and technical support for forestry. The Department of Forests, Parks and Recreation in Vermont uses state and federal resources in order to provide benefits to American citizens. The department has an urban and community forestry programme which focuses on the stewardship of both urban and rural landscapes and improving Vermont communities quality of life. The department has nine principles which it bases its action upon, including the recognition that society values forests for their contribution to the quality of life (Department of Forests, Parks and Recreation, 1999).

#### National Community Forestry Centre

The National Network of Forest Practitioners (NNFP) launched the National Community Forestry Centre (NCFC) in 2000. The main aim of the centre is to 'help rural people conduct and use research to make informed decisions about forest resources' (NNFP, 2002: 1). The NNFP include NGOs, individuals, rural development organisations and small businesses and it also co-ordinates the work of four NCFCs. The NCFC participatory research work in Vermont has included landowner cooperation and communities developing forest health indicators.

#### Northern Forest Centre

The forests in Northern Vermont are part of the Northern Forest that stretches from Lake Ontario to the Atlantic and covers 26 million acres of land. The Northern Forest Centre is an NGO and is concerned with trying to understand the assets and strengths of the Northern Forest. The centres mission is to:

- Build regional identity
- Increase citizen capacity and leadership
- Promote stewardship

It works to develop the regional identity of the Northern Forest and promote awareness of the economic, ecological, community and cultural issues of the region (Northern Forest Centre, 2000 and 2002).

#### The Vermont Land Trust

This is the most influential and the largest non-profit organisation in Vermont concerned with conserving forest and agricultural land (Albers, 2000). The mission of the trust is to conserve land for the future of Vermont from a timber production, biological and recreational standpoint. What is notable about the trust is that it was involved in the creation of the Vermont Housing and Conservation Trust Fund which is concerned with land conservation and affordable housing.

#### Forest Watch

This non profit organisation was founded in 1994 and originally focused on the Green Mountain National Forest in Vermont, this remit has now changed and they work to protect and restore forests across New England. Forest Watch is particularly interested in increasing the amount of designated wilderness areas within the New England states.

#### Vermont Family Forests

The aim of the VFF is to promote conservation of forest community health and promote careful cultivation of local family forests for the benefits of communities where appropriate. Value adding is an important concept for VFF. One of it's projects involved school children from the town of Starksboro and a local logger and sawmill. Trees were harvested from the town forest and converted into bookcases and display units for the town library. VFF wants to promote a shared community land ethic which acknowledges the health of the landscape.

#### Greenleaf Forestry

Greenleaf is a private consulting forestry organisation that provides a service to private landowners on how to manage their forestland. It also provides advice on possible markets for timber and works with state and federal organisations. Its biggest client is the National Guard.

#### Vermont Council on Rural Development

Non profit organisation focused on helping Vermont communities develop capacity to create a sustainable future through collaboration and the use of public and private resources. The board of the council is a partnership of state, federal, local, non-profit and private partners.

## Appendix C: Study locations

**Burlington** is the largest city in the state of Vermont and it is known for its culture and events. The city is situated in Chittenden County on the shores of Lake Champlain the sixth largest freshwater lake in the USA. Large numbers of students attend the University of Vermont and add an extra dimension to the dynamics of the city. The population for the city in 2000 was 38,889.

Lyndonville is situated in the Northeast Kingdom in the county of Caledonia with a small population of 1,227. Agriculture and forestry play an important role in the economy of the area.

**Craftsbury** is an attractive village also within the Northeast Kingdom in the county of Orleans. Craftsbury common is known as one of America's most handsome village commons. The village has a sports centre which is open all year round and is also home to Sterling College which specialises in environmental studies and small scale agriculture. The population recorded in the 2000 census was 1,136.

**Starksboro** situated in Addison County with a population of just under 1,900 people is known as a bedroom community within forty minutes drive of Burlington. Farmland and the foothills of the Green Mountains surround the town. It is also known as an economically and socially diverse community with small town values.

Chittenden is a mostly rural and hilly area. It is in the county of Rutland with a population of approximately 1,182. The Green Mountains run down the entire eastern half of the town's land base. Chittenden Resevoir is a feature of the area providing public access, boat launch and fishing. A large proportion of the towns land base, approximately sixty three percent, is owned by the US Forest Service as it is part of the Green Mountain National Forest.

**Waterbury** is in the Northwest of Washington County, it is near to the interstate providing easy access to Burlington. It is also near to the ski area of Stowe and has a population of 1,706. The village has been designated a historic district because of its fine buildings.

Organisation	Greenleaf Forestry	USDA Forest Service (USFS)	Vermont Council on Rural Development	Department of Forests, Parks and Recreation	Forest Watch
Work of organisation	Private Forestry Consultants	Federal Forestry	Help communities to develop capacity	State Forestry	Works to protect and restore forests
Role	Consulting forester	District Manager	Executive Director	County forester working exclusively with private landowners in Northeast Kingdom	Executive Director
Key Issues raised by each organisation	Fire suppression big issue in forestry - sometimes fires should be left to burn.	People in Vermont (VT) have a well-developed relationship with the forests and think long term.	Rural communities should be included in public policy.	The resource is here in the region but if you haven't got the mills or markets close by you are out of the wood business.	Working for a non-profit organisation you can speak freely about what you believe to be in the public interest.
	Woodland management is a balance between good forest management and economics.	Logging has been postponed for four years on GM National Forest (GMNF) because of endangered species.	Vermont is exporting raw logs which is a third world type of economy. Should be selling value added products.	There is a lot of poverty in Northern New England.	With certified wood you are selling the wood and a story - selling a product with a set of values attached.
	Not all landowners realise conservation easements will restrict them as much as they do.	Many diverse organisations in Vermont, which makes things complicated, so we need constant communication.	Modern people have no connection to the materials they use - they are divorced from production. Then we often condemn those who are involved in productive activity in connection with natural resources.	Difficult to convince consumers about buying certified products.	All forestlands provide public benefits. Public land should provide what private land cannot.
	What happens on an easement further down the line when a landowner needs some money? Forest Certification	USFS becoming more involved in conservation easements and going beyond the boundaries of the GMNF. Current proposal to double	Facing tremendous challenges to market what's special about VT to an international elite clientele for the highest value added return. Need an ecological economy that	Average age of landowners is very high, in sixties or seventies, continuity is a problem and fragmentation of land a possibility. Like to have more tourism in Northeast	VT is only cutting half of the wood that is growing annually in the state so we could do away with logging on National Forests. Losing money on logging on National
	expensive and cumbersome.	size of wilderness in GMNF - congress will decide.	uses the resource wisely for the long term future.	Kingdom - tourism will be forest based. Tourism wages pay less than forestry wages. Less tourist development in this area at the moment.	Forests as federal laws require federal land managers to go to great lengths to protect lands, water and habitats.
	Landowners getting certified see it as an investment for the future.	Wilderness different concept in New England, not much old growth forest.	Danger is in the break down of traditional forests and their cutting up for housing development.	Differences between North and South Vermont generally related to parcel size and land ownership patterns and cultural differences.	Should use National Forests to demonstrate exemplary forestry to private landowners.
	Land posting has increased.	Need to know what the socio-economic impacts of wilderness are.	How do we support a positive perspective of wise land use.	If Northeast Kingdom loses pulp markets landowners will have to go out and grow better quality trees.	People in urban areas value the National Forests for amenity values not commodity production.
	Try to educate landowners by putting out a newsletter, talk to people and take them out into their wood.	Better quality timber in the GMNF because it is managed for the long term.	Bottom has dropped out of the paper and pulp markets.	40 acre heavy cutting rule has cut down the amount of clear cutting that takes place. In the past parcels as big as 2200 acres have been clear cut.	With state lands you should pay attention to Vermonters views. With federal lands need to pay attention to views of all people in the nation.
	Public don't like logging but don't realise the trails they walk on were put in to give access for timber.	Recent changes in GM forest have been an increase in recreation - cross country skiing and car camping.	Need to take responsibility for what we are doing with our own patterns of consumption - so we don't export environmental degradation elsewhere.	Ownership in this area is mainly for timber production. Some of the pulp paper mills are barely hanging on - not globally competitive.	Two certification schemes SFI and FSC. Industry prefers SFI not as rigorous as FSC. Industry is making a better job of marketing SFI.

# Appendix D: Key Issues raised by each organisation

	Greenleaf forestry	US Forest Service	Council on Rural Development	Dept Forests, Parks	Forest Watch
Key Issues	When marking a wood you need to consider that the owner wants to do good stewardship but he also needs the money.	Often have to deal with litigation and appeals which takes up staff time so timber and wildlife management does not then take place.	Tourism while celebrating natural beauty also builds hotels and McDonalds - every economic sector has its cost.	Non-timber forest product gathering could be encouraged for the future as a possible income supplement.	National Forests, Wilderness and National Parks areas attract and hold businesses and workers to a region. These sorts of amenity based economies are bigger and more stable than tourism based economies.
	Timber is a destructive industry but a few years later a clear cut looks fine.	Not going to factor into the forest plan time that might be spent on litigation - it's a congressional issue.	Wilderness is very much a managed environment.	Average landowner acreage is larger in the Northeast Kingdom than the rest of the state.	Strongly oppose the charging of fees for use of National Forest lands - does not work well for the old and poor.
	Our woodland owners are mainly someone who buys a house they like and it happens to have forty or fifty acres of land with it. They don't necessarily buy to manage for timber.	Forest plan completed every 15 years, after10 years a new plan is developed over four or five years.	Producing maple syrup is a great family activity and keeps woods open and growing big mature beautiful trees.	Difficult to get landowners excited about making an investment they won't get back for 20 years.	Forty acre logging law is weak on forest protection as it's easy to obtain a permit to log over that amount. Don't have strong forestry practice laws or regulations in Vermont today.
	Amount of easements has increased dramatically - it's good that a lot of parcels are getting conserved.	People come to public meetings on forest plan not to learn but to voice opinion - need different structure and to be more analytical about approach.	VT is special in being mainly family operations rather than corporate forestry.	In this area we have low value markets and areas are often clear cut rather than high graded.	Bias for timber production in Vermont through preferential taxation programmes.
	Champion land sale and easement sold to private company - easement says they have to cut 40% of their net annual growth so there is resource for local economies.	USFS talk to people around the forest about the plan and have huge mailing list for other people outside the area.	Communities in Northeast Kingdom are losing their young people who move from the area due to limited job opportunities.	Landowners can cut timber, make money then sell the land which is often parcalised into smaller units - issue of short term versus long term management.	Champion land easement requires logging in perpetuity - this should not be done as in the future the landowner may get a higher economic return from managing the land as wilderness.
	Land changes ownership pretty quickly - at least 5% of clients transferred ownership last year.	Differences in attitudes between Vermonters and flatlanders.	Difficult to build the kind of momentum that a creative economy needs in hard hit rural areas.	Fish and Wildlife dept are hesitant about cutting - sportsmen have a big input into what Fish and Wildlife do as they finance them through hunting licences.	Wild land is very much managed for recreation, habitats, water quality.
	Should cut public trees - taking away state and federal timber sales puts pressure on private industrial landowners.	GMNF unlikely to charge fee for recreation as car parks and people too dispersed around the forest.	VT has had the wisdom to build regulation and common standards in forestry.	Increased posting of land often takes place when parcel size gets smaller.	In order to create a network of wild lands need to create network of people committed to the vision.
	Not cutting on public lands is like saying we want to protect public land but it does not matter what happens to private lands.		Traditional forest products sector in VT needs to respond to international circumstances.	Quality and size of trees is greater on public land - get more for stumpage than private lands do.	Posting in some areas being used as political response, e.g. to the heavy cutting law.
	Timber on public land is probably more valuable - better quality.				State government and agencies in Vermont reluctant to go up against Vermont timber industry.

# Appendix D (continued): Key issues raised by each organisation

Organisation	Northern Forest Centre	National Community Forestry Centre	USDA Forest Service	Vermont Land Trust	Department of Forests, Parks and Recreation	Vermont Family Forests
Work of organisation	Promote regional identity of Northern Forest. Works with arts and humanities	Participatory community research	Federal Forestry	Conservation easements to prevent development	State forestry	Works with small landowners to provide advice
Role	President	Principle Associate	Archaeologist	Forest Projects Director	State Forester	Director
Key issues raised by each organisation	Who should own land - public or private landowners and in what proportion.	Many groups fail to realise and underestimate the importance of talking to your neighbour or to local people.	Wilderness in the east USA is very different from the west - some trees in wilderness areas in Vermont are only 70 years old.	Managing productive forests or farmland - helping communities achieve what matters.	Increased public acquisition of land and conservation easements - conflict between environmental groups and industry over how much public land there should be.	Importance of maintaining forest health.
	Large scale selling of land and subsequent land fragmentation - reduction in parcel size.	Town forests are an important resource for communities.	Wilderness is an elitist concept from a recreational perspective.	ATV use damages the land.	Land fragmentation through the sale of land - timber production difficult on small parcels of land.	Need to develop community shared land ethic.
	Investment forestry - 10 year investments are not long term e.g. pensions companies. Either have to sell land or raise new investment money for another 10 years.	Building connections and networks between groups and communities.	In the GMNF the most contentious issues are wilderness and logging. Polarisation of issues is scary.	Investor owned properties are the main players at the moment in VT - concerned with dollar and cent analysis.	Cultural change within the state organisation away from timber production.	Need different ways for landowners to participate in the market - value added products.
	Reduction in forest employment - economic future of region uncertain: how much will be forestry and how much tourism - best paying jobs are forestry ones.	Generational change as many land owners reach retirement - will land fragmentation take place or development?	When Forest Service reaches decision points e.g. when creating a new forest plan people come forward, they realise these don't happen frequently so everyone gets agitated.	To conserve land through easements doesn't require many services - misconception that easements will reduce the money towns receive from taxes.	Tourism - money from leasing ski areas helps subsidise state parks.	Certification is costly and bureaucratic.
	Development and sprawl reducing forest cover.	Different views - forests for industrial purposes versus the view that industry destroys the land.	The new GMNF plan will be more philosophical rather than being overly prescriptive.	Sprawl - second home development huge.	Regional differences in Vermont related to how forests should be managed.	Tensions between traditional managers and others.

	Northern Forest Centre	National Community FC	Forest Service	Vermont Land Trust	Dept of Forests, Parks	Vermont Family Forests
Key issues	Logging versus non logging - wide spectrum of opinion on logging.	Use of the arts can build consensus - help find common ground.	Easier to satisfy people who come from outside area. Locals see GMNF as their backyard and think about how things affect them.	Tourism - Patch work of open and wooded land appeals to tourists.	Change in past decade from land owned by large industrial corporations - carving forests into smaller units.	Tax laws favor timber production.
	Forest certification - driven by landowners with many different standards.	Children no longer having unstructured experiences in the forest.	Vermonters and flatlanders - differences are not between these groups but are about economic lifestyle differences.	Lack of market place incentives for sound management leading to land sales and fragmentation.	Land posting increasing.	Ideal model is family forests and light on the land style management.
	Generational change as landowners reach retirement age - what will happen to the land.	Children's safety big concern right now.	The conservation easement concept has run amok, its good but how will it be managed in the long term.	Forests taken for granted unlike agricultural holdings.	Urban people tend to concentrate on non commodity values of forests - see management as negative, while rural residents may see trees only as commodity.	Most landowners are not interested in creating wilderness but are interested in light management of the land.
	Cross border connections in New England tend to happen through NGOs.	What happens to loggers, timber owners, saw millers and communities when land changes ownership.	Public lands are where poor people can recreate. Should not restrict public land to those who have disposable income.	Rural poverty in the Northeast Kingdom.	Influx of people coming into Vermont bringing different values that are not tied to the landscape.	Need new way for landowners to participate in the market place.
	Increased posting of land reducing public access.	Logging community in crisis - how do they form new sets of relationships.	Snowmobiling groups are impressively managed and organised in creating and managing trails.	Land posting - there is an ethic of access unless land posted.	Private landowners say why should we provide recreational values for urban folk that don't value traditional uses of the land and place restrictions on what we can do.	Land posting is increasing.
	Woods cut heavily over past 100 yrs so wood quality has now been reduced.	Importance of translating research into something readable for the public.	The main mission in east USA for most foresters is recreation.	Need to let timber come back to maturity.	Often surprising how much the public knows about a resource because they live there and travel there.	Networks and relationships are key. VFF works because its local.
	Big increase in conservation easements - ownership seen as bundle of sticks.		We should define ecosystems so they include people.	Certification expensive.	State forests are a hidden resource state parks more widely known.	Need to involve people - take bottom up approach.
	Class differences which effect how people view the forests.				When people see a tree they see something beautiful they don't necessarily see a connection to a product - we need to address why this connection has been lost.	Custom place based niche marketing.
	Federal tax laws almost favour landowners to sell land to pay their taxes.					

# Appendix E: Issues of importance in forestry and within wider society in both Vermont and England

Issues of importance in forestry and more broadly in environmental and societal issues	Vermont (VT)	England	Related to wider issues within society
Ethical issues	Respect private landowners rights. Respect private property when using it for recreational purposes.	People should respect the environment - need to have education and contact with nature. Everyone should be able to participate in using green spaces. Management to balance different needs.	Who benefits particularly on public land that should be available to everyone. Are we exclusive or inclusive in our management practices?
People's connection to the land	Rural people see forests as more of a resource to be used. Often people still tied to the land. In urban areas often little connection to the land and it is to be used for recreation and conservation.	Worries that urban children have no connection with nature and that they will not learn to understand it and respect it without this connection.	Increased disconnection from the land leading to disinterest and possible destruction of habitats, ecosystems.
Ownership of land - Small landowners and large landowners, public/private ownership	Small landowners who don't often know much about woodlands may come from an urban background. Small woodland owners lack the information and financial incentives to ecologically manage woods.	Urban attitudes of small landowners - they don't particularly want to give people access to their land.	Patterns of ownership - who owns land and who should own land also relates to who has access to land.
Forestry industry and environment organisation tensions	In Vermont and New England this is related to the amount of land being taken into public ownership and an increase in conservation easements. Industry is worried that it reduces the productive base of forestry.	In England tensions between conservationists and industry over management practices.	Tensions between economics, short termism and sustainability. Political agendas, organisational agendas?
Public involvement	Who gets to speak? State realises the difficulties of trying to hear different voices. US FS need to develop other forums for finding out public needs and concerns.	Worries about being overwhelmed by the public response if the public are involved. How to reconcile local voices and those from outside the area.	What are the rights of the public to be involved, engaged, consulted and to determine the public interest.
Loss of forest cover/green space Fragmentation of forests	Fear of sprawl and loss of landscape character that makes New England unique in the USA. Even with a state that is 67% rural concern is strong over any increase in development. Changes in the forest economy have led too the large scale selling of land.	Based on a concern for any loss of precious green space particularly in urban areas. In rural areas concern for a loss/change of character which attracted people to the area in the first place. Quality of life issue.	Concern over development and retaining a particular way of life and lifestyle, topics both very relevant to each area. A realisation particularly in England of the need for a balance and a realisation that some development will need to take place and this should be done sensitively.

Issues of importance	Vermont	England	Related to wider issues in society
Tourism	VT receives large numbers of tourists who come to see the fall foliage, pastoral landscape, and ski in the mountains. Tourism brings a substantial amount of money into the economy and has brought many to VT who have gone on to buy second homes which has often raised land prices.	Both the Lake District and New Forest receive millions of tourists every year who contribute greatly to the local economy. People had often moved to these rural areas for the quality of life the area provides such as a cleaner and more attractive environment.	Tourism important in both areas. Impact of foot and mouth disease in Britain highlighted the importance of tourism to local economies. There is also the issue of wealthy outsiders buying second homes, prices rising and young people and locals being unable to afford to live in the area they grew up in.
Forest Management and Timber production	Logging can be an issue for some groups particularly clear felling. Recreation is an important part of management in both state and federal forests.	Management to balance needs of people and wildlife seen as important. Little concern over timber production in England among the public, possibly because not many people see much going on. Some disliked plantation forests calling them boring and uninteresting because of their uniformity. Although a number enjoyed conifers and for example the smell of pine.	Working landscapes or natural landscapes? Sustainable management of the environment to meet the needs of society or profit and economic returns?
Wilderness	Strong advocates both for and against increased wilderness in Vermont. The USDA has designated wilderness areas within National Forests. These places are supposed to be untrammelled and no motorised access is allowed. How much public money should be spent on wilderness areas?	A difference in perception of what is wild. In the urban groups some people talk about wild patches of land even within the urban environment. Some talked of wild areas even where paths had been specifically created.	Perceptions of what a landscape should look like. Concern over change and loss of perceived wild/wilderness areas is strong. Very different perceptions of what a wild area looks like in both countries. Does the concept of wilderness leave any place for humans? Wilderness is always managed.
Access Land posting	Vermont is the only state whose constitution actually guarantees the right to hunt and fish on unposted private land. As more urban people move to the state they are seeking to restrict access to land. State surveys show that posted land is increasing. Worries about the loss of access to land.	There was often uncertainty about were people were allowed to go. There appeared to be less concern in the urban environment as it was often assumed that green space was public space. Closure of footpaths due to the foot and mouth outbreak had a big impact on people particularly those in rural areas.	Related to issues of justice and equity. Deprived areas often have less green space and a more degraded environment. People tend to visit sites that are in close proximity to where they live.
Accessibility	Related in Vermont to land posting more than anything else.	A number of people in the urban groups did not drive or had only limited access to a car, which made certain areas inaccessible to them.	Related in England to access to a car. Also to having the time and opportunity away from work to visit woodlands and the knowledge and confidence to take the opportunity. Concerns about the lack of public transport.

Issues of importance	Vermont	England	Related to wider issues in society
Safety (adult and child)	A number of child abductions in the US have had a high profile and concerns for children's safety has risen. Safety for women not a big issue.	Very much a gender issue with the majority of women stating that they would not visit woodlands alone. Also related to not letting their children have the freedom to go alone or with friends to woods. A number of women in urban areas talked about seeing flashers.	Violence in society. People debated whether society was becoming increasingly violent or whether media representations of particularly horrible incidents stuck in people's minds and gave them the perception of increased violence.
Childhood memories	Very strong often involved learning skills from parents such as hunting and fishing.	Very vivid in both urban and rural areas and across all ages ranges. Both exciting and scary memories. Strong memories of particular places. Even people in their early twenties were nostalgia about their childhood experiences. Concern by mothers that children have to follow to many rules and do not have enough opportunity to let of steam.	A realisation from the public that children today including their own do not have the same freedom to explore green spaces or even walk to school. What unstructured experiences do children have? How do we allow children to have the experiences their parents had? Related to people's connection to the land.
Abuses	All Terrain Vehicle's considered damaging to the landscape. The majority of people disliked them and thought they should be restricted.	In urban areas abuses could be extensive from burning trees, drug taking in woods, burning cars, fly tipping. Young people using air rifles. In rural areas the main concern was with rubbish. Reluctance to use places that appear to be or are neglected.	Greater problems occur in deprived areas where people become disenfranchised because of degraded environments, joblessness and a lack of alternative opportunities.
Learning and education	A few people talked about learning skills from parents and sometimes passing this on to their own children.	Particularly strong feeling from urban groups that children should have contact with and learn about nature in order to be able to respect it.	Different knowledges important, a concern to pass on knowledge. Worries about reduced school trips because of fears of safety and not having enough flexibility in the national curriculum to bring in more environmental information.
Well-being	Quality of life issue in VT - seeing the autumn colours, skiing in the winter. People prepared to take reduced income to live in the state.	Physical, emotional and psychological benefits were described covering a range of benefits. Mentioned again and again was the need to get away from the stress of modern and urban life.	Importance of feelings of well-being to health and happiness and resilience to cope with the stresses and strains of modern life.
Place identity - Identification with state, town, village	Uncommercialised nature of Vermont seen as important in providing character to the state. Those in the Northern part of the state have a distinct identity and independence.	Those who lived in scenic areas appreciated very strongly the quality of life and character of these areas.	Familiarity with areas provides a strong relationship and connection to that place.
Recreational use	VT recreational paradise with skiing, hiking and all sorts of opportunities for outdoor recreation.	No mention of conflict between different user groups. People engaged in walking, picnicking, cycling, nature watching.	Are we only encouraging particular groups of people to use woodlands by providing certain recreational opportunities?