Forest Ownership in Scotland

A Scoping Study



Andy Wightman February 2012

published by the Forest Policy Group www.forestpolicygroup.org

TABLE OF CONTENTS

	Summary	2
	Preamble	3
1.	Introduction	4
2.	Analysis of Forest Ownership	6
3.	Scotland in a European Context	11
4.	Forest Ownership and Forest Policy	16
5.	Choices about Ownership	19
6.	Conclusions	21
ANNEX I	Existing Data on Forest Ownership.	22
ANNEX II	Analysis of forest cover.	23
ANNEX III	Analysis of forest ownership - methodology	24
ANNEX IV	Analysis of forest ownership - results	26

SUMMARY

The development and management of forests in Scotland is largely dependent on, and therefore driven by, public investment. This is provided in the form of tax incentives and grants, offered in support of the wide range of public benefits which forestry can deliver.

This objective is reflected in the Scottish Government's vision for forestry:

"By the second half of this century, people are benefiting from Scotland's trees, woodlands and forests, actively engaging with and looking after them for the use and enjoyment of generations to come. The forestry resource has become a central part of our culture, economy and environment."

Whether these public benefits are realised or not depends at least in part on the ownership, and especially the motivations of the owner. Different types of owner show markedly different patterns of motivation (financial, social, environmental), so the pattern of ownership of forests is actually a crucial determinant of the scale and nature of benefits that accrue to society.

However, this pattern of ownership has itself been profoundly influenced by the design and structure of publicly funded forestry incentives over the last 50 years, attracting some types of owner much more than others. Deliberately or otherwise, public policy has driven a very distinctive pattern of forest ownership, which may not be optimal for securing the full suite of potential public benefits.

There can be little doubt that the pattern of forest ownership is a very important issue for public policy. However, officially, we know nothing about forest ownership patterns in Scotland.

Unlike most other European countries (which not only consider the ownership of forests to matter a great deal but collect and publish data on the subject), the Scottish Government and Forestry Commission collect minimal information on forest holdings and publish nothing.

Preliminary research using sample areas of Scotland reveals that, leaving aside the onethird of Scotland's forest which is owned by Scottish Ministers and managed by the Forestry Commission,

- 91% of the rest is owned either by landed estates or by investment owners.
- 55% is owned by absentees.
- 32% of the private owners live outside Scotland.

Scotland's forest resource is thus dominated by the state, landed estates and forestry investors. The big contrast with other European countries is the insignificant proportion owned here by individual resident owners, farmers, co-operatives, and municipalities.

Of 19 European countries in a position to provide statistics, Scotland has by far the most concentrated pattern of private forest ownership, occupying the extreme end of the spectrum of forest landholding size classes, with large holdings dominating the picture, and by far the lowest proportion of the population involved in owning forests.

- 55% of forest holdings in Scotland are over 50ha (Europe = 1.6%).
- 59.6% of European forest holdings are less than 1ha in extent (Scotland = 6.3%).
- Over 93% of Scotland's privately owned forest area is held in holdings of over 100ha.

Unsurprisingly, there is also a contrast in the level of forest owner representation. In many European countries there are significant forest owners' associations; in Scotland these have been subsumed into wider coalitions dominated by industrial timber interests, investment-driven forest management companies and landed estates.

Given that forestry is a long-term business and that for much of the past half century Scotland has been in an afforestation phase, the current pattern is perhaps not surprising. However, as existing forests continue to mature, as a new expansion of forestry is underway, and as an integrated approach to land use has been adopted via the Scottish Land Use Strategy, now is an ideal time to think about both the kind of pattern that might be desirable and how to achieve it.

A more diverse ownership pattern would arguably be more likely to deliver far greater diversity in approaches and models of management leading to greater innovation, investment and commitment to local economies, in addition to greater resilience to external change. In particular, sectors currently under-represented such as community owners, small-scale individual owners, co-operatives and farmers and crofters could deliver wider benefits.

This paper concludes with five key points. Ownership is a significant issue; there is no policy identifying desirable objectives in the pattern of ownership to be encouraged; informed debate is inhibited by the lack of information; there are opportunities for diversifying ownership, inspired by European examples; and further investigation of these issues would be highly desirable.

PREAMBLE

I begin this report with a personal story.

I studied forestry at the University of Aberdeen from 1981 to 1985. This was a period when wealthy individuals from all over the UK were being encouraged to buy land in Caithness and Sutherland and to establish conifer plantations. The principal motivation was tax avoidance. The whole endeavour was very controversial with environmentalists and the Nature Conservancy Council mounting a sustained campaign against the despoliation of valuable habitats. Mike Ashmole, Director of Fountain Forestry, famously claimed that ground that was being left unplanted was more than enough for rare breeding birds such as Greenshank. "If a bird can't survive on that it doesn't bloody well deserve to survive", he claimed at the time.1

Matters came to a head on 14 February 1988 when the Observer newspaper published an in-depth expose in their Sunday magazine. The tax reliefs were removed that same year by Nigel Lawson in the Budget.

One day, whilst I was a student, Mr Ashmole visited the forestry department of the University and presented a lecture to us. Afterwards I asked him (quite innocently), why the government was providing tax breaks worth millions of pounds to folk who were already wealthy when the foregone revenue could be used, instead, to give grants to farmers and crofters in Caithness and Sutherland to plant trees and forests?

I received a dismissive answer and afterwards was upbraided by the head of the forestry department for having asked a "political" question. It was unclear to me at the time how such a question could be political but I quickly found out and have been interested in matters of land and power ever since.

In a sense, this report brings me back to that exact same question. Although the precise nature of the taxation environment of forestry has changed, the question remains - is there a public policy interest in the ownership of forests and, if there is, what is it and how should it be addressed?

¹ Cited in the Herald, 23 April 1994 'Felled by the acid reign', by Bruce Sandison.

1. INTRODUCTION

This report outlines the findings of a scoping study designed to examine the existing pattern of private forest ownership in Scotland and how this compares to other European countries. It is not intended to provide any policy recommendations but to derive some firm data that can be used to underpin further work on the topic.

Scotland has 1,385,000 ha of forest land of which 453,000ha (32.7%) is owned by Scottish Ministers and managed by the Forestry Commission (FC) and 932,000 ha (67.3%) is owned by private owners and other public owners.²

Historically, the only real debate about forest ownership has been concerned with the necessity in the early 20th century to set up a State forest service to deliver the kind of afforestation targets that were beyond the capacity of the private sector. Since then, there have been debates about the future of state forestry (most notably, proposals in the 1980s to privatise the FC). However, there has never been any serious discussion about either a) the nature and pattern of private ownership nor b) the precise structure of public forest ownership.

The question of forest ownership has seldom been addressed either by academics, by policy-makers or by Government and its agencies. Indeed, one of the prominent findings of this study is how little interest there has been (and continues to be) concerning the nature and pattern of ownership of a strategically important natural resource.

This is surprising since between, on the one hand, a state forest owned by Scottish Ministers and, on the other, an elite formation of private ownership, there exists a wide range of ownership models that might deliver greater public benefits. These range from more localised structures of public forest ownership, to mutuals and co-ops, community trusts and companies, farmers, estate owners and individuals, most of which are underrepresented in Scotland.

At one level, ownership is perhaps unimportant. Trees grow or do not grow irrespective of who owns the land. Wildlife flourishes whether the owner is a pension fund or a hippy. Carbon is captured (or not) whether the owner worries about climate change or is a climate sceptic.

Over a whole range of issues, the question of ownership per se (that is to say the precise identity of the owner) has little influence. Ownership at a structural level, however, does matter. What type of person is making decisions about the forest? What are their connections with the local economy or global industries? How do they relate to the social fabric of the locality. To whom do they talk to when seeking input to management planning? Who is employed in the forest? What opportunities are they willing to countenance for others to use the forest? How easy is it to know who the owner is and how to contact them? And what is their outlook, their motivation and their strategic aims?

² Source: Scottish Ministers/FC - <u>Asset Management review of Rural Land</u> Annex B; Total - <u>NFI 26 May 2011</u> Private ownership is the difference between these two. it should be noted that included within the "private" figure is all forest land not managed by the FC and includes a small area owned by other public bodies such as local authorities, Scottish Natural Heritage and others. The total land area managed by the Forestry Commission in Scotland extends to 667,000ha and includes areas of non-forested land.

For example, this study reveals that 46% of Scotland's private forest owners are absentee (55.5% of privately-owned forest area) and that 69% of these absentees live outwith Scotland. Fundamental questions therefore arise as to the connection such owners have with the land they own. Given that absenteeism is deemed to be something to legislate against when it comes to crofting tenure, for example, an obvious question is to what extent forests might deliver greater public benefits were more of them to be owned by resident owners.

This is an important question because the pattern of ownership is highly influenced by public policy. As highlighted in the Preamble, the wrong kind of ownership model can lead to expensive mistakes in the long term. Had the public funds directed at external investors in the 1980s been directed instead at resident farmers and landowners, then arguably a very different pattern of forests and woodland would have developed - one more integrated with existing land uses and more sustainable in the long term.

Forests are important natural resources which can deliver a wide range of public and private benefits to society. Whether many of those benefits are realised or not depends at least in part on the ownership model. Who is taking decisions on long-term management, and how connected is the forest economy to the local economy? What are the economic multipliers? Where are the synergies and who identifies them? What contribution does the forest make to social capital and to cultural identity?

These are all questions whose answer is influenced by whether a few people own the forest resource or many, whether they are resident or absentee, whether their motives are tax planning or economic regeneration, whether they have children in the local school or not and whether they are real people or corporate bodies.

For these reasons, the ownership of forests is actually a crucial determinant of the scale and nature of benefits that accrue to society. And because society has chosen to subsidise the creation and management of forests in return for those benefits, it is illogical for government to ignore the question of ownership.

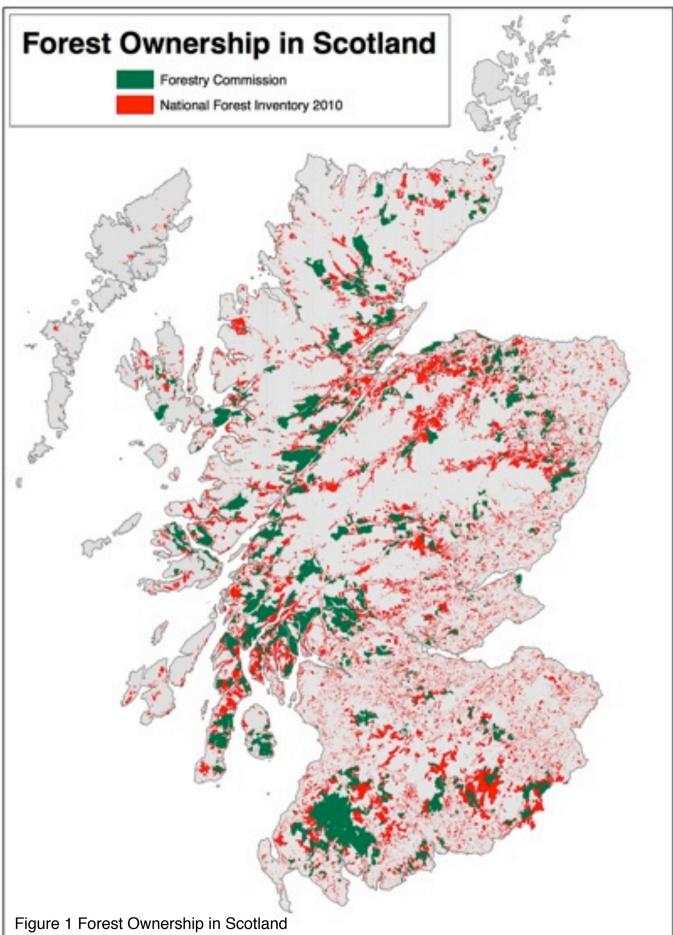
In terms of Scottish Government policy, forest ownership matters not only in the context of the delivery of forestry policy but in public policy more widely. For example Scotland's Land Use Strategy has three objectives: -

- Land-based businesses working with nature to contribute more to Scotland's prosperity.
- Responsible stewardship of Scotland's natural resources delivering more benefits to Scotland's people
- Urban and rural communities better connected to the land, with more people enjoying the land and positively influencing land use.

In addition, the Strategy proposes that all land-use regulations and incentives will be aligned with Land Use Strategy Objectives.

Furthermore, the Scottish Government has ambitions for community empowerment and regeneration and for land reform. Forest ownership is also part of those agendas.

This report aims to provide some preliminary findings which can inform a fuller analysis and discussion of the current pattern of forest ownership.



Green areas show land owned by Scottish Ministers and managed on their behalf by the Forestry Commission. They include Loch Katrine which is leased from Scottish Water.

3. ANALYSIS OF FOREST OWNERSHIP

Forests are owned by a variety of types of people for a variety of different reasons. The ownership pattern varies markedly from country to country across Europe and is largely explained by each nation's distinctive history.

Unlike most other European countries (which not only consider the ownership of forests to matter a great deal but collect and publish data on the subject), the Scottish Government and Forestry Commission collect minimal information on forest holdings and publish nothing.³

Scottish Forest Ownership

Data is scarce on forest ownership in Scotland but in 2006/07 UNECE/FAO⁴ conducted an inquiry into private forest ownership in Europe.⁵ The results of the inquiry include data on forest ownership patterns in 23 European countries including the UK. The inquiry looked at the extent of private forest ownership and its characteristics. Data for the UK was limited and is shown in Table 1 (See Annex I).

In terms of size of holdings, the data was broken down into size classes (see Table 2, Annex I). On the demographics of owners and on gender, the UK provided no data. On the status of owners, residency and owner objectives, the UK also offered no data.

As to the quality and reliability of the data, according to the Forestry Commission, the figures (supplied to the UNECE on 27 July 2006) are estimates which, in turn, are derived from a survey carried out UK-wide as long ago as 1977 which cannot be broken down by country. So, officially, we know nothing about forest ownership patterns in Scotland.

This data was updated as part of the UK's submission to the State of Europe's Forests 2011 Report.⁶ The sources used remain unchanged and the results differ little to that contained in Table 2.

Other Attempts

A first attempt to analyse forest ownership in Scotland was made by the late Sandy Mather in 1987.⁷ As he observed, "There is no forestry equivalent to the agricultural census, and there is no national register of forest owners." In 1987 Mather found that, of the 344,444ha of grant-aided forestry, the ownership was as outlined in Table 3.

³ Compare Forestry Commission Scotland with, for example the Swedish Forest Agency statistics

⁴ UNECE United Nations Economic Commission for Europe, FAO Food and Agriculture Organisation of the United Nations.

⁵ See http://timber.unece.org/index.php?id=90 for reports and data. A useful analysis of all the data is provided by Franz Schmithüse & Franziska Hirsch, Private-Forest-Ownership in Europe, Geneva Timber and Forest Study Paper 25, UNECE/FAO, 2009. The FC National Inventory of Woods and Trees 2001 did contain some ownership figures but these were based on voluntary returns from owners and not on any systematic analysis of actual ownership.

⁶ See http://www.forestry.gov.uk/forestry/INFD-86hchq Section 6.1 Forest holdings

⁷ A.S. Mather, 1987. 'The Structure of Forest Ownership in Scotland: a first approximation Journal of Rural Studies, Vol. 3 (2) pp.175-182. Available at www.andywightman.com/docs/Mather_JournalRuralStudies.pdf

	Total area (ha)	No. of owners	Average area (ha)
Traditional Estates	151,552 (43.9%)	604 (42.9%)	251.7
Personal Investors	94,842 (27.5%)	483 (34.4%)	196.4
Corporate Investors	70,770 (20.5%)	139 (9.9%)	509.1
Unknown	27,280 (7.9%)	180 (12.8%)	151.6
TOTAL	344,444	1404	245.3

Table 3. Private Forest Ownership in Scotland (Table 1 from Mather, 1987)

In his conclusions, Mather observed that, "There has been no stated policy towards ownership structure. Whether by design or by default, the state has exerted an influence of fundamental significance for the structure of forest ownership through its choice of policy instruments. Whether by design or default, the state has facilitated the expansion of financial ownership of forests in Scotland." 8

Forest Ownership 2011

Two tasks are involved in analysing forest ownership in Scotland today. The first is to know where the forested land is and the second is to know who owns it.

In relation to forest cover, the location of forested land was identified by using the National Forest Inventory (NFI) data. An alternative data source, the Ordnance Survey VectorMap District beta dataset released in March 2011 is more detailed but its use demands a level of computing power that the author does not have access to. Full details of the origins and limitations of this data are outlined in Annex II.

In relation to forest ownership, data was derived from the *whoownsscotland* dataset which currently covers around 56% of Scotland.⁹

Figure 1 illustrates the coverage of forested land in Scotland and the breakdown in ownership between the state and the private sector.

Analysis

A detailed analysis of forest ownership across Scotland is beyond the scope of this current investigation. Instead, a sampling approach was adopted.

Scotland's 100km grid squares were divided into quadrants and four were selected which contained both a significant extent of forest and a significant coverage of ownership information. The four quadrants are shown in Figure 2. Forest cover in the sample squares totals 237,019ha and represents a sample of 17.1% of the total forest cover of Scotland. The sample also closely matched the national breakdown between FC-managed forest

⁸ A.S. Mather, 1987. 'The Structure of Forest Ownership in Scotland: a first approximation Journal of Rural Studies, Vol. 3 (2) pp.175-182. Available at www.andywightman.com/docs/Mather_JournalRuralStudies.pdf

⁹ See <u>www.whoownsscotland.org.uk</u>

land and privately-owned forest land, suggesting that it is fairly representative. A full description of the sampling methodology is given in Annex III.

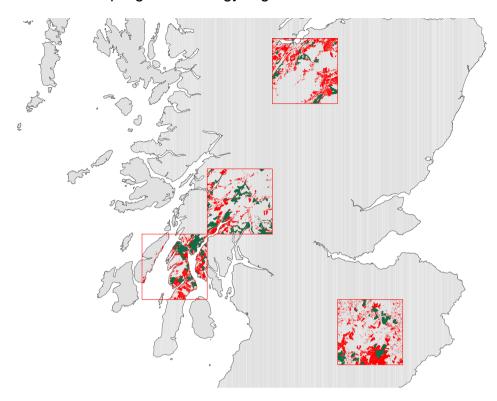


Figure 2. 4 x 50km square sample areas.

In these four sample squares, ownership information was identified for 83.8% of the privately-owned forest area (132,171 ha) in a total of 631 distinct forest landholdings. Account was then taken of the fact that parcels of forest in different sample squares were owned by the same landowner. These were merged resulting in 569 discrete forest landholdings. These holdings breakdown into ownership classes as shown in Table 4.

	No.	% No.	total ha	% ha
<1ha	36	6.3%	14	0.01%
1 - 2	25	4.4%	45	0.03%
3 - 5	33	5.8%	145	0.11%
6 - 10	38	6.7%	307	0.23%
11 - 20	56	9.8%	894	0.68%
21 - 50	68	12.0%	2335	1.77%
51-100	61	10.7%	4649	3.52%
> 100	252	44.3%	123781	93.65%
TOTAL	569	100%	132170	100%

Table 4. Forest Holding Size distribution

The *characteristics* of this pattern of ownership are shown in Tables 9, 10 and 11 (see Annex IV), some key findings of which are that: -

- over 91% of Scotland's non-FC forest area is owned by landed estates (46.2%) or investment owners (45.5%)
- 55% of Scotland's non-FC forest area is owned by absentee landowners.
- 32% of the owners of Scotland's privately-owned forests live outside Scotland.

Scotland's forest resource is thus dominated by the state, landed estates and forestry investors; the latter two categories, together, account for 91.7% of the non-FC resource. The big contrast with other European countries is the insignificant proportion owned by individual resident owners, farmers, co-operatives, and municipalities. This contrast is explored in the next section.

3. SCOTLAND IN A EUROPEAN CONTEXT

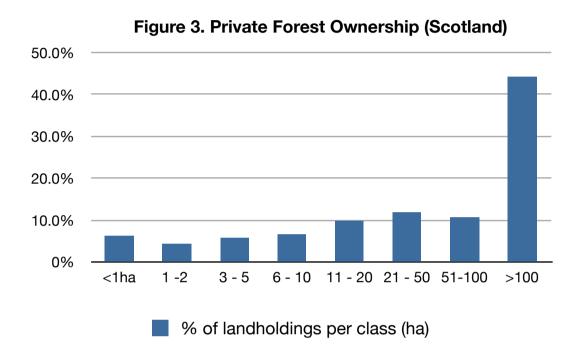
Data on forest ownership in other European countries is available via the 2006/07 UNECE/FAO enquiry noted earlier. With these reservations in mind, the UNECE/FAO data nevertheless provide a useful comparative picture. Table 5 shows the average size of private forest holding in the 19 countries that supplied relevant and reliable data.

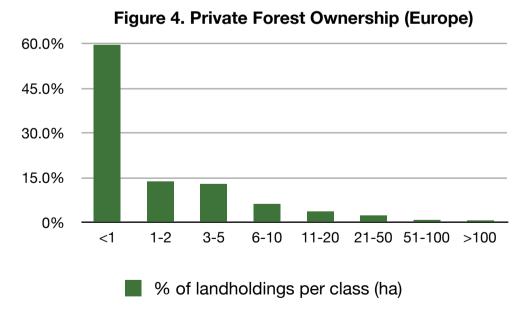
	Private Forest ha	No. owners	av. size ha	Population (m.)	% forest owners	
Poland	1,076,000	838,608	1.3	38.6	2.2	
Switzerland	333,000	246,415	1.4	7.3	3.4	
Serbia	1,002,000	500,000	2.0	7.8	6.4	
Belgium	393,940	155,110	2.5	10.3	1.5	
Czech Republic	645,000	224,623	2.9	10.7	2.1	
Slovenia	988,000	320,000	3.1	2.0	16.0	
Lithuania	717,000	213,324	3.4	3.6	5.9	
France	13,002,000	3,483,000	3.7	63.6	5.5	
Netherlands	180,000	29,578	6.1	16.7	0.2	
Latvia	1,330,670	173,233	7.7	2.4	7.2	
Ireland	197,670	20,390	9.7	4.2	0.5	
Austria	2,332,000	168,819	13.8	8.2	2.1	
Denmark	405,410	26,000	15.6	5.4	0.5	
UK	1,862,000	106,700	17.5	60.6	0.2	
Hungary	572,320	28,408	20.1	10.1	0.2	
Finland	10,498,000	443,800	23.7	5.3	8.4	
Norway	9,141,000	171,079	53.4	4.9	3.5	
Slovakia	823,200	14,475	56.9	5.4	0.3	
Sweden	17,916,200	268,235	66.8	9.1	2.9	
Scotland	932,000	4,017	232.0	5.2	0.1	

Table 5. Private Forest Ownership Source: Table 2.2 UNECE/FAO, for Denmark, Dansk Skovforening

¹⁰ See http://timber.unece.org/index.php?id=90 for reports and data. For a wider picture of Europe's forests see State of Europe's Forests 2011 Report under "Publications" at http://www.foresteurope.org. As with the UK data there will be some variation in the quality. The summary report notes the fact that availability of data on private forests is significantly lower than on public forests, that it is variable, and highlights the nature of that variability. There are also some conflicting figures in the literature. For example, the UNECE/FAO figure for Norway is 171079 owners but in Working Paper of Finnish Forest Research Institute 38, the figure is 120,000 owners of the 7 million acres of productive forest. The difference is likely explained by whether "productive forest" is being analysed or (in the case of figures I have quoted from UNECE/FAO) it is "forests and other wooded land"

The UK appears halfway on the ranked list. However, given the unreliable nature of this data and the fact that it is UK-wide, I have computed a Scottish figure for comparison and this is included in italics in the table. What this shows very clearly is that, of all the European countries in a position to provide statistics, *Scotland has the most concentrated pattern of private forest ownership and the lowest proportion of the population involved in owning forests in Europe*.





Figures. 3 & 4 break these figures down into landholding size classes. (Table 12, Annex IV contains the numbers).

¹¹ The UK figure has little if any credibility given the source of the data. The Scottish figure is computed by calculating the average size of the 569 forest holdings from the full sample in the four sample blocks. The total extent of non-FC forest land (932,000ha) is then divided by this extent (232 ha) to provide the number of owners at a Scotland-wide level.

The pattern is remarkable and reveals how the distribution of forest landholding size classes in Scotland is the very opposite of that in the eight European countries for which data exists. On a whole range of other characteristics, continental private forestry differs markedly from the Scottish picture.

- In Finland, 40,000 forest owners attend forestry training courses each year, there is a growing proportion of female forest owners, and the number of small forest holdings is increasing.
- In Norway, 90% of forest holdings are family holdings and the existence of forest owners' co-operatives makes it possible to manage small holdings efficiently.
- In Belgium, the average size of forest holding is decreasing as the number of owners increases through inheritance (in Scotland children have no legal rights to inherit forest land).
- In Ireland, around 15,000 farmers have switched land use from agriculture to forestry and this has been the main contributing factor in a 220,000 ha increase in forest area since 1990.¹²
- Structurally, many European countries have a more diverse range of ownership types. In France, for example, there are 11,000 local forest communes, accounting for 30% of all communes in the country. They own around 3 million ha of forest 20% of the total forest area of France.¹³
- In Sweden, 51,000 forest owners, owning 36,000 forest properties, own Södra, a company operating timber processing and pulp and paper plants.¹⁴
- Some of the UK and Europe's biggest businesses are co-operatives. Some like Mondragon¹⁵ are global. Others, like the Swedish forest co-operative Södra are still substantially based in their own country but expanding regionally.¹⁶
- Metsäliitto is a Finnish producer co-operative owned by 130,000 Finnish forest owners. It is Europe's largest wood producer and has diversified into a range of paper, packaging, wood processing and biofuels markets. It turns over €8.4 billion and employs 30,000 people. Metsäliitto was established during the 1930s following land reforms which saw 51% of the country's forest area pass to individual land owners.

¹² Most of the examples in the following paragraphs are derived from Franz Schmithüse & Franziska Hirsch, <u>Private Forest Ownership in Europe</u>, Geneva Timber and Forest Study Paper 25, UNECE/FAO, 2009.

¹³ Delong, cited in Zingari, <u>French forest communes and sustainable development in mountain areas</u>. FAO

¹⁴ www.sodra.com/en/About-Sodra/An-economic-association

¹⁵ See <u>www.mondragon-corporation.com</u>

¹⁶ Södra has expanded into Latvia and Estonia.

The contrast between the pattern in continental Europe and in Scotland is a reflection of a number of historical and political factors.

- 1. Feudal tenure.
- 2. The wider pattern of landownership generally.
- 3. The widespread rights of children to inherit land in most European countries.
- 4. The historic prohibition on tenant farmers having rights to forests in Scotland.
- 5. UK Government taxation policy and financial incentives.
- 6. The fact that European revolutions which transformed aristocratic and ecclesiastical power never took place in Scotland.

and, more generally, in recent times in Scotland.

- 7. Lack of any national policy on ownership
- 8. Poor integration of land use
- 9. Elite policy capture

One key consequence of this difference in the pattern of forest ownership is that in many European countries there are significant forest owners associations as outlined in Table 6. Interesting insights into, for example, Scandinavian forest ownership, can be gleaned from Nordic Family Forestry, the website of the Nordic Forest Owners' Associations.

The contrast with Scotland is stark. In the past forest owners organised themselves in a co-operative as the Co-operative Forestry Society of Scotland and latterly the Scottish Woodland Owners' Association. More recently, owners have been represented by the Timber Growers Association (TGA). In 2002, TGA merged with the Association of Professional Foresters to form the Forestry and Timber Association. In turn, this body has now been subsumed into the Confederation of Forest Industries (ConFor). Thus the interests of forest owners are but one small part of an organisation whose main funders and players are the large forest industry corporations and the forest management companies.

In Scotland there is therefore no organisation representing forest owners specifically. Forest owners who own estates will probably be members of Scottish Land and Estates and/or CONFOR while farmers will be members of NFU Scotland. Investment owners, however, are most likely not engaged in any association of any kind and have to rely on representation via the forest management companies whom they employ to manage their properties.

In conclusion, most European countries present a very different history and pattern of forest ownership with widespread small-scale ownership, family ownership, resident ownership and municipal and co-operative ownership.¹⁷ Scotland, by contrast, has inherited a feudal, statist and elite monied state of affairs.

The contrast is a vital part of beginning to understand and frame new possibilities for forestry policy in Scotland.

¹⁷ This contrast is neatly illustrated by the websites <u>Nordic Family Forestry</u> (Nordic Owners' Associations) and <u>ConFor</u> (Confederation of Forest Industries in UK)

Country	Forest Owners' Association	No. members
Austria	Austrian Chamber of Agriculture Austrian Farm Foresters' Association Austrian Association of Farm and Forest Owners	164239
Belgium	Societe Royale Forestiere de Belgique	3000
Bulgaria	Association of the non state forest owners	35,000
Cyprus	None	not known
Czech Republic	4 organisations	not known
Denmark	The Danish Forest Association	26000
Finland	Forest Management Associations	630000
France	Federation Forestiers Prives de France	60000
Germany	n/a	n.a
Hungary	Association of Private Forest Owners	20000
Iceland	National Forest Owner Association	700
Ireland	Irish Timber Growers' Association	2200
Latvia	40 owner associations	3000
Netherlands	National Forest Owner Association	900
Norway	Norwegian Forest Owners' Federation	45000
Sweden	Federation of Swedish Farmers	90000
UK	n/a	n/a

Source: <u>UNECE/FAO Reporting form F8</u> For Denmark, <u>Dansk Skovforening</u>

Table 6. Examples of Forest Ownership Associations.

The next chapter discusses some of the background policy context to forest ownership before finally exploring some of the strengths and weaknesses of both the current pattern and alternatives.

4. FOREST OWNERSHIP & FOREST POLICY

Government Policy

The question of who owns Scotland's forests does not feature in the Scottish Forestry Strategy beyond a vision (by the second half of the 21st century) that "community ownership of woodlands is widespread." and that private ownership of woodlands increases from 65% to 70% of total forest area. 18 There are therefore no progress indicators relating to the question of ownership and no data.

The Scottish Forestry Strategy's vision is that

"By the second half of this century, people are benefiting from Scotland's trees, woodlands and forests, actively engaging with and looking after them for the use and enjoyment of generations to come. The forestry resource has become a central part of our culture, economy and environment."

The Principles underlying this vision are,

- sustainable development underpinned by sustainable forest management
- social inclusion through helping to provide opportunities for all, and helping to build stronger communities
- · forestry for and with people
- · integration with other land uses and businesses

this is further developed into Outcomes, Objectives and Key themes, 19

- · climate change
- timber
- community development
- environmental quality
- · business development
- · access and health
- biodiversity

None of the outcomes, objectives and themes address the question of forest ownership but it is worth looking at the Vision and Principles and considering what role forest ownership plays in achieving them.

¹⁸ Scottish Forestry Strategy, pg. 15 & 16

¹⁹ Scottish Forestry Strategy, pg. 8



Figure 5. French Student poster conjugating the verb "to participate": "I. you, he, we ... participate, they profit."

The existing pattern of public and private ownership of forests can deliver degrees of participation but in terms of citizen power, intervention in tenure and ownership is required to achieve the higher three levels.

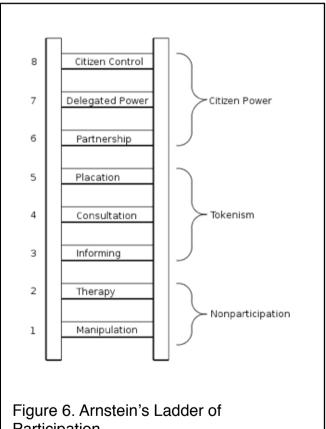
Tenure has already been recognised as a factor in Scottish forestry policy. Historically, trees belonged to the landowner and tenants had no rights.

The Crofter Forestry (Scotland) Act 1991 provided statutory rights for crofters to plant trees on their common grazings²¹ and the Agricultural Holdings (Scotland)

Act 2003 provided similar rights for farm tenants.²²

Forests deliver both public and private benefits. Public benefits include a wide range of environmental and economic goods but also (as the vision makes clear) include social goods. Active engagement with forests and looking after them implies a vision of widespread participation in forest management. Such participation will take place at a number of levels according to Arnstein's classic ladder of citizen participation (see Figure 6).20

The key missing ingredient in the Scottish Forestry Strategy is any understanding, analysis or framework for promoting civic participation in Scotland's forests at all the levels of the ladder.



Participation.

²⁰ Sherry Arnstein, A Ladder of Citizen Participation (1969)

²¹ The Crofter Forestry (Scotland) Act was repealed and consolidated in the Crofters (Scotland) Act of 1993.

²² Agricultural Holdings (Scotland) Act 2003 Section 42.

Forest ownership is also implicitly recognised as an issue as evidenced by the very existence of the Forestry Commission as a state forest service and by periodic debates over whether it should be privatised or otherwise reformed. Private ownership has also been the subject of government intervention in the form of specific arrangements over income tax, business tax, capital gains tax and business rates exemptions.

By and large, however, government intervention has been designed to promote forestry within the private sector as it is. So, for example, the forest dedication scheme was designed to promote long term forestry principally on private estates. The tax incentives available now are principally intended to attract outside "investors" to establish and manage forests.

If forestry policy is to succeed in its vision, then ownership is central to the four principles underpinning the Scottish Forestry Strategy, namely sustainable development, social inclusion, forestry for and with people, and integration with other land uses and businesses.

Self-evidently, social inclusion is promoted when people engage at the "citizen power" end of Arnstein's ladder. Forestry "for people" is more likely to be achieved if the land necessary for forestry is also "for people". And integration with other land uses and businesses necessitates a nuanced approach to forestry development that seeks to nurture and grow local economies.

5. CHOICES ABOUT OWNERSHIP

The concentrated pattern of forest ownership identified in this report may or may not be an issue depending on what objectives are set for forest policy. Currently, beyond a broad balance between state and private ownership (It is hard to imagine public ownership ever falling much below around 30% of forest cover), there is little discussion or thought given as to what pattern of ownership might best deliver public policy over the remaining 70% owned by non-state interests.

The current pattern of ownership consists of the state forest department (FC) and a private sector composed principally of landed estates and investment forestry owners and management companies. Whilst there is a range of motivations and approaches represented within the current pattern, it tends to be limited in scope and focus.

Over the past 50 years or so, the characteristics of non-state forestry have been hugely influenced by a wide range of taxation and financial incentives. A limited range of motivations can be found in investment forestry from hunting to capital appreciation but, by its nature, it tends to be focussed on financial considerations of the "investor" owner. Too often (as any random visit to any number of private forestry plantations will reveal), the forest management is not integrated with other land uses, there is little or no participation by the community, forests tend to be monolithic in structure and owners are absentee. Indeed, private investment forestry has all the features of colonial extractive industry with most financial and trade benefits accruing far from the resource.

For example, forestry is now packaged as an "Inheritance Tax Offering" by companies such as FIM in the form of their "FIM Sustainable Timber & Energy LP" offering which now owns 51 forests across the UK, covering 8,659ha.²³ Such approaches are perfectly legitimate but, as the European experience demonstrates, are only one small part of what, potentially, forestry has to offer.

Given that forestry is a long-term business and that for much of the past half century Scotland has been in an afforestation phase, the current pattern is perhaps not surprising. However, as existing forests have been and continue to mature, as a new expansion of forestry is underway, and as a new integrated approach to land use has been adopted via the Scottish Land Use Strategy, now is an ideal time to think about both the kind of pattern that might be desirable and how to achieve it.

It is not the purpose of this report to be prescriptive or indeed to make any recommendations beyond an appeal for a more informed analysis. However, it is worth providing some pointers as to the pros and cons of both the existing pattern, that of other European countries and any future pattern that Scotland might aspire to. At the very least, the Scotlish Government would be well advised to consider the question of forest ownership more seriously in the context of its forest policy and land use objectives.

The Existing Pattern

The existing pattern of ownership limits the opportunities for others who might like to own forests to do so since private forest values are elevated due to the tax advantages available to the wealthy. A limited range of forest ownership types is associated with a

²³ TFIM Sustainable Timber & Energy LP IHT, <u>Tax Efficient Review</u>, October 2010.

limited range of management regimes. Significant levels of absentee ownership mean that forestry is not a land use that is well-integrated into the rural economy.

On the other hand, the existing pattern has the advantage of being tightly focussed on, for the most part, a narrow range of objectives. In particular the timber supply chain is simplified by the system of investment forestry and private management companies with strong links to the processing industry. It also makes public policy rather more straightforward by placing the onus of forest expansion on the private sector.

Such a narrow focus of private ownership opportunities, however, has led to tensions with, for example agricultural interests - tensions which would not exist in the same way were farmers to have been more significant actors in forest ownership.

The European Experience

The pattern from across Europe, whilst more diverse, presents a varied set of issues and outcomes. Forestry tends, on the whole to be better integrated with agriculture and the cultural life of rural communities. In some countries, however, the fragmentation of ownership into very small parcels has posed challenges to positive long-term management. Such challenges can be overcome by co-operation as the vertically-integrated co-ops of Scandinavia demonstrate but this requires willingness and organisation.

Most significantly, the pattern of forest ownership in much of Europe is a consequence of a more diverse pattern of ownership generally which arose out of reforms enacted centuries ago principally in relation to inheritance laws. This highlights the value of thinking about land use policy in relation to land reform in Scotland and thinking about how the two processes could be mutually supportive.

A Future Pattern for Scotland

A more diverse ownership pattern would arguably be more likely to deliver greater diversity in approaches and models of management leading to greater innovation, investment and commitment to local economies in addition to greater resilience to external change. In particular, greater involvement of sectors currently under-represented such as community owners, small-scale individual owners, co-operatives and farmers and crofters could deliver wider benefits.

Above all the current pattern of forest ownership and its advantages and disadvantages needs to be rather more systematically explored as well as the costs and benefits of promoting particular ownership regimes. There is little doubt that there is merit in doing this since it is doubtful if the present pattern is optimal. Without further detailed consideration of the pros and cons of modified patterns of forest ownership, however, we will remain where we were when the late Sandy Mather made his telling comments in 1987:

There has been no stated policy towards ownership structure. Whether by design or by default, the state has exerted an influence of fundamental significance for the structure of forest ownership through its choice of policy instruments. Whether by design or default, the state has facilitated the expansion of financial ownership of forests in Scotland.²⁴

²⁴ A.S. Mather, 1987. 'The Structure of Forest Ownership in Scotland: a first approximation Journal of Rural Studies, Vol. 3 (2) pp.175-182. Available at www.andywightman.com/docs/Mather-JournalRuralStudies.pdf

6. CONCLUSIONS

This scoping study reveals five key messages.

Ownership matters

How forests are owned both in the public and private sector has an influence on how they are managed and how the public and private benefits are delivered and distributed. The nature and extent of this influence needs to be better understood. In the absence of any such understanding, forest ownership continues to influenced whether by design or by default by fiscal policy.

There is no policy on the pattern of ownership which is most likely to deliver the optimal range of public benefits

A cursory examination of the models of forest ownership across Europe suggests that the pattern that has evolved in Scotland is both unique and very probably not in a position to deliver all the public benefits that are promoted through Scotland's Forestry Strategy and Land Use Strategy.

The need for information

Any debate about the pattern of forest ownership is inhibited by the lack of information on the current pattern. This study has demonstrated that it is possible to obtain such information and use it to better understand the pattern of ownership.

Opportunities

There are a wide range of opportunities for diversifying ownership models in Scotland and there is no shortage of ideas from within Scotland and across Europe to deliver this. For example, there is significant scope to integrate the objectives of forestry policy with those of land reform and promote community forestry through a co-ordinated strategy of land acquisition and forestry grant support.

· Further Investigation

The stark findings of this preliminary inquiry suggest that further exploration of the pros and cons of Scotland's current model of forest ownership would be hugely beneficial and that fuller consideration should be given to whether current policy is delivering the full potential of forestry in Scotland.

ANNEX I EXISTING DATA ON FOREST OWNERSHIP

Category	area (ha)
Forest area Total	2,845,000
Private ownership	1,862,000
Owned by individuals	1,435,000
Owned by families	n/a
Owned by forest industries	41,000
Owned by private institutions	386,000
Owned by co-operatives	n/a
Owned by religious institutions	n/a
Owned by educational authorities	n/a
Owned by other private institutions	n/a
Public ownership	983,000
State ownership	903,000
Provincial ownership	80,000
Communal ownership	0
Other ownership	0

Table 1. Forest Ownership in the UK²⁵

Size class (ha)	area (ha)	No. owners		
< 1 ha	13,000	25,800		
1 to 2	28,000	18,400		
3 to 5	71,000	23,100		
6 to 10	104,000	15,200		
11 to 20	129,000	9400		
21 to 50	234,000	7300		
51 to 100	280,000	3900		
101 to 500	581,000	3100		
> 500	422,000	500		
TOTAL	1,862,000	106,700		

Table 2. Forest Ownership in the UK broken down by holding size.²⁶

²⁵ Source: http://timber.unece.org/index.php?id=90 UK Report

²⁶ Source: <u>http://timber.unece.org/index.php?id=90</u> UK Report

ANNEX II ANALYSIS OF FOREST COVER

In terms of forest cover, the most accurate data is that provided by the Ordnance Survey in their OS VectorMap District beta dataset released in March 2011 and which is available free from the OS OpenData.²⁷ Using similar data, the Forestry Commission has revised its estimates of woodland cover from 1,343,000ha (17.2%) in 2010 to 1,385,000ha (17.8%) in 2011.²⁸ This data was published by the Forestry Commission in May 2011 as the National Forest Inventory (NFI) NFI 2010 dataset²⁹ and is the latest product of the current National Inventory.³⁰ It contains spatial data on all woodland > 0.5ha with a minimum width of 20m.

The OS VectorMap is much finer grained but, as a consequence proved too complex a dataset to use with limited computing power. A contrast between the two datasets can be seen in Figure 7.

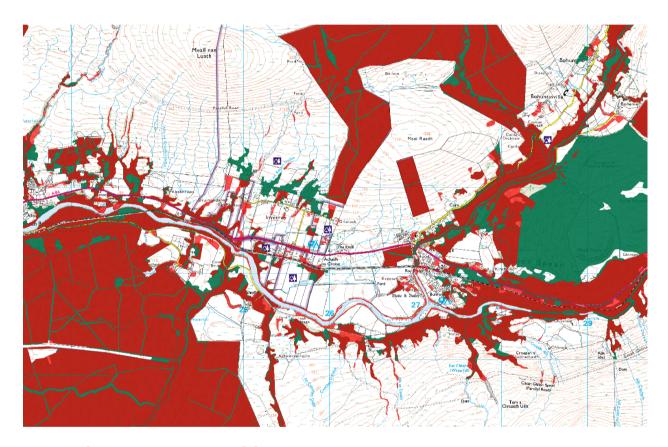


Figure 7. Comparison between OS VectorMap data and NWI 2010

The green areas represent NFI 2010 data and the red represents OC VectorMap data. As can be seen, the OS data is more fine-grained (it excludes forest roads and rides, for example). On the other hand, the NFI 2010 data contains large areas (such as the area to the east in Figure 7) which have not been identified by the OS as woodland but which probably represents a known new planting scheme.

²⁷ See OS OpenData

²⁸ Britain has more Woodland than previously thought, Ordnance Survey blog 7 June 2011.

²⁹ 2010 NFI Spatial data downloaded from www.forestry.gov.uk/website/forestry.nsf/byunique/INFD-8EYJWF See, in particular the NFI Method statement for further details of this data.

³⁰ See http://www.forestry.gov.uk/inventory

ANNEX III ANALYSIS OF FOREST OWNERSHIP - METHODOLOGY

Figure 8 shows one of the sample squares. Green areas are FC woodland (open land FC is not delineated). Purple areas are private forest where ownership has been identified in the sample. Red is forest areas where ownership has not been identified.

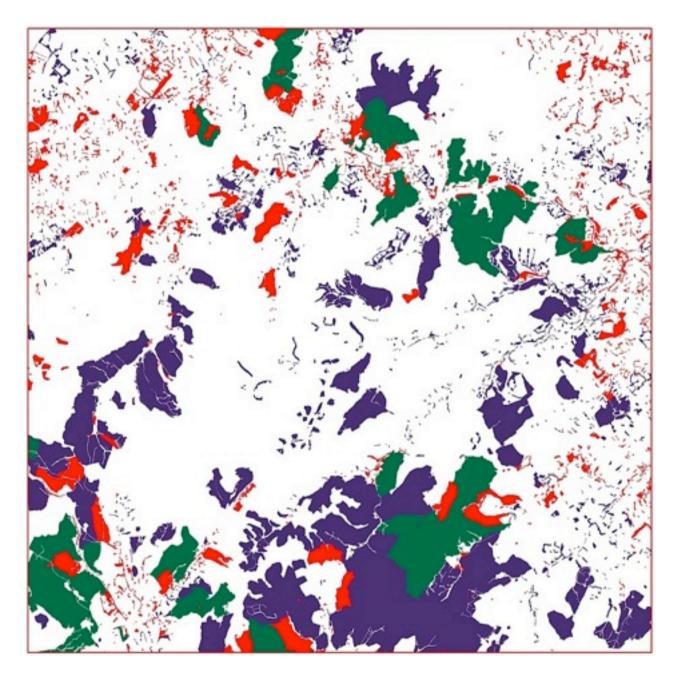


Figure 8. Forest Ownership sample square NT SW.

From this analysis, forest parcels were allocated between FC land, non-FC land where ownership data was available, and non-FC land where ownership data was not available. The overall pattern is given in Table 7.

	ha	% of NFI	sum	NATIONAL %
non-FC ownership identified	132,171	55.76%	66.54%	67%
non-FC ownership unknown	25,552	10.78%		
Forestry Commission	79,296	33.5%	33.5%	33%
TOTAL	237,019			

Table 7. Summary of Forest Ownership Identified in Sample squares

Using GIS analytical tools, forest parcels were amalgamated where these were in the ownership of the same owner whether that be in the individual sample square or across all of Scotland.

A detailed analysis of the sample squares is shown in Table 8. Of the 237,019 ha of forest in the four sample squares, there are 157,723 ha in private ownership.³¹ Of this, ownership information has been identified for 132,171 ha or 83.8% of private forestry in 569 separate landholdings.

As can be seen from Figure 8, the pattern of ownership of the red areas (16.2% of all four sample squares) contains a significant number of quite large blocks and thus the overall ownership pattern is unlikely to differ greatly from the 83.8% of the sample squares which forms the basis for this study where ownership has been identified.

Patterns of ownership in privately-owned forests.

Grid Squares	NFI ha	FC Estate	Non-FC estate	known non-FC ownership	unknown non-FC ownership	% non-FC NFI identified
NH50	61,697	12,413	49,284	44,544	4,740	90.4%
NN00	54,026	26,853	27,173	26,072	1,101	95.9%
NR55	53,526	22,311	31,215	23,451	7,764	75.1%
NT00	67,770	17,719	50,051	38,104	11,947	76.1%
TOTAL	237,019	79,296	157,723	132,171	25,552	83.8%

Table 8. Breakdown of forest ownership in sample squares.

³¹ By private is strictly meant non-FC since some non-FC managed forest land is owned by public bodies.

ANNEX IV ANALYSIS OF FOREST OWNERSHIP - RESULTS

Landholding Type	No.	ha	% ha
Estates	174	61,047	46.19%
Investment Forestry	179	60,095	45.47%
Farms	191	5,324	4.03%
Charities	5	1,853	1.40%
Forest Holdings	10	1,821	1.38%
Public ownership (non-FC)	3	1,208	0.91%
Community	6	811	0.61%
Co-operative	1	12	0.01%
TOTAL	569	132,171	

Note: The characteristics used to attribute landholdings to different categories are not definitive but there is a high degree of confidence that the vast majority of holdings are correctly attributed.

Estates are large (>400ha) holdings comprising multiple land use and where the main residence is a mansion house (i.e. not a farmhouse)

Investment forestry comprises holdings where the greater proportion (typically over 80%) of the landholding comprises plantation forest and where there is no residence. Owners are thus absentee. Forest holdings are holdings dominated by forestry but where the owner lives in the locality.

Table 9. Analysis of landholdings by type

Status	ha	%	no.	%	Landholding	No.	ha
Absentee owner	73393	55.5%	264	46.4%	Investment Forestry	176	59778
					Estates	67	13115
					Farm	21	500
Resident owner	55718	42.2%	297	52.2%	Estates	107	47933
					Farms	170	4825
					Forest holding	10	1821
					Community	2	747
					Investment Forestry	3	317
					Co-operatives	1	12
Charity	1853	1.4%	5	0.9%			
Public (non-FC)	1208	0.9%	3	0.5%			
	132172		569				

Table 10. Analysis of landholdings by owner status

	Investment Forestry Owners			Estate & Farm Owners				Total %	Total % ha	
Origin	No	% No	ha	% ha	No	% No	ha	% ha	No	
UK ex Scotland	97	55.1%	29486	49.3%	40	45%	7,330	54%	51.9%	50.2%
Offshore	28	15.9%	15564	26.0%	17	19%	1,789	13%	17.0%	23.6%
Scotland	51	29.0%	14727	24.6%	31	35%	4,496	33%	31.1%	26.2%
	176		59777		88		13,615			

Table 11. Analysis of landholdings owned by absentee owners

Landholding class (ha)	% of landholdings (Europe) *	% of landholdings (Scotland)
< 1ha	59.6%	6.3%
1-2 ha	13.7%	4.4%
3-5 ha	12.9%	5.8%
6-10 ha	6.1%	6.7%
11-20 ha	3.7%	9.8%
21-50 ha	2.4%	12.0%
51-100 ha	0.9%	10.7%
>100 ha	0.7%	44.3%
TOTAL	100.0%	100.0%

^{*} Source: UNECE/FAO data from 8 countries: Austria, Belgium, France, Hungary, Latvia, Lithuania, Norway, Poland & Slovakia. Scotland: derived from 569 holdings in Table 4.

Table 12. Private forest ownership by landholding class Europe vs Scotland