

**SCOTTISH WOODLAND HISTORY**  
**DISCUSSION GROUP**

**NOTES X**



**TENTH MEETING**

**FRIDAY 14<sup>TH</sup> OCTOBER 2005**

**SCOTTISH NATURAL HERITAGE CENTRE  
BATTLEBY, PERTH**

# A C K N O W L E D G E M E N T S

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**Front cover photograph:** Pear Tree in the Clyde Valley Woods (Richard Thompson)

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## **INTRODUCTION**

The tenth anniversary of the Scottish Woodland History Discussion Group was celebrated at the SNH countryside centre at Battleby on Friday, 14<sup>th</sup> October, over seventy members present, to look at the relationships between woodland history, management and policy.

Oliver Rackham set us off to a fine start with a worldwide perspective on woodland history, ranging from northern Europe and the Mediterranean, to the Americas, Japan and Australia. The woods of our islands seemed familiar until he showed the subtler differences, Welsh woods, for example, being more free-ranging than English, and Ireland having a reworked landscape of woodland erasure and planting quite unlike its neighbours. In Scotland, we have Scots pine that shares with the eucalyptus and the great redwoods the quality of being fire-adapted. In mainland Greece, its bitten-down oak can grow into a substantial wood the moment grazing pressure is lifted, with lessons for Scotland. On Crete you can find wood-pastures reminiscent of Glen Finglas, which the speaker had just visited and which he described as the northernmost “savannah” he could think of anywhere in the world.

In the tropics the fusion between cultural history and the ecological history of trees is particularly close, but landscapes that are all forests are not easy ones in which to make a living. In most parts of the world about the only useful thing you can make with a really large tree is a dug-out canoe, though in Japan, because of the splittable nature of the big timber, it is magnificently used in the oldest temples. The usual solution is by coppice and pollard to make big trees produce timber of a handy size for construction, as practised in recent centuries as far afield as Tasmania and Columbia, but a method going back to the Neolithic in Europe. It could not have been a better start to the day.

Althea Davies brought us home again to Abernethy, examining the relationship between people and the pinewood over the last thousand years through an amalgam of archaeology, palynology and documentary history, focusing in particular on the modern problem of achieving naturalness through management. There is an important tension here. Conservation bodies like the RSPB here and the Woodland Trust at Glen Finglas have a desire to create a natural-seeming environment in the woods, but how can this be achieved in what are also important cultural landscapes without obliterating the heritage encapsulated both in the archaeology and within the shapes and spacings of the trees themselves? Patience and a measure of deer control will answer better than rushing to plant, and as all these ancient forests have also been to a greater or lesser degree wood pastures for out-wintering animals, natural regeneration itself will have to be managed sensitively.

Chris Dingwall drew us to the plight of the wooded designed landscapes that play such an important part in the beauty and character of rural Scotland. Everyone admires them, but they are profoundly at risk from a legislative and bureaucratic shambles that leaves them with little effective protection. Responsibility for them is divided between Historic Scotland and SNH. Between them, the two bodies inherited an inventory from the old Countryside Commission for Scotland, but while there are 45,000 listed buildings there are only 268 designed landscapes and gardens on the inventory, and in the last 17 years only 71 have been added through the co-operation of the two bodies. This was an impassioned plea for the heritage quangoes to get their acts together and to give the designed landscapes a prominent place in their corporate plans. They need to collaborate properly to stop the erosion and outright destruction to which the landscapes are now constantly subject, through neglect and development pressures.

In the afternoon, we heard Richard Thomson explain how as a woodland adviser he considers history a vital tool to understand the important riverine woodlands of the Clyde gorges. This is a place where human use of many kinds has interacted with trees growing on steep slopes – a robust habitat but also a cultural landscape. History, he emphasised, has the potential to fill local people with enthusiasm for the conservation and interpretation of the resource. Gordon Donaldson followed him with an account of the involvement of the Forestry Commission and Forest Enterprise with native woods. This began with the designation in 1933 of part of Glen Loy as an “ecological reserve”, followed in the early 1960s by a “pine reserve” in Glen Affric with exclosures from stock, and eventually in 1994 by explicit policy recognition that native woodlands were important and to be cherished. Today, this takes the form of restoration of old Caledonian pinewoods like Glen Garry and Glenmore, the establishment of forest habitat networks and the recent plans greatly to extend the natural woodland of the Loch Katrine area. Throughout, there is a conscious effort to protect the cultural heritage and to work with local communities, and the need to research and respect the past is therefore explicit.

Dick Balharry then gave an account of his own experience of a lifetime in nature conservation, showing the changes in attitude and policy towards native woodlands since the 1950s. When Beinn Eighe NNR was bought, no-one was quite certain how to manage the pinewood or what the conservation objectives should be, but by a process of trial and error there has gradually evolved across Scotland an approach that favours natural regeneration over planting and deer control over fencing. We have not come to an end of this saga because we have not solved the problem of deer control, but today there is general agreement on the importance of caring for our native woods and a much greater respect for their antiquity.

The day was rounded off by a panel forum led by Chris Badenoch and composed of Richard Luxmoore (NTS), John Thomson (SNH), Lesley MacInnes (Historic Scotland) and Dick Balharry. As ever, the discussion from the floor was vigorous, with comments on, for example, the inadequate protection given to ancient trees and on the need to overcome the perceived indifference of many conservationists in the field towards cultural history. But as someone who has been with the discussion group from the start, I felt a sense of pleasure over how far we had come in ten years. The agencies, despite shortcomings no doubt, have a much greater awareness that our native woods are both historic and natural, and belong to the past, the present and the future. The problem of securing the designed landscape is an urgent one that will not go away, and that is perhaps the most pressing task at the moment.

Chris Smout

DATE OF NEXT MEETING: THURSDAY 26<sup>TH</sup> OCTOBER 2006, BATTLEBY.

## **LIVING WITH THE WOODS: THE RELATIONSHIP BETWEEN PEOPLE AND WOODS IN ABERNETHY OVER THE LAST 400 YEARS**

**ALTHEA L. DAVIES**

The aims of this paper are to use Abernethy as a case study to consider how the changing patterns of past management have contributed to the survival of the woods, and to examine the implications of this evidence for decision-making in future management. Abernethy is regarded as the largest 'native' pinewood in the UK and is currently managed primarily for conservation purposes. Pine has certainly been present in this area for around 8800 years (Bennett 1995, 1996), but this emphasis on native species, whether deliberate or unintentional, downplays the role which people have played in altering the woods over the centuries. This paper will look back from the present, but not to the origin of the woods, focussing rather on historical and palaeoecological evidence for the changing socio-economic incentives for woodland exploitation by the Grant family, past owners of Abernethy, and their tenants over the last 400 years, and the impacts of these decisions on the composition and structure of the woodland. Although both the Grants and the RSPB, current owners of Abernethy, were and are interested in preserving the woods, the woodland history results indicate that their motivations for doing so have little in common. The relationship between research into woodland history and present day management planning is discussed in connection with this evidence.

### **Sources**

A large amount of documentary research has been carried out into the exploitation of Abernethy for timber, primarily from a commercial perspective (*e.g.* Dixon 1976, Grant 1994, Dunlop 1997, Stewart 2003, Smout *et al.* 2005). Some of the main conclusions from this work will be presented here but this is by no means a summary of the extensive research into the past management of Abernethy's timber resources, for which readers are referred to the sources quoted above. Additional archival research has been carried out by Alasdair Ross for a current historical-palaeoecological project at Stirling University<sup>1</sup>. Most of the published work has focussed on the numerous short-lived phases of commercial timber exploitation, with relatively little information on the more protracted pressures exerted by tenants and the role of the woods in agriculture, especially as a grazing resource.

Numerous pollen sequences have been analysed in and around Abernethy, although not all of these continue to the present day (*e.g.* Birks and Mathewes 1978). Of this evidence, the research by O'Sullivan (1973a) is unusual in that many of the profiles work on a woodland stand scale, rather than at broad regional scales in which pollen signals from a potentially large and varied range of communities are amalgamated, thus blurring the picture of past vegetation and making it particularly difficult to detect openings in the woodland canopy other than large-scale clearances (Tipping 1994, Davies and Tipping 2004). Eleven pollen diagrams have been published for the Abernethy area. This suggests that Abernethy is quite well-served in terms of pollen-based woodland history which may be used to complement the extensive historical sources. However, the biggest drawback affecting all of the published pollen diagrams is the lack of dating controls; of eleven published pollen sequences from the area, only two have any radiocarbon dates within the last 1000 years and one additional site has some dating evidence for the last 2000 years. Linking known historical events with palynological changes (*e.g.* O'Sullivan 1973a, 1977) results in circular arguments and does not constitute independent evidence for the relationship between management and the woodlands. This severely limits the comparisons which can be drawn between documentary sources and pollen evidence, and remains a common and serious problem in pollen analysis. New research is underway at nine sites in the forest, with an interest in the more recent past, two by the present author as part of the historical-palaeoecological project mentioned above, and seven by Sandra Pratt as the basis for her PhD thesis at Edinburgh University; the results of the latter are not yet available. This range of sources, palynological and historical, though flawed, remains the most informative source of evidence for changing patterns of management and vegetation in and around Abernethy. In this discussion, references to the 'northern' or 'lower forest' refer to the area immediately south of Nethy Bridge, while the 'southern' or 'upper forest' includes the higher altitude areas of Abernethy Forest, south of Tore Hill and Forest Lodge up towards Ryvoan Pass.

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<sup>1</sup> More information about this project can be found on the following website: <http://www.cehp.stir.ac.uk/proj-7.html>

### **Vegetation patterns**

Despite the limited potential for linking changes in woodland composition and dynamics with patterns of woodland management, it is clear that the woodland stands in Abernethy were formerly more mixed in composition, including more birch and less heather than current communities (O'Sullivan 1977). This woodland mosaic included birchwoods at Rynuie and Rynettin, both shielings in the upper forest which were converted to farms during the eighteenth century. There is continued interest in past and potential future woodland links between Abernethy and Glenmore, through Ryvoan Pass. Ryvoan has been dominated by open heath since at least the fifth millennium AD (O'Sullivan 1973a), suggesting that any tree growth at higher altitudes in the southern or upper forest has been sparse for most of the last millennium. Heaths appear to have expanded over the last 500-1000 years, a process which has been attributed to grazing and appears to have continued through the nineteenth century (O'Sullivan 1973a, 1973b, 1977). At such coarse temporal scales, it is very difficult to understand the impacts of changing patterns of grazing and timber management, or establish the role of fire.

### **Patterns of exploitation**

In light of this broad-brush palynological picture, the primary phases of woodland exploitation recorded in documentary sources and evidence for changes in woodland composition and extent are discussed briefly in order to consider how decision-making relating to the woods has altered over the last four centuries in response to shifting socio-economic incentives.

Seventeenth century sources relating to Abernethy record 19-year leases issued in the 1620s for local timber exploitation, although these are thought to have had little effect due to their small-scale in relation to the size of the forest (Grant 1994). The first recorded outside contract dates from 1630, when a 41-year lease was signed and, despite political turmoil during the 1640s and changes in the holder of the contract, it appears to have run for the full term. It is notable that these early contracts did not place any limits on the number of trees or areas to be cut, and no replanting plans were established (Heard 1988). However, by the late seventeenth century timber was recognised as a scarcer resource on a national scale and the lairds of Grant became more concerned with the state and extent of their woods. This is suggested by some authors to have been the first wave of conservation and forest planning (Grant 1994), although with very different incentives to present day conservation strategies in Abernethy. Indeed, repeated attempts by the Grant family to exploit the commercial potential of their timber and sell to English markets through the eighteenth century demonstrate the power of financial motives in the preservation and management of Abernethy's timber resources.

In contrast with seventeenth century leases, eighteenth century contracts specify the number of trees to be extracted, giving perhaps some indication of the potential pressure on the woods: figures range from 60000 pines over 15 years to the York Buildings Company, although only 20000 were felled between 1728 and 1737, to a 1769 contract for the extraction of 100000 pines over 15 years, which lasted only 3 years. Most of these contracts met with limited success, with the result that fewer than the agreed numbers of trees were felled. These failures were largely attributed to the costs of extracting and transporting timber, poorer quality wood than anticipated and competition from other markets. Exploitation was directed towards local markets between attempts to engage English interest in the woods. The possible effects of these activities are considered below.

The lairds of Grant may have looked to commercial timber contracts to profit from their woods, but the estate also derived revenue from its tenants. To this end, since the seventeenth century at least, local wood keepers and foresters were put in place to police the woods and control the use of fire in the woods and heaths. While pine remained the focus of attention for commercial extraction and local regulations, the estate also sought to guard other species from over-exploitation. In 1763 this entailed placing tenants in custody of neighbouring scattered and small woods of birch and alder. Despite these measures, seventeenth and eighteenth century court books record repeated infringements in the woods, ranging from taking timber to peeling bark, setting fire and poaching game. The relationship between commercial and local tenant extraction is unclear, although regulations dating to 1664 indicate that the estate was attempting to ensure that the tenants used the timber only for their own needs, forbidding them from transporting or selling timber, wood or bark.

The tenants therefore had a continuing interest in the woods, if not a wood culture, to the extent that William Lorimer, advisor to James Grant of Grant, declared in 1763 that 'They spend too much time in

this and neglect Agriculture'. However, agriculture constituted their livelihood and there is some evidence that, on occasions, agriculture may have led to conflicts between woods and grazing. Palynological evidence from Rynuie, on the western edge of the upper forest, shows the clearance of local birchwoods to expand pastures during the late sixteenth century. A report of the woods and plantations in 1851 records a complaint about sheep and cattle pasturing in the forest. It is important to note that the forest remained unenclosed until after 1869, and the author of a report of 1812 drew a distinction between the good rough grazing in the woods and the poorer quality grazing on open land (O'Sullivan 1973b).

### **Changing incentives**

During the later eighteenth and nineteenth centuries pressures on the woods intensified as wars renewed the need for home-produced timber, which was now largely sold through local markets. This coincided with a push to increase agricultural productivity, resulting in the implementation of agricultural improvements during the 1770s-1780s. This led to the return of some farms within and bordering the woods to common pasture and resulted in the clearance of the remaining birch and alder growth around Rynuie to support increased pastoral and arable production.

At a wider level, the effects on woodland structure and extent are difficult to gauge from figures provided in timber contracts and court records, while most published pollen diagrams are too poorly dated to be informative. However, cautious interpretation of cartographic evidence suggests that exploitation during the century after 1750 was intensive and that the woods may have reached their smallest extent around 1830 (O'Sullivan 1973b), with the result that only a small proportion of Abernethy has been continuously wooded (Smout *et al.* 2005), a finding supported by pollen analyses (O'Sullivan 1973a). It was reported that by the 1760s, the largest and most accessible trees had been felled. This contraction was not limited to the lower forest, where most of the infrastructure for timber extraction was based, including sawmills: the limits of the upper forest also declined. Between 1858 and 1955, there was expansion in the lower forest due to planting, but continued contraction in the upper forest. Records from 1873 record the sale of 'small stunted trees' from the upper forest for pitwood. This raises the question of who was to blame for the changing extent of the woods. Smout has suggested that the short-lived character of the external commercial contracts probably brought about only the removal of the largest trees, while the continuous activities of local people contributed to the maintenance of smaller trees, rather than allowing them to mature into large trees (Smout *et al.* 2005). However, assessing the balance between local and external demands is difficult, particularly during times of war in the late eighteenth and early nineteenth centuries when foreign sources of timber were not available.

By the mid- to late nineteenth century, plantations established on a large scale during the early nineteenth century were maturing, but access problems still reduced the attractiveness of the timber. To some extent this changed with the arrival of the railway in 1863, which allowed the efficient transport of timber. However, this was a short-lived boon as timber prices began to fall during the same decade due to cheaper imports, steam, steel and iron. The railways also increased access for tourism and sport, which became increasingly important as the value of timber declined. This culminated, in 1869, in the clearance of crofts to create a deer forest and the enclosure of the woods to exclude stock. This brought an end to the wood pasture and resulted in the prohibition of timber operations in the upper forest during the shooting season. It has been suggested that the present even-aged mature stands originated from a phase of rapid regeneration due to the absence of livestock and initially low deer numbers immediately after enclosure (Dunlop 1997), and this was also O'Sullivan's (1973a, 1977) preferred age estimate for woodland regeneration near the top of some of his pollen diagrams. Felling and some replanting occurred during both World Wars, with the last extensive felling in the 1970s-1980s, prior to the acquisition of Abernethy by its present managers, the RSPB.

### **Decision-making and woodland history in current management**

The records for Abernethy indicate a continuous and changeable history of timber exploitation, one which fluctuated in response to socio-economic conditions, including agricultural pressures and market opportunities from both local and external sources. Abernethy Forest has thus not been a 'natural' habitat for more than 300 years. Many questions remain to be answered in order to understand the relationship between these changing incentives and pressures, not least of all a clearer picture of their impact on the woods themselves.

It is important to emphasise that the woods have not survived by chance from some pre-cultural time, as a 'wildwood' relict, contrary to popular perception of the woods. Woodland at Abernethy has survived precisely because it was valued as a resource to be managed and exploited, whether that was to meet local needs or for commercial profit. Management plans have always changed with the times, such that current management objectives are not identical to any previous strategies and the past provides no simple comparisons to learn from.

The current situation thus presents something of a paradox, firstly in the search for 'naturalness' though management, and, secondly, in the desire for natural processes in habitats that may be more cultural than semi-natural in origin. This opens the possibility that in striving for the natural we may be losing past cultural attributes which are equally valid parts of the history of the ecosystem. This poses a dilemma for managers, not only in Abernethy. History (encompassing documentary and palaeoenvironmental sources) can indicate the influence of the past in the present: the patterns of change in habitats, any species losses and the reasons behind these (Tipping *et al.* 1999), but it does not indicate the way forward or simply indicate past wrongs to be righted. Increasingly decisions made in the present need to be recognised as a matter of choice firmly rooted in current social and economic conditions, much as past choices reflect pressures of the time. The challenge for current and future managers is to be informed by the past in order to understand what the present represents, in both natural and cultural terms, and to take that forward, whether the decision is then made to protect some of this past or to aim for a new vision.

### Acknowledgements

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**NEW POLICIES FOR OLD POLICIES**  
**PLEADING THE CASE FOR DESIGNED LANDSCAPES**

**CHRISTOPHER DINGWALL**

I think that most members of the Scottish Woodland History Discussion Group (SWHDG) will be aware of my former role as Conservation Officer with the Garden History Society in Scotland (GHSS) in which capacity – for some twelve years from 1992 until last year – I sought to argue the case for the protection and conservation of historic gardens and designed landscapes within the wider spectrum of heritage interests.

In this role I was involved at one end of the scale with individual designed landscapes across the length and breadth of Scotland – indeed, you will recall contributions to past meetings of the SWHDG on the Hermitage and the history of coppice management around Dunkeld, and on the continuity and development of woodland cover around Callendar House near Falkirk. Or my interest in the overlap between wood pasture and parkland planting within designed landscapes. With particular regard to trees and woodland, a significant part of the GHSS Conservation Officer's workload for some time past has been the processing of individual Felling Licence applications, Scottish Forestry Grant Scheme (SFGS) proposals and Forest Plans, where these are seen to affect significant designed landscapes. At the other end of the scale the GHSS has long been a contributor to the discussion of policy, whether at a national or agency level, or at a more local level through the development planning process. Throughout its existence as a lobbying organisation the GHSS has consistently argued for more explicit recognition to be given to designed landscapes as part of the nation's cultural heritage, and for appropriate measures to be put in place for their safeguarding against neglect and inappropriate development. Today's proceedings provide me with an opportunity to reflect on my twelve years service with the GHSS, and on some of the issues which this has raised.

I ought to start by apologising for the punning reference in my title to 'policies'. However, as you will know this is a useful Scottish term derived from the Latin word *politus*, meaning 'polished' or 'refined', and defined in the OED as "... *the enclosed, planted and partly embellished park or demesne land lying around a country seat or gentleman's house*". I am sure that there is no need for me to describe to the present company of the contribution made by policy planting to the character of Scotland's landscape, or of the important part played by Scots landowners and foresters in the history and development of tree-planting – influential figures such as the 6th Earl of Haddington, the 4th Duke of Atholl, Thomas White, Sir Henry Steuart of Allanton, John Claudius Loudon and Prof. Mark Loudon Anderson spring to mind, to name but a few. In the same way that changing taste and practice is reflected in art and architecture, so it is with the designed landscapes which have for centuries provided the setting for Scotland's country houses. So it is that we can read the history of landscaping in the different styles of planting.

The contribution made by 'policy' woodlands to the Scottish landscape was first commented on some three centuries ago by the likes of Daniel Defoe and John Macky. Their continuing relevance in the context of today's landscape is acknowledged in many of the *Landscape Character Assessments* drawn up by Scottish Natural Heritage, and was recognised in the discussion paper entitled *Scotland's Future Landscapes ? Encouraging a Wider Debate*, published by SNH as recently as 2004. I quote from this "... *There is a record of past change that can be discerned in the landscape which provides important historical and cultural evidence of the nation's development ... Today's land cover reflects a long history of woodland clearance and human management. The agricultural improvement enclosures, along with their associated designed landscapes, create the basic structure of much of today's lowland rural landscape.*" Recognising this, and the economic pressures which affect country estates today, the report went on to observe that "... *The distinctive character of cultural landscapes is at risk – designed landscapes and the settings of important buildings have been adversely affected ... the condition of detailed landscape elements such as woodland, tree-lines, hedgerows and other field boundaries continues to decline.*" And finally there was a fairly unequivocal statement to the effect that "... *Designed landscapes contribute greatly to the appearance of the rural landscape, but their long-term survival remains at risk, and will not be secured without targeted action.*" In policy terms, then, one might expect the concern expressed by the report to be reflected in such things as our **legislation**, in the **corporate strategies** and **grant-giving** powers of relevant agencies, in the **listing process**, in local

**development plans**, and in the **advice** available to landowners, land managers, and local authorities. In the few minutes allocated to me, I should like briefly to examine each of these areas in turn.

### Primary Legislation

The legislation most directly affecting designed landscapes is that concerned with the relevant Government agencies – **Historic Scotland** and **Scottish Natural Heritage** – and their operation within the town and country planning system. For reasons which are unclear the legislators chose to give the responsibility for designed landscapes in Scotland not to a single agency, as they did with the creation of English Heritage south of the Border, and of Cadw in Wales. Rather the responsibility was divided equally between the **Countryside Commission for Scotland** (as the precursor to Scottish Natural Heritage) and the Historic Buildings and Monuments Division of the **Scottish Development Department** (as the precursor to Historic Scotland). The third relevant agency, with the primary responsibility for trees and woodland, was and still remains the **Forestry Commission**. Current policy and practice with respect to designed landscapes in Scotland, therefore, is based on

- *The Town & Country Planning (Scotland) Act 1997* ~ TCP(S)A 1977
- *The Planning (Listed Buildings and Conservation Areas)(Scotland) Act 1997* ~ P(LBCA)(S)A 1997
- *The Natural Heritage (Scotland) Act 1991* ~ NH(S)A 1991
- *The Forestry Act 1967* ~ FA 1967

It is a startling fact that not one of these Acts acknowledges the existence of gardens and designed landscapes, in their own right, as part of the nation's cultural or natural heritage.

Although reference is made in the P(LBCA)(S)A 1997 to the desirability of “...*preserving on the ground of its architectural or historic interest, any feature of the building consisting of a man made object or structure fixed to the building or forming part of the land and comprised within the curtilage of the building*” [Section 1(2)(b)] there was and is no recognition given, as there has been in England and Wales since 1974, to the ‘setting’ of that building. Reference is made throughout the Act to ‘buildings’, ‘structures’ and ‘objects’, but never to landscape. While the closely related TCP(S)A 1997 does include some provision for the protection of “...*trees, groups of trees or woodland*” through Tree Preservation Orders [Section 160 (1)] it is the individual trees themselves, rather than the landscape which they create, which are the subject of this legislation. Furthermore, there is no statutory duty placed on Historic Scotland, as there was in the *National Heritage Act 1983* in respect of English Heritage, “...*to compile a register of gardens and other land situated in England, and appearing to them to be of special historic interest*” [Section 8 (c)] . In spite of this Historic Buildings and Monuments Division of the Scottish Development Department (now reinvented as Historic Scotland), became a partner with Countryside Commission for Scotland, since incorporated into Scottish Natural Heritage, in the compilation and subsequent extension of the *Inventory of Gardens and Designed Landscapes in Scotland*, Scotland's equivalent of the English *Register of Parks and Gardens of Special Historic Interest* (to which subject I shall return. Incidentally, the phrase ‘... *listed building or its setting*’ [Schedule 2 : Paragraph 15 (a)(i & ii)] was included in the *Local Government and Planning (Scotland) Act 1982*, but this phrase has not found its way into subsequent legislation.

It was the *Natural Heritage (Scotland) Act 1991* which brought about the merger of the Countryside Commission for Scotland with the Nature Conservancy Council (Scotland), to form **Scottish Natural Heritage**. The legislation referred to the new agency's responsibility for Scotland's “... *natural beauty and amenity*” [Section 1(3)], without actually defining either of these terms. Despite a statement within the Act concerning Scottish Natural Heritage's wider responsibility for the conservation, among other things, of “...*sites and landscapes of archaeological or historical interest*” [Section 3 (1)(d)], both the choice of name for the new organisation, and subsequent interpretation of the legislation, have resulted in a body which has always laid the emphasis on the conservation of natural landscape, wildlife habitats and species rather than of the wider cultural landscape or countryside. As with Historic Scotland, there was no statutory duty placed on SNH to compile a register of gardens and designed landscapes, despite the former Countryside Commission for Scotland having been a significant (indeed arguably *the*) driving force behind the compilation of the *Inventory of Gardens and Designed Landscapes in Scotland*.

## Secondary Legislation

The only piece of legislation which explicitly acknowledges the responsibility of Historic Scotland and Scottish Natural Heritage towards the garden heritage is the Statutory Instrument *The Town and Country Planning (General Development Procedure)(Scotland) Order 1992* ~ GDP(S)O 1992, which uses the term ‘... *historic garden or designed landscape*’, defining this as ‘... *a garden or designed landscape identified in the Inventory of Gardens and Designed Landscapes in Scotland*’ [Section 2(1)]. This legislation requires local authorities to consult both the Countryside Commission for Scotland (now embodied in Scottish Natural Heritage) and the Secretary of State for Scotland (now the Scottish Ministers as represented by Historic Scotland) on development which is seen to affect an ‘... *historic garden or designed landscape*’ [Sections 15(1)(d) and 15(1)(j)(iv)]. Although the GDP(S)O 1992 itself refers to the *Inventory* without any qualification [Part 1 Section 2(1)], the supporting *Scottish Office Circular 6/1992* refers specifically to the *Inventory* ‘...*published in 1988*’ [Paragraph 8(h)], thereby effectively disqualifying sites listed in the supplementary volumes for Fife, Lothian and the Highlands and Islands, which have been published since that date.

Furthermore, while local authorities are required by the GDP(S)O 1992 to consult both Historic Scotland and Scottish Natural Heritage on development proposals affecting historic gardens and designed landscapes, the fact that the *Inventory* is an ‘advisory’ rather than a ‘statutory’ list gives the agencies’ opinions less weight within the planning system than most other designations. Nor is there any legal constraint or penalty placed on landowners or developers whose activity results in the loss or degradation of designed landscapes included in the *Inventory*, as there is in the case of Listed Buildings, National Nature Reserves, Sites of Special Scientific Interest or Tree Preservation Orders, where the relevant authorities have been given powers of enforcement. Finally, it is possible to cite a number of instances where local authorities have chosen to ignore advice given to them by the agencies and/or the Planning Inspectorate, and have granted permission for development within, or directly affecting *Inventory* landscapes.

## Corporate Strategies

Given that legislation takes time to change, we might at least expect to find more positive signals in the corporate strategies of the relevant Government agencies, to suggest that they are addressing the problem. Sad to say, this does not appear to be the case. There is no mention of historic gardens and designed landscapes to be found in Historic Scotland’s most recent Corporate Strategy, which is written solely in terms of its responsibility for ‘buildings’ and ‘monuments’. I think a look at Historic Scotland’s website is particularly instructive, as you will struggle to find any acknowledgement of its role with respect to designed landscapes. Likewise, and in spite of the responsibilities inherited from the Countryside Commission for Scotland, and the statement included in the discussion paper which I quoted from earlier, there is no reference in SNH’s most recent Corporate Strategy to designed landscapes. Indeed, I was among those who sat in this very room eighteen months ago and heard Mike Scott, Deputy Chair of SNH, confess that the agency “... *has a problem with designed landscapes*”. Now in the latest SNH Strategic Review 2005, I see that gardens are described as not being “...*in the mainstream of SNH’s work*”, with the consequent recommendation that “... *the responsibility for statutory advice on gardens and designed landscapes should be relinquished to Historic Scotland*”. This might seem a logical move, to focus responsibility on a single agency, except for the implications which this has for other areas of SNH’s involvement with designed landscapes. For example, should we take this statement to mean that the concordat which has always existed between SNH and HS on the joint funding of the *Inventory of Gardens and Designed Landscapes in Scotland* is under threat, too? Or that there may be a reduction or cessation of the grants which SNH has traditionally given towards the preparation of Management Plans for designed landscapes? And where does it leave SNH in relation to the GDP(S)O1992, which requires it to have a view on designed landscapes.

Finally, and despite strong lobbying from the GHSS and others, there was no recognition given in the most recent *Scottish Forestry Strategy* to the rich heritage of tree planting here in Scotland. As a result, there is no **explicit** recognition given in the *Strategy* to historic woodlands in the Strategy, and no commitment made to their conservation. In spite of this, however, the Forestry Commission has shown itself to be more sympathetic to historic landscapes and woodlands than it was in the past, through offering enhanced levels of grant for such woodlands under the SFGS.

## The Listing Process and Planning Casework

Well, you might say, at least there is an *Inventory of Gardens and Designed Landscapes in Scotland* and an ongoing listing process, however inadequate the protection which this offers. However, I think it was already recognised in 1987, when the *Inventory* was first published that the 275 sites described therein were no more than a representative sample of Scotland's most important designed landscapes, and that the listing process should be continued. Compare the *Inventory* of gardens, for example, with similar inventories of listed buildings (45,000), of ancient monuments (8,000) and of natural heritage sites (between 1500 and 2000) enjoying some form of statutory protection. Although a project to extend the *Inventory* was begun as long ago as 1993, nearly thirteen years on, we have seen only 71 sites added to the *Inventory* in just three of the old Scottish regions – Lothians, Fife, and Highland – representing a rate of five or six sites per year. While preliminary surveys have taken place and provisional lists have been drawn up for Tayside, Central, Strathclyde, Dumfries and Galloway, the re-survey of Grampian is still incomplete, while that for the Scottish Borders has yet to begin. Nor is there any listing being done of sites of regional or local significance. For much of the last twelve or thirteen years there has been a single part-time post, jointly funded by HS and SNH, devoted to the extension of the *Inventory*. Although this was recently expanded to one full-time post, the possibility of a reduced commitment by SNH seems to bode ill for the future, unless an alternative source of funding for this work can be found. Can we really pretend that designed landscapes are the subject of 'targeted action' when we look at pitiful resources within the agencies today which are allocated to the survey and recording of designed landscapes and to related planning casework.

Finally, on the listings side, we can ask why, where new sites are discovered, as happens from time to time with gardens, as with buildings, there is no mechanism by which these sites can be spot-listed and offered the protection which they deserve? All of this and the lack of advice currently available to local authorities and landowners on designed landscapes can hardly be said to be sending out a strong message.

## Guidance and Advice

Finally, with respect to this last point, what can be said of the information and advice on planning and best practice which should be serving as a guide to local councils and landowners on the subject of gardens and designed landscapes? We do at least have Historic Scotland's *Memorandum of Guidance on Listed Buildings and Conservation Areas 1998*, but this is more of a technical manual aimed primarily at local authorities, and can hardly be described as an accessible publication. There were plans for a Planning Advice Note for local authorities on *The Safeguarding of Historic Gardens and Designed Landscapes*, first drafted by the Scottish office Environment Department in 1992, but this was quietly and inexplicably dropped. Other useful advice notes have long been out of print, as is the case with the former Countryside Commission's booklet *Gardens and Designed Landscapes: An Owners Guide to Planning their Management and Conservation* (published in 1989 but never reprinted), and the Forestry Commission's excellent *Forestry Practice Advice Note 3: Woodlands in Designed Landscapes* similarly out of print for at least the last five years or more. And, although three new volumes of the gardens *Inventory* have been published, they are nowhere to be found on public sale.

Where is the targeted action which SNH's excellent discussion paper called for? Does anyone out there really care?

## Conclusion

I think you will find that I am not alone in my concern for designed landscapes, and the way in which they seem to have fallen between the two stools of the built and natural heritage. It became clear to me at a conference organised by the National Trust for Scotland last November that there are others who believe that the existing **legislation** is both confused and inadequate; that the **listing process** is manifestly under-resourced; that there is a woeful lack of **guidance** available for landowners and local authorities, or **training opportunities** in Scotland for those involved in the business of conserving historic and designed landscapes. I fear that without a significant change in policies, attitudes and funding, this vital aspect of Scotland's garden heritage will remain at risk.

## **TAKING HISTORY INTO ACCOUNT IN WOODLAND DYNAMICS**

**RICHARD THOMPSON**

### **INTRODUCTION**

Forest Research and The AHRC Research Centre for Environmental History (University of Stirling) undertook a collaborative project in the Clyde Valley. FR looked at the dynamics of three stands in Lower Nethan, Upper Nethan and Jock's Gill. Philip Sansum, Mairi Stewart and Fiona Watson undertook a desk based study of the general woodland history of the Clyde Valley, with a detailed look at the three woods. Contrasting woodland histories are presented, with corresponding differences in stand response. The legacy of past management is described in relation to *Tilio-Acerion* and upland oakwoods. The results of this work are presented in two reports published by Highland Birchwoods - Please see the 'Publications' section on [www.highlandbirchwoods.co.uk](http://www.highlandbirchwoods.co.uk) **OR** 'Resources' then 'Books and Articles' on [www.cehp.stir.ac.uk](http://www.cehp.stir.ac.uk)

### **THREE CONTRASTING WOODLAND HISTORIES**

#### **Lower Nethan**

The stand in question (NGR: NS 818 465) is located in the Nethan Gorge, on a moderate slope facing Craig Nethan castle.

There is an account of woodland around Craignethan in 1770. The population of Lesmahagow (the parish in which the woodland is situated), more than doubled between 1801 and 1831 suggesting increased utilisation of workable land. William Forrest's 1816 survey of the county of Lanark suggests that this area was unwooded at that time. By the time of the First Edition Ordnance Survey (1858) it can be seen that the area in question was occupied by an orchard.

The period as an orchard must have been very short-lived for there are records that in 1914, a stand of timber was felled for coffin wood and duck boards. Assuming that it would take at least 50 years for hardwood trees to reach an adequate diameter for sawlog production, this would mean that the orchard must have regenerated (or been planted) with high forest species no later than the mid 1860's. Certainly the OS revisions of 1898 and 1913 depict mixed woodland.

The woodland today shows little sign that it was once an orchard, the only evidence being a pear tree at the top of the slope and a suppressed apple tree within the wood. The main stand is of a fairly complex structure. The overstorey is dominated by sycamore but also contains abundant ash and frequent oak and elm. There are regular holes in the canopy caused by Dutch elm disease. There is a well developed understorey with dense patches of ash and hawthorn regeneration in places.

Further up the valley (to the north) the gorge banks become very steep and it seems unlikely that much utilisation of the timber resource has ever been made. However, in 1834, 450 acres of the parish were under coppice. As there was so much pressure on other land at the time, a lot of this must have been on the steeper gorge banks. Coppicing has taken place in similarly steep terrain elsewhere. For example, the beechwoods of the Apennines in Italy. In that case, the relatively light charcoal was extracted on pony tracks. It would be interesting to look further into this aspect of woodland history in the Clyde Valley, to see to what extent the steeper gorges were worked and what techniques were employed.

#### **Jock's Gill**

The stand in question (NGR NS 820 500) lies to the east and west of Whorley Burn on the northern banks of Jock's Gill. The Roy map shows the area to the east of the Whorley Burn to be well wooded on the lower slopes. By 1816 (William Forrest's survey), this wood appeared to be part of a formal landscape associated with Hallcraig house. Woodland to the west was restricted to the lower slopes and there was formal planting down Whorley burn. To the east was a predominantly open area with some indication of formal planting.

The First Edition Ordnance Survey map (1858) shows the area to the west to be well wooded (higher up the bank than in 1816), with an open, unwooded area lying to the east. The designed landscape appears to have changed by this time, to a semi-industrial one with evidence of tile works, limestone pits etc. The woodland to the west of Whorley Burn included symbols of conifer species. There are records of a brickworks opening in 1880, just to the south of the area described. Timber was sold from the west of Whorley Burn in 1933. Sale particulars describe a magnificent stand of timber including beech, larch and spruce.

Today, it is possible to see various elements of former landuse. Mature trees of a range of species can be seen in a formal pattern across the Carluke golf course (above the wood) and some mature beech (presumably also dating back to the formal planting seen on the 1816 map) can be seen within the wood. These are beginning to have an impact on dynamics as large limbs fall to create canopy gaps and regeneration of beech develops.

The area to the east of Whorley Burn appears to have been disturbed by the brickworks and is now a mosaic of willow carr, fen and blackthorn thicket. The sharp divide between former landuses is still evident from the Whorley Burn west, where there is high forest, composed of a range of species including ash, alder, hazel and birch (also, until recently, sycamore and beech which have been felled as part of a LIFE Nature funded project). Presumably, this stand arose from natural regeneration following the felling of the mixed woodland around 1933. Casual observations suggest that ground flora lower down the bank may be richer than above and that there is a higher proportion of birch in the canopy higher up the slope. Broad vegetation communities indicate that the upper and lower slopes are of a similar site type and it is possible that some of the differences observed may be due to greater continuity of woodland cover lower down the slope.

### **Upper Nethan**

The stand in question (NGR: NS 803 447) lies to the south of Lower Nethan. It presents a stark contrast to Lower Nethan in terms of stand structure and species composition and in terms of its woodland history.

Coal mining appears to have had a big influence over this landscape. Between 1832 and 1857, coal tonnage won in parish mines rose from 8,000 tonnes to 60,000 tonnes. The First Edition Ordnance survey map (1858) shows three coal pits lying on adjoining boundaries to the wood, a railway running along the top of the wood and, just to the north, a viaduct (built in 1853) presumably to extract coal from across the gorge.

Forrest's 1816 map shows that the study area was wooded at this time. By 1858, an area at the top of the bank was shown to support mixed woodland. This is now a mosaic of grassland and hawthorn scrub and was grazed by cattle until the late 1980's. The areas of hawthorn also contain ash trees which may have been protected by the "thorny mantle" when adjoining land was cattle grazed.

Further along the bank, it is not clear what changes in woodland structure have taken place. These stands are now dominated by stems of coppiced ash, of a uniform structure, with alder dominated stands further up the bank. It is tempting to imagine that the ash areas have developed from scrub colonisation and have followed a similar succession to that taking place further up the bank (described above). However, the 1816 map suggests that there was woodland cover over this area at that time. Some felling has taken place recently and ash stems appear to be c. 60 years old, indicating war time felling (this agrees with evidence on 1940 aerial photographs). The small size of ash stools suggests that they may have only been coppiced once and that maidens were felled in the late 1800's.

### **THE LEGACY OF PAST MANAGEMENT IN RELATION TO WOODLAND TYPE**

A contrast is considered between *Tilio-Acerion* and western oakwoods. The table below shows some characteristics of each type. All of these aspects influence the way in which natural processes have interacted with previous management.

<i>Tilio Acerion</i>	Western oakwoods
near populations	remote
diverse range of landuses	limited range of landuses
long history of planned management	short history of planned management
recent disturbance/dynamic (e.g. Dutch elm disease)	long period of minimal disturbance
range of tree species, many shade bearing	most tree species light demanding
productive sites	relatively low productivity
low impact from herbivores	high herbivore impacts
relatively fast rate of change	relatively slow rate of change

Today, western oakwoods typical contain the same stands that existed 100 years ago. In many cases, all that has happened is singling of coppice stems to high forest or self thinning as sub-dominant and suppressed stems are killed by more vigorous growth. There is direct evidence for this, either through visible saw cuts to singled stems or dead stems around coppice stools. In areas previously managed as wood pasture, the landscape either remains in a very similar state or grazing has changed to produce a more open woodland or conversely, infilled veteran trees.

In the same period, *Tilio-Acerion* woods have typically gone through substantial changes. Where the area was woodland 100 years ago, stands have been replaced by two or three new generations. In most cases, industrial use of the land itself or adjoining land has had a substantial impact which is scarcely discernible today, usually reflected in man made remains rather than the trees themselves. Nevertheless, these past uses have created woodlands of different character where a range of different processes are taking place.

## **CONCLUSIONS**

The study sites in the Clyde Valley have been managed for a diverse range of objectives and undergone many changes. Whilst it is difficult to see what activities took place in the past, there are clear differences in the character of the three woodlands which appear to be largely due to the historic use of each site rather than differences in site type.

The rate of change in *Tilio Acerion* stands has generally been much faster than in western oak stands. This is due to some extent to site effect (e.g. faster nutrient cycling; greater forage for herbivores and therefore more opportunities for tree regeneration; and a wider range of tree species including shade tolerant ones capable of regenerating and establishing under a woodland canopy). However, this difference is also due to man's activities, much more intensive use being made of land in the Clyde Valley than in the western Highlands over the last 100 years.

Knowledge of woodland history in the Clyde Valley has allowed a much more meaningful investigation into the dynamics of these woodlands, than would have been possible by examining existing stand structure and composition alone.

## **ACKNOWLEDGEMENTS**

Philip Sansum, Mairi Stewart and Fiona Watson are thanked for their work on the history report. This was part financed by Scottish Natural Heritage and LIFE Nature (through Phil Baarda at Highland Birchwoods). Ian Cornforth and Chris Waltho are thanked for their local knowledge and enthusiasm for this project. My thanks also to Chris Smout for asking me to speak at this meeting.

## **NATIVE WOODLAND MANAGEMENT AND FOREST ENTERPRISE SCOTLAND**

### **GORDON DONALDSON**

This presentation concentrates on five areas of interest within the topic of native woodland management and Forest Enterprise Scotland.

It is important to recognise that throughout this presentation I will refer to Forest Enterprise, Forest Enterprise Scotland (FES), Forestry Commission and Forestry Commission Scotland. All refer to the organisation known today as Forestry Commission Scotland (FCS).

Following devolution Forest Enterprise and Forestry Authority once again came together under the Forestry Commission umbrella, although to reflect devolution the re-merged body added Scotland to its title.

All Forestry Commission Scotland land is owned by the Scottish Executive and managed on its behalf by FCS and they delegate the required management activity to FES.

#### **History**

Forestry Commission was established in 1919 with one of its main objectives to reverse the decline in woodland cover.

It is possible that many would have perceived that this loss of woodland would have been replaced like for like. This was not the case. With the establishment of the FC came a research and development branch who over the years undertook extensive studies into establishment techniques designed to provide a fast growing product with timber production as the key.

This resulted in large areas of ground, much at fairly high elevation being planted with Sitka spruce. Other preferred species were Norway spruce, Douglas fir, Larches and Lodgepole pine. This work carried out in close proximity to the remaining ribbons of semi-natural woodland has created over the years many spectacular views of mixed woodland in the glens of Scotland.

#### **Acquisitions**

Glenmore 1923

Glen Garry 1927

Glen Loy 1931

Guisachan 1935

Black Wood of Rannoch 1947

Rowardennan 1950

Glen Affric 1951

Through the early years of the Forestry Commission many significant purchases were made and with these acquisitions came many of the nationally important areas of native woodland in Scotland. All of these were recognised by the Nature Conservancy Council, now Scottish Natural Heritage as areas with clear historic ties to Ancient Semi-Natural Woodland and Long Established Woodlands and as such many have within them or are, Sites of Special Scientific Interest (SSSI).

#### **Policy**

It would be fair to say that the policy towards native woodland has not been clear. There is little information to show that there was a policy. In fact it is almost certain that the protection and development of the special woodlands we enjoy today was the result of what I would term pioneering individuals. These individuals took a real interest in these woodlands and protected what they could, where they could and the fencing work that was undertaken to protect the new establishing woodlands

had a beneficial effect on these remnants which had suffered from exploitation and over grazing for many many decades.

After some 40 years there was a recognition of what we now had, as a result of the dedication of these few individuals. This enlightenment phase can be dated to an Institute of Chartered Foresters seminar, in 1960 held in Inverness on the topic of pinewoods. During this seminar there was a site visit to Glen Affric when Professor Stephens addressed the FCS and informed them of what a valuable asset they had in Glen Affric and that the government was duty bound to take action to protect the woodland. Following this the FC quickly moved to establish its position on the future management of Glen Affric.

Despite this the development of wider policy took perhaps a further 20 years to really progress. However it is now well established and a ten year review has just been completed. During this phase much positive work has been carried out and targets have been achieved as the total area of native woodland on FCS ground has been more than doubled in the period from 1994 - 2000. FCS is now an organisation committed to the restoration, expansion and enhancement of native woodland.

### **Designations**

Ecological Reserve

National Forest Park

Pine Reserve

Caledonian Forest Reserve

Forest Landscape Restoration Project

SSSI, National Native Reserve (NNR), Special Area of Conservation (SAC)

Although there was no clear policy guidance on native woodland in the early days it should be noted that the Forestry Commission did attempt to understand and categorise these woodlands. As early as 1930 the Phuiteachan pinewood in Glen Loy was given an internal designation of Ecological Reserve. It is a testament to the early forester's ability that this remnant was designated an SSSI and is recognised as a very rich woodland today.

Other native woodlands such as Glenmore were given extra protection through internal designation, in this case National Forest Park in 1954. In 1960 some 1400 hectares of the pinewoods of Glen Affric were designated as a Pine Reserve. As policy became more defined these native woodland areas were designated as Caledonian Forest Reserves. Today following the success of the integration of woodland management and local communities a new initiative of holistic woodland management is being termed Forest Landscape Restoration.

Internal designations work well for the organisation however many of the best examples are now additionally protected through external designation such as SSSI at Rowardennan, NNR at Glen Affric and SAC at Sunart. The Forestry Commission welcome these designations as it recognises the quality of past work and also raises the profile of the woodlands, increasing the possibility of external funding to help with our work.

With this in mind, I felt it would be of value to highlight two projects that I have been involved with over the past 8 or 9 years. These show the level of funding directed to the delivery of our native woodland management and also the outputs that have been achieved in their restoration, expansion and enhancement.

### **Glen Affric**

Purchased 1951

Society of Forester's Visit 1959

Pine Reserve Designation early 1960's

Area Fenced and Grazing Controlled

Seed Collected Locally

Planted 1966-1970

The early history of Glen Affric is defined by the visit of the ICF tour in 1960. After this the Pine Reserve was formed and today this area is truly fantastic with natural regeneration of the full range of appropriate tree and lower ground vegetation.

Caledonian Forest Reserve 1994  
LIFE Programme Project 1996  
MFST Project 1998

Glen Affric has enjoyed an enhanced status with the organisation for many years. It was the first area designated as a Caledonian Reserve and its special status ensured European money from LIFE and lottery money from the Millennium Forest for Scotland Trust (MFST) was targeted to its enhancement. Some 0.75 million pounds have been spent since 1996.

With this money:

20Km of old fences removed  
12Km of new fences erected  
1800 hectares of non-native removal  
300 hectares of new native tree planting  
500 hectares of natural regeneration protected

### **Glen Garry**

Purchased 1927 and 1960  
Area planted  
Restoration started early 1980's  
Caledonian Forest Reserve Designation 1994  
MFST project 1998

The remnant native woodlands were recognised as important and a felling programme devised during the 1980's to relieve the shading effect of the non-natives. This programme was increased over the years and some of the less productive areas were enhanced, through the removal of non-natives funded via MFST. This work included the use of horse for extraction on sensitive sites and also the project provided improved access for deer control. This has resulted in a low deer population and impressive quantities of natural regeneration.

As a result of the success of reducing the deer numbers to low levels, regeneration on the site is now prolific and heavily favouring birch. In an attempt to increase the level of Scots pine regeneration, control levels of birch regeneration and also create a more natural woodland of an intimate mixture of open space, woodland cover and areas of pasture woodland, controlled grazing has been introduced through the use of cattle. 60 animals have been introduced to two areas of approximately 200 hectares each. One at a density of 20/100 hectare and the other at 10/100 hectare. It is expected that over the next few years signs will indicate that their presence has reduced birch regeneration and their physical impact has created increased opportunities for Scots pine to regenerate.

### **What of our future policy**

The work completed, through our early pioneers and via decisions taken following external advice has culminated in the increased activity of the recent past. It is now important that FCS continue with this and broaden our approach to maximise the opportunities this suite of native woodlands present.

It is recognised that we will continue to widen our approach beyond only woodland habitats to include our many associated habitats such as montane, sub alpine and bog. By valuing and developing this diversity increases the opportunity for dependant species.

Many of our woodland habitats also enjoy significant remnants of past cultures and it is important that this is considered and included in future management. Often the best way to achieve this is to involve the local community and research the past with them. Too often the woodlands links with past practices in the area is ignored or not understood.

At Loch Katrine FCS are involved in an exciting new project, where we have been successful in gaining the opportunity to manage the surrounding catchment of the loch for native woodland restoration. It is an excellent chance to put policy into practice. At this early stage we are undertaking the extensive negotiation and involvement of the community. We are also working closely with our neighbours of RSPB and Woodland Trust. It is hoped that we will be able to produce a unique collection of data that covers not only the FCS property but also those neighbouring areas. Thus establishing a data collection which is compatible across the ownerships and more importantly recognises the range of species in the area and the way they use the whole catchment. On establishing this information it will then be essential to respond appropriately to the findings.

So in brief conclusion, FCS has been involved with native woodland management from its very earliest days and despite its lack of real focus at the start, the work it undertook in many cases ensured the retention of an important remnant. Subsequent action has initially secured this and latterly expanded and taken the first steps to its restoration. New work is now directed towards the sustainable management of these woodlands and this is being undertaken with the inclusion of local communities and by information to the wider public. It is hoped that this will ensure that the real value of these woodlands will be enjoyed by our future generations.

## **CONSIDERING THE PAST IN MANAGING FOR THE FUTURE**

### **DICK BALHARRY**

Dick presented his own experience of a career in Nature Conservation using slides to illustrate changes in policies and in native woodland management over this time. From intensive research, to empirical application, from leave it to nature, to ploughing, planting and six foot high deer fences. He was adamant that clearly defined objectives are an absolute necessity and this needed consultation at all levels of land use. Where public money was invested, public benefits need to be delivered.

The experience of Creag Meggaidh and Inshriach where deer populations were adjusted to permit natural regeneration was discussed and pictures showing the dramatic regrowth demonstrated the success of no fencing, no planting, no fertilising, no ploughing i.e. leave it to nature but controlling grazing pressure. Wild deer are an important ingredient in the moulding of a native forest and should be included, not excluded.

Our historical knowledge of our forests is a vital component of future management but it should not be used as a panacea for ensuring our mountains, moorland, and coastal habitats are maintained and enhanced for future generations. We should not entertain the concept of returning to a given age of what some might think to be Utopia.

Living with climate change and managing for the variety of needs demanded by people long into the future is complex and challenging.

The SWHDG gathering was an example of discussing these concerns and exploring the why, what, how, where and when related to ensuring that all our native woodlands not only survived but expand can only lead to environmental, social and economic benefits.

Maybe one day we will rejoice in witnessing our native treeline advancing up the hill at a pace determined by man and nature.

## **WOODLAND MANAGEMENT POLICY IN THE NATIONAL TRUST FOR SCOTLAND**

**RICHARD LUXMOORE**

The National Trust for Scotland is one of the four largest landowners in Scotland and our woodland management has a major impact on the landscape. We own properties ranging from formal gardens and designed landscapes to some of the wildest land in the UK, including most of the Cairngorms plateau. Our policy needs to reflect this responsibility and this diversity.

The management planning process is complex. We have a cultural history stretching back 5-8000 years and an ecological history of 10-15,000 years. How should one choose which period is most important? The first step is to identify the most important features through a "Statement of Significance". In the policies of large houses, normally the designed landscape would feature highly but, on other sites, nature conservation objectives would usually come to the fore.

In managing woodland for nature conservation we try to adhere to four main principles:

1. We are guided by the ecological history of the site. This can be informed by documentary records, a study of the current vegetation community or by pollen analysis.
2. There is a presumption in favour of letting nature take its course – allowing natural processes to decide the outcome.
3. Important species and habitats will be protected.
4. Management should preferably be at a landscape scale.

Management of species composition is a common intervention. Normally we would favour native species and remove invasive exotics (Principle 1). We devote a lot of effort to removing rhododendrons outwith our gardens and often try to remove sycamore or beech. At Killiecrankie, both are removed in the northern portion of the site (within the SSSI) but beech are retained at the southern end for landscape reasons. Ecological history can often yield surprising conclusions. When we acquired West Affric it was assumed that the native pinewoods in the eastern portion of the glen would have stretched up to the head but pollen analysis has subsequently shown that pines have always been rare or absent at West Affric. This has caused a revision of our plans for woodland reestablishment. It is worth reflecting that in a few years time, sitka spruce plantations will be regarded as a cultural landscape.

At face value, the second principle is a recipe for doing nothing but it is seldom so simple in practical woodland management. Regeneration of formerly wooded areas is often hampered by lack of seed source or by grazing. The former will always demand restocking, but the latter will usually require additional intervention. Where grazing is caused by sheep, it may be possible to negotiate their removal. With deer, we have a presumption against the use of fencing, but the natural density of deer in upland Scotland seems to be above that at which regeneration can occur, though there is uncertainty about the former impact of natural predators (wolves). In most cases, therefore, woodland establishment is a managed process and the decision of where and what to allow is value-driven.

## **NOTE ON HISTORIC ENVIRONMENT AND WOODLAND HISTORY**

### **LESLEY MACINNES**

#### **Archaeology in woodland**

The conservation of archaeological and historical features within woodland is now well-established. These features usually have no direct connection to the woodland itself, such as prehistoric burial mounds and more recent deserted settlements; though some are associated with the past management of woodland or the use and exploitation of timber, such as plantation boundary banks and charcoal clamps. Policies to protect these are in place within the Scottish Forestry Strategy and the Forestry Commission's Archaeological Guidelines, though regeneration will have an impact if cultural heritage sites are merely protected but not afforded positive management.

#### **Archaeology of woodland**

Interest in the "archaeology" of trees and how they have been used, looking at evidence for coppicing, for example, is fairly well-established in the context of designed landscapes. However, it is an expanding area of interest in a wider landscape context, and RCAHMS is actively working with the Forestry Commission Scotland and SNH to improve the recording of this evidence more widely, while the Historic Land-use Assessment (HLA: a joint initiative between Historic Scotland and RCAHMS to describe the historic origin of current land-uses) is identifying areas of woodland which have been managed in the past. This is an important aspect of the cultural landscape, and it is clearly an area where cultural and natural heritage and woodland management come together.

#### **Gardens and Designed Landscapes Inventory**

The cultural value of trees is clear within Designed Landscapes, where deliberate planting, often with exotic species, took place to enhance the landscape. HS and SNH have long collaborated on a national, non-statutory Inventory of Gardens and Designed Landscapes, and are currently producing supplementary volumes. Access to Inventory data is now improved, through PASTMAP and the HS and SNH web-sites, and there will be on-line access to the Inventory volumes in the near future. The HLA is identifying many non-Inventory designed landscapes and some local authorities are beginning to build these into local plan policies, for example Aberdeenshire Council and the Loch Lomond and the Trossachs National Park Authority. Historic Scotland will be issuing a consultation on a proposed policy statement on designed landscapes early in the New Year.

#### **The value of woodland in heritage conservation**

Historic Scotland is concerned to ensure that traditional building materials and associated craft skills are not lost, particularly as there is a continuing need for these in the repair of ancient monuments and historic buildings. The availability of timber and the ability to work with it is an important aspect of this work, as seen in the reconstruction of the roof of the Great Hall at Stirling Castle.

#### **Research and understanding**

Understanding the history of woodland requires a multi-disciplinary approach involving a variety of disciplines, including archaeology, history, palaeobotany and ecology. Each has its distinctive contribution to make to the whole study. The particular contribution of archaeology is in identifying and interpreting the evidence for human use of woodland and timber over time – what types of wood have been managed and used, using what techniques and for what purposes. Historical documentation can identify records of use and the impact of human and natural agencies on the resource – and the impact of the existence of woodlands on economic and social patterns. Palaeobotany can identify what species were present, when and where, and interpret changing patterns over time. Together, these disciplines can give a holistic view of the history of woodland and its use and changes to these over time; and together they offer more powerful opportunities for management and interpretation than any one individually.

#### **Conclusion**

There is a close relationship between the conservation of the cultural heritage, woodland history and the continuing survival of historically managed woodlands. It is an area where we all must work together to ensure continuity of the resource and maximum benefits for society. Historic Scotland is committed to continuing to work in close partnership with partners such as Forestry Commission Scotland, SNH and RCAHMS, to this end.

**WOODLAND MANAGEMENT AND WOODLAND HISTORY:  
THE CULTURAL DIMENSION OF THE NATURAL**

**JOHN THOMSON**

Historically, there has been a tendency to see environmental (and especially ecological) objectives as being at odds with cultural and historical ones where woodlands are concerned. The late 20<sup>th</sup> century drive to increase, or “restore”, woodland cover in Scotland prompted concern and even criticism amongst those who valued the archaeological heritage that could be obscured and ultimately destroyed by the appearance of trees in places from which they had long been absent. Hopefully that period of confrontation is now largely behind us. There remains a need for mutual awareness, care and dialogue between the interests but the goal of integration – the simultaneous pursuit of both sets of objectives – is broadly agreed.

This leaves us with the question of the management of existing woodlands. Here the issues are more subtle. Everyone closely involved recognises that none – or virtually none – of Scotland’s woodlands are truly natural, in the sense of unaffected by man. All have been shaped by past human intervention, either deliberate to garner a range of forest products or indirect through the introduction of grazing animals or even polluted air and water. Such human intervention obviously continues; the question is what its goals should be.

For a handful of fundamentalist conservationists the answer is simple: only a few of the least disturbed woods are of any real value and there the goal should be minimum intervention. Leave them alone and see what happens.

It is easy to ridicule this stance as wilfully ignoring the reality of the pervasiveness of human influence. But it does have a respectable rationale, with two interestingly different strands. First, such a minimum intervention regime provides a laboratory, yielding insight into what does happen if natural processes are allowed to take their course (with all the necessary caveats about the impossibility of insulating individual areas from the more wide-ranging human impacts, such as climate change). It can also serve as a “control”, against which to judge the effects of interventionist management regimes elsewhere.

Second, the alternative, interventionist approach can be accused of exaggerating human ability to achieve particular desired outcomes, even if (and it is a big “if”) they can be agreed beforehand. The management of woodlands can in this context be seen as a particular example of the debate over how far Scotland’s future countryside should be allowed to emerge almost incidentally from the interplay of natural, economic and social forces, as it has done in the past, and how far we should seek to guide its evolution through some form of planning process – inevitably provoking changes of statism and bureaucracy.

By now you are probably getting worried and seeing me as someone who wishes to turn a blind eye to the past! I can assure you that I am not. What is more, I am speaking not just for myself as that oddity amongst SNH staff, a history graduate, but for the organisation as a whole. SNH corporately has increasingly come to appreciate the importance of understanding the history of woodlands, not as a prescriptive guide to their future but as a source of insight into the current resource and the options for its future. Also – and crucially – we are recognising that it is key to engaging wider public interest in woodland issues : all our experience tells us that it is much easier to attract people’s attention if you have a story with a strong human dimension to tell.

What are the implications of this acknowledgement of the contribution of woodland history for SNH’s approach to woodland management issues? It is worth noting at this point that this growing awareness of the historical dimension has developed alongside an increasing understanding of the natural dynamics of woodlands, which has also favoured less absolutist ways of thinking. I would pick out a number of consequences:

- we are less preoccupied with returning woodlands (and indeed other habitats) to some idealised – even mythologised – “natural” state;

- we are more willing to look to the work of historians and other scientific disciplines which investigate the past to tell us how the existing woodland resource has evolved, with the lessons that this may have for the future (eg. the contrast in character between the pinewoods in Speyside and Glen Affric, which now appears to be more a function of local conditions than past human activity);
- this acceptance that there is no one “right” condition for woodland, together with SNH’s landscape and sustainability duties, has allowed us to place value on a wider range of woodlands and indeed to value diversity in the overall resource, on a spectrum from the most natural to the most strongly managed (eg. policy woodlands in Designed Landscapes);
- notwithstanding this, we of course continue to place a very high value on less disturbed, more natural woodlands, which tend to be particularly rich in biodiversity (not for nothing is one of our core documents known as the “Ancient Woodland Inventory”). But we are happier than perhaps we were formerly to acknowledge the part that human interventions have played in shaping even these woodlands and in creating the conditions in which the current pattern of biodiversity interest has emerged;
- this is reflected in the way that we “tell the story”, for example at our woodland National Nature Reserves. Increasingly, we seek to work with other relevant bodies, such as the Forestry Commission and Historic Scotland, to do this;
- looking ahead, we draw upon our understanding of woodland history, as well as physical conditions, to contribute to debates about the future of forestry in Scotland. This history does provide us with pointers as to what will grow where, as well as to (for example) the scope that exists in Scotland to produce commercially valuable timber from native species of tree.

Finally, I would like to highlight how much we potentially have to learn from woodland history about the “dos and don’ts” of sustainable living. As most of you here will know far better than I, we still have much too far to go in understanding the history of human use of natural resources to draw definitive conclusions. But if our goal is – as it must be – to find a basis on which people are to live harmoniously with the rest of nature, then the history of woodland management is surely a good place to start looking for clues. SNH will be very interested in what you manage to discover.