Norway and Scotland
A STUDY IN LAND USE

THE REFORESTING SCOTLAND NORWAY STUDY TOUR
MAY 1993
NORWAY AND SCOTLAND  A STUDY IN LAND USE
a report based upon the experience of the
Reforesting Scotland Norway Study Tour
ACKNOWLEDGMENTS

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SCOTTISH NATURAL HERITAGE
G&H Roberts Community Trust
The Gannochy Trust
The Russell Trust
Christina Ker

Many people have helped in the preparation and organisation of this tour. We would like to thank the following for their willing and generous time at critical moments during the last two years and apologise to anyone who has been inadvertently omitted.

Special thanks are due to: Bjørne and Rigmore Moe; Kjell Sandaa; Anders Stub; Professor Frans Wielgolaski for their help from a very early date in preparing for the tour.

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To the tour consultants: Robin Callander and Rick Worrell.

For photography and media: Brendan Hill and Martin Howard
Foreword

The proximity of Scotland to Norway caught the attention of Samuel Johnson when he was on tour in 1773: at Slains Castle he observed that 'from the windows the eye reaches over the sea that separated Scotland from Norway'...

Norway is indeed Scotland's nearest continental neighbour. From Buchan Ness (ten miles north of Slains) to the nearest point of the Norwegian coast, near Stavanger, is less than 300 miles; from the Berwickshire coast to the Dutch coast, the next shortest distance between Scotland and any point on the continent, is a good deal more.

from A Northern Commonwealth: Scotland and Norway by Gordon Donaldson, Edinburgh, 1990

Scotland and Norway have long enjoyed a close relationship with each other and our history as two small countries on the north-west fringes of Europe has much in common.

In Norway, we have always been deeply concerned with all aspects of rural life. Many of our people live in far flung, remote and inhospitable places where, in the past, there was much hardship, emigration and poverty. Today, we are more than ever concerned with the quality of our environment, with the retention of our cultural identity and with the social and economic well-being of our rural areas. In Scotland, you have a world-famous reputation for an unspoilt, unpolluted and beautiful countryside. But I know that this image hides environmental, social and economic problems—some of the same kind of problems that we have in Norway.

Reforesting Scotland seems a very sound idea. It suggests a positive and creative process of restoring Scotland's natural resources so that future generations can continue to gain sustenance from the land. In Norway, we too have suffered deforestation. Fortunately, we have managed to retain or restore much of our forest land and it, together with our very limited amount of agricultural land forms the economic basis of much of our settled rural population.

Reforesting Scotland put together a very professional and comprehensive Study Tour which was enjoyed by a remarkable range of people. I know that all the participants were highly stimulated by their time in Norway and I hope that this Study Tour concept can be part of a growing cooperation between our two countries in the field of land use and environmental management.

Finally, if you have never visited Norway, I hope you will do so soon. Whether professionally or on holiday, may the bonds between us grow ever stronger.

Best wishes

Nikolai Skeie
Royal Norwegian Consul General, Edinburgh
January 1994
Participants

There were 31 participants on the Norway Study Tour with prominent and wide-ranging involvements in land use and community issues in rural Scotland.

Dr. Richard Birnie
Head of Land Use, Macaulay Land Use Research Institute

Robin Callander
Independent Land Use Consultant and Adviser to the Norway Study Tour

Alan Drever
Director, Scottish Native Woods Campaign

Graham Gill
Head of Forestry Practice Division, Forestry Commission

Priscilla Gordon-Duff
Landowner & Rural Forum & Scottish Conservation Projects

Councillor Duncan Grant
Highland Regional Council

Graham Grant
Farmer, Laggan Community Association

Alan Hampson
Head of Woodlands & Forestry, Scottish Natural Heritage

Brendan Hill
Journalist

Martin Howard
Director, Reforesting Scotland

Alyne Jones
Ethnologist, The School of Scottish Studies

Howard Liddell
Gaia Architects

Donald McPhillimy
Director, Reforesting Scotland

Alec Miller
Shetland Development Officer, Association of Community Enterprises in the Highlands and Islands

David Minns
Senior Conservation Planning Officer, Royal Society for the Protection of Birds

Alasdair Nicholson
Director, Lewis Council of Social Service

Alastair Nicolson
Crofter, Skye Forum

Councillor Jim Oag
Highland Regional Council

Logan Paterson
Lecturer, Barony College & Galloway Uplands Association

Simon Pepper
Head of Operations, WWF Scotland

Dr. Peter Pitkin
Head of Agriculture and Woodlands Environments Branch, Scottish Natural Heritage

Bernard Planterose
Director, Reforesting Scotland

Emma Planterose
Director, Reforesting Scotland

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Chief Technical Officer, Crofters Commission

Bill Ritchie
Assynt Crofters Trust

Sheena Slinon
Farmer & Rural Forum

John Toal
Development Officer, Scottish Crofters Union

Drennan Watson
Consultant & Highlands and Islands Forum

Andy Wightman
Development Officer, Reforesting Scotland

Peter Wilson
Chief Executive, Timber Growers United Kingdom

Dr. Rick Worrell
Forestry Consultant and Adviser to the Norway Study Tour

Norway Study Tour participants visiting a fruit farm, Hardanger, Hordaland. Photo: Martin Howard
This report is an account of the highly successful Study Tour to Hordaland County, western Norway in May 1993 organised by Reforesting Scotland. It describes the motivation and purpose of the tour and the broad conclusions of the participants.

We hope the report will act as a catalyst to develop further many of the ideas which emerged from the week in Norway. It aims to distil the experience of the tour and the ideas it generated so that a wider audience can take part in the ongoing debate about the future for rural Scotland.

The Norway Study Tour was born of a belief that there is something to be learnt from a country such as Norway, with its ecological and climatic similarities to Scotland, which could be of benefit to Scotland at a time of uncertainty and change in the Scottish rural economy.

A range of organisations and individuals with an interest and stake in rural land-use were approached to take part in the tour, from community groups and public sector agencies to local authorities, crofters and environmental groups.

All thirty one participants were unanimous in their view of the overall success of the tour which forged a new common agenda for the participants summed up in seven themes which emerged at the end of the nine days. It also demonstrated that this process of developing common interests between sectors was as valuable as the content of the tour itself. It should be emphasised that the tour and this report are the beginning and not the end of the project. The themes and the intangible and tangible results of the tour will be developed in the form of further projects within Scotland and exchanges between Norway and Scotland.

This project is a significant step in the ongoing debate about land use in Scotland. It demonstrates the value of the study tour approach, of the relevance of Norwegian experience, of building a broad community of interests, and of looking critically and radically at the underlying assumptions behind why rural Scotland is the way it is today. The Norway Study Tour meant different things to each participant but all agreed that they could not look at Scotland in quite the same way again. We know that this report will extend the interest and debate to many more people throughout Scotland.
**BACKGROUND**

A pattern of land ownership and use has evolved in Scotland which is the product of historical political events and which continues to be the subject of debate. Recently, various factors have come together which have stimulated debate about the future for rural Scotland: the demand for better land use integration and more local control; the prospect of substantial withdrawal of agricultural support; new industries such as fish farming; the new imperative of sustainability; reforms in world trade and markets and a growing need to restore and protect all aspects of our environment.

What do we want to do with our land? There is a certain amount of agreement on the problems, a range of views on the solutions but a distinct lack of a coherent and agreed vision of what the shape of rural Scotland should be in, say, 50 or 100 years time. One way of generating such a long term view is to look for inspiration, ideas and models from elsewhere, and the Norway Study Tour was organised for this purpose.

Norway, in common with other parts of Scandinavia, has strong ecological, climatic, economic and cultural associations with Scotland. Many of the plants and animals to be found throughout Norway are also present in Scotland in similar associations. The climate bears close comparison with parts of Scotland in being heavily influenced by the sea and by altitude. Land uses in Norway are similar to those in Scotland; agriculture, forestry, fishing, tourism and the oil industry. Norway, however, is a heavily wooded country with forests playing an important part in the rural economy and culture. Rural communities are also much more heavily populated with small scale agriculture having a key role in preserving the ‘cultural landscape’ in the face of outside economic forces. It is these two features – the extent of forest and the long tradition of rural settlement that makes Norway such an interesting and potentially important country to study.

**Days 1 & 2: Departure and the West Coast of Norway.** Introductions and briefings on board MS Venus. Lectures on ecology and land use in west coastal Norway from Prof. Frans Wielgolaski of the University of Oslo and Prof. Peter Kaland of the University of Bergen whose special interest is the ecology and history of the coastal heathlands which have been managed for 4000 years by farmers.

**Day 3: An Overview of Hordaland and Bergen Community Forest.** Short presentations by staff from Hordaland County Council and land use agencies. A visit to the 1850ha. Bergen Community Forest which is owned and managed by a charitable society celebrating its 125th anniversary in 1993. The forest is an important recreational area with pony trekking, cross-country ski trails and a café and restaurant as well as a small sawmill providing timber and firewood to the public.

**Day 4: The Uses of Wood.** A visit to a small forest-farm with its own sawmill which produced the timber with which the farmer had just built a new farmhouse. Also a look at the timber industry including a visit to the maker of traditional wooden barrels, a furniture factory and a laminated timber beam factory. Evening lecture from the Chief Forest Office of Hordaland.

**Day 5: Farming and Forestry.** Visits to Killen, a forest-farm with dairy and sawmill and Malkenes a typical forest-farm with indoor sheep housing owned by the local Chairman of the Forest Owners Association. Discussion of the economics and future for Norwegian agriculture including an evening lecture titled, ‘Norwegian agriculture: is it sustainable?’ by Vidar Rune Synnestvedt, an architect and organic farmer.

**Day 6: The Coastal Heathlands.** Travel by boat to exposed heath-covered islands, home to wild Norwegian sheep, on the extreme west coast of Norway. A look at the economy of a scattered island community where fish farming, tourism and agriculture are all important. Visit to Hisøy, an island reforested by a local doctor starting in 1895. Travel through rocky, low, heath covered islands reminiscent of Harris and other parts of the Hebrides.

**Day 7: Fjords and Uplands.** A journey 100 miles inland through the mountains to Sørøya at the head of the Hardanger fjord – Norway’s most famous fruit growing district. Steps to examine the land use pattern from the sea shore to the mountain plateau. Visit to the Ullensvang Fruit Research Station and introductory talks on the development of the fruit farming industry.

**Day 8: Fruit Farming.** Visits to local fruit farms to discuss the integration of fruit growing, livestock rearing, tourism and craft industries such as wood turning and weaving. Afternoon recreational walk up to the Buhaug glacier. A final evening discussion session concluding the tour.

**Day 9: Cultural Landscapes.** A visit to a designated cultural landscape site where large oak trees have been pollarded to produce timbers for boat construction. Flight home via Stavanger over the area travelled through during the week.
The area visited was the County of Hordaland in western Norway. The landscapes of Hordaland have much in common with Scotland, ranging from sub-arctic plateaux and mountains, to forested hill ranges and exposed coastal heathlands. This part of Norway was heavily deforested by the 17th and 18th century following the introduction of the water-powered sawmill, with much of the timber being exported to Scotland. This was followed by a period dominated by sheep grazing before grazing levels were reduced and the forest regenerated. This history, together with the ecological and climatic parallels, makes it a valuable region to study.

THE STUDY TOUR APPROACH
The aim was explicitly not to undertake a crash course in the Norwegian rural economy but to assemble sufficient information in order to think constructively about the future for Scotland’s rural areas. Reforesting Scotland has its own diverse views on the significance of the Norwegian experience. We did not, however, organise this tour to promote these ideas, but to facilitate and enable a wide range of participants to judge for themselves whether a study of Norwegian land use can yield any insights into the future for Scotland.

Several professional groups and individuals have visited Norway in recent years to study aspects of land use. These, however, have mainly been single discipline studies often carried out by specialists. The Norway Study Tour was specifically designed to be multidisciplinary so that participants could interact and learn as much from each other as they could from the Norwegian experience.

The tour was planned over two years and incorporated in its planning the following key elements:

- Two detailed pre-tour reconnaissance visits.
- The careful selection of participants from a wide range of backgrounds and interests.
- A comprehensive 60-page set of pre-tour briefing papers including documents, academic papers and newspaper articles as well as an overview of each day’s activities.
- Familiarisation and orientation sessions on the outward 30-hour ferry journey including a sail up the Norwegian coast with Norwegian land use specialists. Flight home over the same ground.
- The preparation of a varied and structured programme of visits to various parts of Hordaland County including farms, forests, factories and research institutes.
- Appointment of tour consultants and day organisers to manage the week’s events.
- Involvement of participants in day work-groups and evening discussion leading to final concluding session.
- A post-tour weekend meeting in July 1993.

Critical to the success of the tour and in many ways the principal outcome was the sharing and synthesis of ideas which took place among the diverse range of participants over the nine days. The success of the tour was very much due to the committed and hard working group of participants as well as to the detailed planning which went into it.
Norway is a country of 4.2 million people inhabiting an area 4 times the size of Scotland (ref. Table 1). Like Scotland, it is a land dominated by mountains, forests and the sea. It has traditionally been heavily dependent on its natural resources with industrialisation only occurring early in the twentieth century.

There is a long history of links between Norway and Scotland – from the Viking era through the Hanseatic League and the Second World War. Currently there are strong connections with Shetland and other regions such as Grampian, with whom Norway shares the North Sea fisheries and oil and gas resources.

### Table 1:
**Norway and Scotland**

<table>
<thead>
<tr>
<th></th>
<th>NORWAY</th>
<th>SCOTLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land area (ha)</strong></td>
<td>32,390,000</td>
<td>7,878,300</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>4,221,000</td>
<td>5,091,000</td>
</tr>
<tr>
<td><strong>Density (persons per km²)</strong></td>
<td>13</td>
<td>65</td>
</tr>
<tr>
<td><strong>Land use:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture – Cultivated (ha)</td>
<td>1,000,000 (3%)</td>
<td>1,717,000 (22%)</td>
</tr>
<tr>
<td>Number of holdings</td>
<td>92,000</td>
<td>26,000</td>
</tr>
<tr>
<td>Average size of holding (cultivated ha)</td>
<td>10</td>
<td>66</td>
</tr>
<tr>
<td>Employment (man years)</td>
<td>105,000</td>
<td>61,100</td>
</tr>
<tr>
<td>Forest – Productive (ha)</td>
<td>70,360,100 (22%)</td>
<td>1,049,000 (13%)</td>
</tr>
<tr>
<td>Number of holdings</td>
<td>125,522</td>
<td>*</td>
</tr>
<tr>
<td>Average size of holdings (ha)</td>
<td>56</td>
<td>*</td>
</tr>
<tr>
<td>Employment (man years)</td>
<td>37,000</td>
<td>14,877</td>
</tr>
</tbody>
</table>


* No official statistics available for Scotland.

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**The West Coast of Norway**

Norwegian sheep in winter on the coastal heath: a harsh oceanic climate.

Photo: Peter Emil Kaland
LANDSCAPE AND CLIMATE

The county of Hordaland on the west coast of Norway was specifically chosen as the study tour location due to its similarity with parts of Scotland. In ecological and climatic terms it has most in common with Highland Region in Scotland, with its long and indented coastline, high rainfall, oceanic boreal ecology, glacial topography and traditional economic dependence on natural resources.

The climate in Hordaland is dominated by south-west winds and rain, and by rapid and marked changes with height and distance from the sea. Bergen has an average rainfall of 1958mm. and only 146 rain-free days per year which is equivalent to the wettest parts of the western Highlands. The islands in Hordaland have climatic conditions similar to the Hebrides, whilst inland areas experience conditions more like Grampian and Tayside.

The landscape of western Norway is characterised by a coastal heathland strip of gently rolling topography, and rocky, steep terrain further inland. It is a region of islands, skerries and sheltered bays, fjords with steep mountainsides, mountain plateaux, glaciers and fertile valleys. The land is clothed in extensive, mainly natural forest, consisting of Scots pine and a wide range of broadleaved species such as elm, oak, birch, hazel, lime and ash – exactly the same species as are found in Scotland. Norway spruce is not native to western Norway but has been widely planted. Much of the forest has regenerated naturally in the last few hundred years following extensive exploitation for timber in the 17th and 18th centuries giving rise to a landscape which, although intensively used, retains many of its natural characteristics.

<table>
<thead>
<tr>
<th></th>
<th>HORDALAND</th>
<th>HIGHLAND REGION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AREA (HA)</td>
<td>1 563 400</td>
<td>2 613 000</td>
</tr>
<tr>
<td>POPULATION</td>
<td>414 038</td>
<td>201 900</td>
</tr>
<tr>
<td>[BERGEN / INVERNESS]</td>
<td>215 967</td>
<td>[62 000]</td>
</tr>
<tr>
<td>DENSITY (PERSONS PER KM²)</td>
<td>26</td>
<td>8</td>
</tr>
<tr>
<td>[EX INVERNESS &amp; BERGEN]</td>
<td>[13]</td>
<td>[5]</td>
</tr>
<tr>
<td>LAND USE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGRICULTURE – CULTIVATED (HA)</td>
<td>52 400 (3%)</td>
<td>135 000 (8%)</td>
</tr>
<tr>
<td>FOREST – PRODUCTIVE (HA)</td>
<td>242 600 (16%)</td>
<td>300 000 (11%)</td>
</tr>
</tbody>
</table>

Table 2: Hordaland County and Highland Region


ADMINISTRATION

Hordaland is one of 19 counties in Norway and the home of 10% of Norway’s population. It contains 34 municipalities or kommunen – the lowest tier of local government – which range in size from Fedje, an area of 9km² and a population of 708 people, to Voss, an area of 1816km² and 13 979 people. The kommunen have a substantial amount of devolved power including education, environment, housing and planning.
RURAL SETTLEMENT

There is in Norway a powerful consensus to maintain rural communities through support for agriculture. The thinly scattered rural population of farmers/foresters live mostly on their own land often with several generations of the family in two or three houses together. Historically, like Scotland, rural Norway has experienced major periods of emigration but, unlike Scotland, remains densely populated. A comparison between Hordaland county and Highland Region is striking. Highland, with almost twice the land area (ref. Table 2), has less than half the population of Hordaland. Even excluding the cities of Inverness and Bergen, the population density of Hordaland is still almost three times as great as Highland despite having only 40% as much cultivated agricultural land and 80% as much productive forest.

The land settlement pattern has most obvious parallels with the crofting counties in Scotland although where the Norwegian farmer is an owner, the crofter is a tenant.

LAND OWNERSHIP

The pattern of settlement has persisted due to the stable structure of land ownership provided by the Alloidal Act which is enshrined in the Norwegian constitution. By statute, the oldest child has the first priority to take over a family farm. The few farms sold outside the family are subject to government concession and the purchaser must be assessed as suitable and must agree to live on and operate the property for at least five years.

Such a stabilising influence in the rate and character of land ownership changes is markedly absent in Scotland where major structural changes can take place over a period of a few years without any regulation.

LAND USE: AGRICULTURE

The predominant land use model in Hordaland, as in most of Norway, is a traditional small farming system in combination with a forest holding. The average farm-forestry property consists of 10ha of farmland and 56ha of forest (ref. Table 1). In Hordaland, as in the rest of Norway the majority of the land is in private hands. Farm sizes, like Scotland are becoming larger as small units become progressively more uneconomic to run. Forestry and agriculture are, unlike Scotland, very closely integrated with each other both on the ground and at Government level. The Norwegian Ministry of Agriculture has responsibility for both agriculture and forestry which are administered at the county and kommune level by local officers. In Scotland agriculture and forestry are governed by separate Government departments and are seldom managed together on the ground.

Farm and forest cooperatives operate extensively in Norway with 16 nationwide organisations covering sales of produce, agricultural equipment and financial services. Agricultural sales cooperatives exist for all products from potatoes and meat to fur and honey, with purchasing cooperatives for equipment and agricultural consumables.

In Norway, agriculture is carried out further north than in any other country in the world. With a harsh climate, great distances between the farm and markets and a small agricultural land area, Norwegian agriculture cannot compete in price with countries with more favourable conditions. Even with an aim of national self-sufficiency, Norway...
Norway

- Small country of 4 million people on north-west fringes of Europe.
- Temperate and boreal ecology.
- Oceanic and continental climate.
- Alloidal land tenure with many owners and a regulated land market.
- Small-scale landownership pattern.
- Extensive and diverse forest resource owned by farmers – mainly native species.
- Integration of forestry and agriculture at all levels.
- Agricultural policy central to sustaining rural populations and delivered via small farms.
- Norway an independent country outwith the EC.
- Public right of access to the countryside enshrined in law.

A small-farming landscape in western Norway.

This farming settlement has been occupied by the same family for hundreds of years. Under the Alloidal Law, the farms will be inherited by the eldest children in the family. The attractive 'cultural landscape' is recognised as being of national importance and forms part of the agricultural support package negotiated annually between the farmers' unions and cooperatives and the Government. The small amount of fertile land is worked to produce vegetables, fruit and winter feed. Livestock are taken to summer pastures and the steep, rocky ground behind the settlement is covered with natural woodland which supplies all domestic heating requirements in the form of timber. Fishing forms an important part of the farmer's income. The landscape retains its diversity and character due to the continued management provided by settled agriculture.
Scotland

- Small country of 5 million people on north-west fringes of Europe.
- Temperate and boreal ecology.
- Oceanic climate.
- Feudal land tenure with 80% of private land owned by 4,000 owners and a free market in land.
- Large-scale landownership pattern.
- Forest resource mainly in the form of intensively managed plantations of exotic conifers owned by the State and private estates and institutions.
- Separation of agricultural and forestry activities.
- Common Agricultural Policy in UK chiefly production oriented and dominated by large farms.
- Scotland a country of the UK within EC.
- Rights of access to the countryside historically constrained.

A crofting landscape in the western Highlands of Scotland
The croft is no longer worked and the crofthouse has been de-crofted and sold as a holiday home. Small-scale cropping rotations have been abandoned and the land is used for extensive year-round sheep grazing. Culturally significant features of the landscape such as dykes, single trees and field patterns are disappearing and the small area of fertile ground is degrading due to lack of management. Remnants of native forest have long since disappeared, common grazings are heavily grazed and the culturally and ecologically valuable crofting landscape has lost much of its diversity, richness and aesthetic appeal.

Please note that these photographs are used purely for illustrative purposes and do not necessarily reflect the situation in the localities portrayed.
Photos: left Martin Howard right Lorne Gill, SNH
is still less than 50% (measured in terms of calories) self-sufficient in farm products.

Agricultural policy places great importance on maintaining farmers' incomes at the same level as those of industrial workers, securing good quality food and maintaining agriculture as the basis for rural settlement. These are achieved through a variety of instruments including import regulations, price support, supply controls and market regulation. Each year, these instruments are negotiated between the farmer's organisations and the government as part of the Agricultural Agreement. Prices for farm produce are set as target prices and the market is regulated by farmers themselves through the cooperatives. Any overproduction is the farmers' own responsibility and will result in failure to achieve the agreed price due either to the surplus lowering the market price or to measures being introduced to regulate the market. The only exception is for grain where, due to the low level of self sufficiency, prices are firmly fixed and guaranteed. Scottish farmers meanwhile participate much less directly in farm support arrangements with most of the framework for prices and subsidies being negotiated at Ministerial level within the European Community.

Norway provides substantial financial support to agriculture with a Producer Subsidy Equivalent (PSE) of 77% compared with 47% for the EC. This support has successfully maintained settled agriculture in the most remote and fragile areas of the country as well as providing a high standard of living for all Norwegian farmers. By comparison, the UK provides less support for agriculture, which is largely delivered through support for agricultural produce. Of the Common Agricultural Policy funds that reach farmers in the UK, 80% goes to the largest 20% of farms.

**LAND USE: FORESTRY**

The forests of Hordaland are very similar to native woodlands in the Highlands of Scotland, being dominated by Scots pine and birch. Although the pattern of exploitation has been similar, deforestation has been neither as extensive nor as long lasting, with the result that much of the forest, although secondary, is much more diverse than in Scotland's native forests.

Forestry policy in Norway is similar to Scotland's with timber production as a dominant objective. With a much greater extent of forest of native species, however, and 87% of the forest area owned by individuals (50% by farmers), the pattern of forestry is more varied than in most of Scotland. In Hordaland, 95% of the forest area is privately owned and 80% is composed of native Scots pine and broadleaves.

Nationally, the Norwegian Forest Owners' Federation has 56,000 members in 460 local associations covering 60% of Norway's productive forest. This cooperative negotiates timber prices and lobbies government as well as providing training and other services. All members must sell timber via the Association which controls 75% of the timber market. This contrasts strongly with the situation in Scotland where the Forestry Commission and relatively few private owners control most of the forest area.

A large proportion of forestry operations are carried out by the forest owners and a high proportion of sawn timber is processed in local sawmills or on the farm. Unlike Scotland, the vast majority of Norwegian building are both timber framed and clad. Farmers frequently build their own houses and farm buildings from farm-produced timber.
Forestry is an important land use in Hordaland, is intimately integrated with agriculture and plays a much more varied and multi-purpose role than forestry in Scotland with a much lower intensity of management for timber production.

**LAND USE: RECREATION AND ACCESS**

'Free Access to the Norwegian Countryside – The right of public access is a common good that is free to all.' This statement is on the cover of an official Norwegian access brochure. The Public Right of Access (Allemannsretten) is part of the Norwegian cultural heritage, is enshrined in the Outdoor Recreation Act of 1957, and entitles people to travel over and camp on uncultivated land and to pick mushrooms, berries and flowers subject to an obligation to behave responsibly. Such an approach to public access could not be more different to the situation in Scotland where historical rights of free passage have been abolished and the rights to camp and harvest wild food have become criminal offences.

Allemannsretten is effective from the edges of Norwegian cities and towns to the tops of the mountains. The ethos in Norway is that the countryside should be available to everybody for responsible use. In Scotland this ethos is reflected in the ‘freedom to roam’ principle but absent in existing statutory arrangements.

**CONCLUSIONS**

It would be wrong to portray Norway as a country which has perfected its land use and rural support policies and it would be inappropriate to advocate their adoption in Scotland. Norway’s countryside faces many problems as do most rural areas in Europe but the Norwegians do have one great advantage over us in Scotland – they have a definable, manageable, politically supported and understandable land use system which although it has evolved over many years has a clear logic to it.

In contrast, much land based rural policy in Scotland lacks coherence and lacks clear and consistent objectives. Forestry grants, for example, can lead to sudden changes in landownership and have no social objectives built in. Agricultural support is continuing to lead to a decline in the farming population. Production quotas for sheep and milk are now separate from the land. In many farming communities there is now deep seated concern over the future for entire agricultural regions and sectors. Land ownership remains relatively free of any obligations to the public interest.

In short, whilst Norwegian society enjoys a relatively clear and democratically accountable system of land use and ownership, Scottish society has little understanding of the countryside, little control over its ownership and management, and limited opportunities for gaining a stake in it.
THE STUDY TOUR PROCESS
The principal aim of the tour was to develop thinking on issues relating to the future of land use in Scotland. The process of information gathering, assimilation, analysis and collective stimulation of ideas was inevitably exhausting. By the end of the tour, however, each participant had ideas for actions in their own field of interest, and several ideas for greater cooperation between the various organisations represented on the tour.

In addition, participants were able, through consensus, to develop collectively a set of observations and main themes arising out of the tour. These themes represent the product of a process which brought together an impressive collection of individuals and organisations concerned with rural land use at all levels – a process which involved mutual respect and consensus among people willing to question the status quo in pursuit of alternatives to some deep-seated problems.

The significance of the Norway Study Tour for Scotland lay very much in the coming together of participants from all sectors and levels, from practitioners to policy-makers and scientists. This grouping quickly developed a common working language which is expressed in the observations and themes. Such a process could not have happened without good planning, committed and enthusiastic participants and a genuine willingness to break down sectoral boundaries.

THE NORWAY STUDY TOUR: OBSERVATIONS AND MAIN THEMES

- **Optimum use of biological potential**
The land should be used in a way in which the whole is greater than the sum of the parts. The biological potential of land should be assessed, restored and sustained.

- **Extensive diverse forest**
An extensive and diverse forest resource managed in the interests of all of society provides a wide range of benefits, options and products.

- **Diversity of economic opportunity for land occupiers and communities**
Farmers and rural communities thrive on a diverse range of economic opportunities which can provide flexibility, multiple skills and exploitation of niche and small-scale markets.

- **Local access to and control of resources**
Resources should be distributed equitably and be related to an appropriate scale of ownership. Decision making should be devolved and ‘bottom-up’.

- **Rural support sensitive to local needs**
Incentives and support should be closely targeted and sensitive to local variations and needs.

- **Commitment to rural populations**
Urban and rural society should be mutually supportive and accountable. This requires clearly articulated political commitment.

- **Cultural landscape is a useful concept**
Most of our landscape is a product of the interaction of people and the land over many hundreds of years. Such landscapes and the skills associated with their management represent extremely valuable sources of acquired knowledge and information which can easily be lost forever.
OBSERVATIONS AND MAIN THEMES

In contrast with much of Scotland, much of the land in Norway appears to be in a healthy state with an abundance of natural forest, well managed agricultural land and wild mountain landscapes. Biologically, the land is managed in a way that appears to approach its productive potential and contributes significantly to the support of the human population. This optimum use of biological potential is in stark contrast to much of Scotland which, with a few exceptions, is a deforested landscape and a land in a state of active degradation. As Scottish Natural Heritage point out in their ‘Agenda for Investment in Scotland’s Natural Heritage’, ‘This degradation calls into question the capacity of the natural heritage to sustain the range of uses to which it is subjected.’

A vision of the future land use in Scotland should involve making an assessment of the true biological potential of the land in all parts of Scotland taking into account its degradation over a long period of time. This potential should be restored and sustained so that future generations can inherit a landscape where many more options are open to them than are currently available.

An extensive and diverse forest is one of the most obvious and striking contrasts between western Norway and Scotland. It is worth remembering in the Scottish context that most of Hordaland was deforested, with regeneration only taking place in the last two hundred years. The same period in Scotland was marked by the expansion of upland sheep pastures, the aggregation of farms and the expansion of hunting estates. The forest in Hordaland is currently exploited for timber at levels well below its regenerative capacity with less than 20% of the annual growth harvested each year. Most farmers prefer to treat their forest property as a capital asset or bank to be drawn upon when finance is needed for the farm or other business.

There is widespread support for the idea of more tree cover in Scotland – the key questions are what trees, where, for what purpose and for whom? Should all sectors not be working together to reach an understanding of what such a forest could provide? Community groups, farmers and crofters, local authorities and advisory agencies in each locality could work up strategic plans for existing and future forestry development which would meet the needs of all the community. The planning approach of some crofting townships is beginning to make this happen but more needs to be done to reverse the trend of top-down strategic planning aimed at national needs – an approach which is neither sensitive to local situations nor a sufficiently participative process.

What is important is that such a forest resource is available to the Norwegian farmer, which contrasts significantly with the situation in Scotland where forestry and agriculture continue to be seen as competing interests. In Norway, as in much of Europe, the farmer is a forester and each tradition is integrated as reflected in the education system, the extension services and at Government level. Norwegian farmers are therefore provided with a diversity of economic opportunities and options which are simply not available to many of their Scottish counterparts.

In addition to agriculture and forestry, many Norwegian farmers also have off-farm employment. With a secure base in agriculture, farmers have options – an important feature in an ever changing marketplace. The current review of the Forestry Commission raises interesting possibilities for crofting townships, farmers’ cooperatives and
small estate owners to become involved in the management of former FC forests. This would extend the skills base, provide wider economic opportunities and enable proper integration of forests, grazing and cropping. With a greater intensity of management, there would evolve the kind of attractive landscape which can be found in a few parts of Scotland and throughout most of Norway where there has been continuous and sensitive husbandry of the land.

The Norwegian countryside is made up of many stakeholders – a product of the Alloidal land tenure system where the resource base is distributed among many owners and managed on an individual basis but with strong cooperative institutions. In Scotland, in contrast, the land and its products – forest, fish and fowl – are concentrated in the hands of relatively few stakeholders. Local access to and control of resources is a feature much in evidence in Norway but only beginning to become apparent in Scotland where the success of initiatives such as The Assynt Crofters Trust is beginning to inspire other communities to seek greater participation in the management of natural resources.

Support for the rural economy is seen as a priority in Norway and agricultural support is central to this objective. The support system is sophisticated and sensitive to local needs. These needs reflect the full range of climatic and environmental conditions over the whole of Norway.

In Scotland, where agricultural support is governed by the Common Agricultural Policy, there is less ability to fine-tune support although new initiatives such as Environmentally Sensitive Areas are beginning to improve the situation. Too often, farmers are locked into a support system which does not stimulate diversity and initiative. Sheep are supported, for example, but not goats. The Farm Woodland Grant scheme, intended to encourage farmers to establish woodlands by compensatory annual payments, is being promoted as an investment opportunity for outside interests to take over former agricultural holdings.

The agricultural support system in Scotland has been adapted to, and encouraged, an agrarian structure that gravitates towards larger and ostensibly more economic units. Whilst this trend is also evident in Norway, it manifests itself in fewer full-time farmers whilst at the same time ensuring the relative stability of the settlement pattern.

Above all, Norwegian society has consistently demonstrated a commitment to rural populations. This objective has been explicit and has enjoyed obvious and continuing political consensus. Agriculture and its support systems and structures together with the land tenure system underpins the relative stability of the rural economy in Norway in comparison with some parts of Scotland where insecurity and declining opportunities are forcing more and more farmers off the land.

The rural economy in Scotland is far from depressed, however, but is still dependent on relatively few industries which tend to be controlled by outside interests. Innovations in telecommunications, greater social objectives in agricultural policy, the restoration and management of a productive and rich countryside and a greater stake in the land for those who wish it are key elements in sustaining rural populations. European Commission funds for Rural Enterprise Programmes, and the LEADER initiative are useful but are no substitute for greater powers and responsibilities and access to resources at the local level.
Cultural landscape is a useful concept which acknowledges the long interaction of humans with the landscape – the links between human use, traditions and skills. It is used in Norway as a means of preserving certain cherished landscapes which represent particular associations and land use practices which are in danger of disappearing. In Scotland, the concept of cultural landscapes may be a useful way of synthesising the past with the present, the social with the natural, to build a new, more integrated, productive and diverse landscape. As a concept it has been used widely in archaeology but has much to offer rural communities in understanding the past and planning for the future.

THE SCOTTISH OFFICE RURAL FRAMEWORK
These themes represent the key ingredients of the way forward in thinking about the future of land use in Scotland in the light of the Norway Study Tour experience.

It did not escape the attention of participants that the observations and main themes, as well as providing a useful framework for wider debate, also bore a close resemblance to the themes contained in the Rural Framework document which was published by The Scottish Office in March 1992. The Study Tour would therefore appear to validate this approach and was, in addition, even more relevant given the fact that it was a participative process engaged in by a wide range of people.

RURAL FRAMEWORK THEMES

- **Community Involvement** The strength of the rural community lies in its people; it is vital that they be involved in decisions about their future.
- **Diversity** Diversity, once a common feature of rural communities, needs to be re-established and pursued.
- **Quality** Rural communities deserve high quality services and need to produce high quality products.
- **Local Added Value** Value added locally to the resources supplied by rural Scotland will retain the profits locally and benefit its communities.
- **Effective Service Delivery** By working together local authorities, public agencies, the private and voluntary sectors will best deliver their services in ways which most benefit their customers.
- **Networks and Communications** Rural Scotland can use its remoteness to advantage through the development of networks and communications.
- **Europe** Rural Scotland has a place in Europe which it can use to its own and others’ benefit.
- **Sustainability** By pursuing our actions today in a sustainable manner we will protect ourselves and safeguard our descendants.

These Rural Framework themes have been proposed to assist in developing the way forward for Scotland’s rural areas. Given the Rural Framework document’s own claim that ‘rural Scotland has, in particular, close affinities with many parts of Scandinavia and rural Europe’, we would hope that the outcomes of the Norway Study Tour might also become an important element in the way forward for rural Scotland.
5 | Outcomes and Way Forward

REFLECTIONS ON THE TOUR
The study tour was widely felt to have been a success and fulfilled the objectives set for it. At the most straightforward level, all the detailed planning and logistical arrangements ran smoothly and even the weather stayed fine! More fundamentally, it convinced participants that such a project and the process that was undergone was of considerable value in thinking about land use in Scotland.

The experience of travelling through Hordaland, the aesthetic stimulus of the landscape and the similarities and contrasts with Scotland led to an intense period of enquiry and critique of many aspects of land use in Norway. Early reactions evolved into a process of analysis of what the experience could mean for Scotland and resulted in the emergence of the observations and main themes which allowed participants to leave with at least some sense of what the tour meant collectively to the group.

Since the tour, participants have met over two days in July 1993 at Kindrogan Field Centre to reassess the tour and to develop further ways of taking the inspiration of the tour forward. This meeting confirmed the value of the tour itself, of the unique grouping of participants and of the process of collectively exploring the questions raised by the tour.

THE WAY FORWARD
The process of coming together and thinking fundamentally about the future, raises important broader questions which this report will hopefully stimulate.

Will the fragile, remote regions of Europe survive in a free agricultural market? If we want them to survive what conscious political choices must we make? What should be the basis for agricultural and other rural development funding?

Community ownership and management of resources is becoming a widespread idea with significant developments taking place in the crofting counties. What role does this have to play in the rest of rural Scotland and how should it be developed?

Integration of forestry and agriculture has long been a popular demand. With major changes in farming and forestry, how can this be facilitated? What structural changes are required? How can forestry in particular better benefit rural Scotland?

What indigenous rural skills have we lost and are we in danger of losing? Can these be restored and developed as part of a cultural and environmental regeneration of the countryside?

What is a cultural landscape in Scotland? How can such a concept help given the current plethora of designations?

Many people would agree that a reinvigorated rural economy in Scotland is dependent on elements such as secure and widespread settlement, a restored natural resource base, a diversity of opportunities and a policy framework which enjoys the support both of those who pay for it and those who work within it. These are aims that could be widely supported.

At the same time many deep-seated problems remain. Land use integration has been almost non-existent, land tenure is not considered an important issue by decision makers, and social and environmental objectives are only slowly emerging as key elements in rural support policies.

The challenge facing both Norway and Scotland in the years to come is to optimise
Scotland’s Natural Heritage

In our policy paper An Agenda for Investment in Scotland’s Natural Heritage we emphasised the need for a more integrated approach to land-use, and for a new approach to the development of Scotland’s rural areas based on the sustainable use of the natural resources. This approach will gradually bring about an improvement in the appreciation, understanding and management of the natural heritage and as a result benefits will accrue to local communities and to the people of Scotland.

SNH has supported and contributed to Reforesting Scotland’s Norway Study Tour for two reasons. It has allowed participants to learn lessons from a similar biogeographic region through investigation of the environmental, social and economic benefits that the greater integration of land-use policy and practice has brought about in Norway. More important, the study tour, by bringing together key individuals from a wide range of interest groups, provided an excellent opportunity for the exchange of ideas on how a more sustainable approach to land-use in Scotland could be developed and put into practice.

Striking though the physical and climatic similarities between Scotland and Norway are, there are, of course, many social, cultural, economic and administrative differences that require our attention. It is not, therefore, simply a matter of trying to replicate the Norwegian situation in Scotland. It is these differences which demand our full understanding and attention if we are to learn lessons from Hordaland. Western Norway possesses a rich and varied forest resource, which is widely used and managed, in a way that ensures its survival, as part of a mixed rural economy. It possesses a long tradition of forest skills, and a deep-seated woodland culture. The policy of generous agricultural support recognises the importance of the country’s natural resources, and seeks to maintain the balance between livestock, woodland management and off-farm employment, within the holding and in the rural economy. Many of these points are part of the evolving vision for Scotland’s rural areas shared by the study tour participants and their organisations. The challenge now is to demonstrate how to achieve this vision in practice in partnership and cooperation with others.

I also hope the Norway Study Tour will mark the beginning of closer cooperation between Norway and Scotland in rural environmental development.

ROGER CROFTS  Chief Executive, Scottish Natural Heritage

“...The development potential in the Highlands and Islands is immense.” Deserted farm in a deforested landscape, Loch Stack, Sutherland.

Photo: Lorne Gill, SNH
such support so that it meets the legitimate aspirations of rural communities and delivers social and environmental benefits whilst at the same time aspiring to a measure of equity in its application across the country.

TO CONCLUDE
The Norway Study Tour was essentially two things. It was what was seen in Norway and it was a process of envisioning alternative futures. Norway has a similar resource base to Scotland but has produced arguably a healthier settlement pattern, greater diversity of opportunities, a better land use support system and a more attractive environment. Scotland is the way it is because of decisions we took in the past and the current distribution of land, power, opportunity and resources. Going to Norway enabled participants to reinterpret their own situation and conclude that Scotland does not necessarily need to be like it is – there are other alternatives and options.

Others, such as Angus McHattie of the Scottish Crofters Union have returned from abroad with similar conclusions:

‘On returning from Norway to Skye recently, I had occasion to compare the view from similar 3000ft granite hills in both countries. In Norway the valley I looked down upon contained an autonomous village of 20 small farms, with their own crops, power supply, school etc. – a prosperous and happy place with a good trade surplus and a population with a healthy age structure. The Skye valley had twenty black-face ewes and twelve lambs. Compared to what the Norwegians started with, we are sitting on a gold mine. The development potential in the Highlands and Islands is immense.’

SOME USEFUL ADDRESSES

Directorate for Nature Management
Tungasletta 2, 7004 Trondheim, Norway.
Tel: 07 58 05 00. Fax: 07 91 5433.

Fylkeslandbrukskontoret i Hordaland
(Land Use Board of Hordaland), Litleåsvegen
49, 5090 Nyborg, Norway. Tel: 05 19 2730.

Highland Scandinavian Society
c/o Alex Brodie (Sec.), 6 Torbreck Road,
Inverness IV2 4DG. Tel: 0463 23 2239.

Hordaland and Bergen Tourist Board
Slottseng 1, N-5003 Bergen, Norway.
Tel: 05 31 5800.

Hordaland County Council
Lars Hilles gt. 22, N-5020 Bergen, Norway.
Tel: 05 31 3000.

Ministry of Agriculture
PO Box 8007 Dep., N-0030 Oslo, Norway.

Ministry of Environment
PO Box 8013 Dep., N-0030 Oslo, Norway.

The Norwegian Forestry Society
Wergelandstveien 23 B, N-0167 Oslo 1, Norway.

The Norwegian Nature Conservation Society
PO Box 2113, Grunerlokka, 0505 Oslo, Norway.
Tel: 22 71 5520.

Royal Norwegian Consulate General
86 George Street, Edinburgh, EH12 3BU.
Tel: 031 226 5701.

Scottish Society for Northern Studies
School of Scottish Studies, 27 George Square,
Edinburgh, EH8 9LD.

The State Pollution Control Authority
Stromsvn. 96, PO Box 8100 Dep., N-0032 Oslo,
Norway.

SOME FURTHER READING

Directorate for Nature Management.
Free Access to the Norwegian Countryside. Brochure
published by The Directorate for Nature
Management, Norway.

Biological Diversity in Norway: A Country Study.
Management, Norway.

Commonwealth: Scotland and Norway. Saltire,
Edinburgh.

Haugen, J. I. (1990). History of Norway: From the
Ice Age to the Oil Age. Grandahl & Son Forlag A/S,
Oslo.

Cultural Landscape Studies. Norsk Geografisk

Forest in Norway – A Critical Time for
International Environmental Obligations.

NORWAY The National Report to UNCED.
Available from The State Pollution Control
Authority, Norway.

in Norway. Available from The Norwegian
Forestry Society.

Policies in Norway. Socio-economic Restructuring
in Rural Areas: the Local and the Global (Ed. P.
Commins). The Arkleton Trust.

Reforesting Scotland (1993). The Norway Study
Tour Briefing Pack. Available from Norway Study
Tour participants.

Royal Norwegian Ministry of Foreign Affairs
(1992). FACING THE FUTURE Norway and the
Environmental Challenges of the 1990s. Available
from Ministry of Environment, Norway.

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