7. Landscape aesthetics, conservation and public access after 1940

After the Second World War the Nature Conservancy’s Scottish Committee emerged as a new major player on the conservation and land management stage in Scotland. The Nature Conservancy was established in 1949 and its mission was to create and manage nature reserves, which preserved flora and fauna, geological and physiological features. The Conservancy was also charged with conducting research and advising planning and land management authorities on Sites of Special Scientific Interest (SSSI).\(^1\) It was set up as a nation-wide organisation but the Scottish Wildlife Conservation Committee (the Ritchie Committee), which advocated the creation of a single conservation service for Britain, concluded that a Scottish Division was needed to carry out an effective conservation policy in Scotland. According to Donald Mackay, the Scottish Committee was unique within the Nature Conservancy because it was virtually autonomous.\(^2\)

As in the case of the Association for the Preservation of Rural Scotland (APRS) and the National Trust for Scotland before the war, the personalities involved with the Scottish Committee of the Nature Conservancy were of some importance to its influence and objectives. The list of members reads like a shortlist of the post-war scientific and land-owning establishment in Scotland. John Berry, a biologist and former environmental advisor to the Hydro-Electric Board, was chairman of the Scottish Committee. Other members included the Earl of Wemyss and March, Sir Henry Beresford-Peirse, Director General of the Forestry Commission, Sir Basil Neville-Spence, along with ecologist Frank Fraser Darling, biologist Donald McVean and Professors Ritchie (Zoology, Edinburgh) and Matthews (Botany, Aberdeen), one of the leading ecologists of his time. A Committee of this calibre was necessary for gaining the confidence of major landowners in Scotland.\(^3\)

Berry was a good choice for leading the Scottish branch of the Nature Conservancy because he was well connected with land-owners and other land-use agencies in Scotland. He was on the Council of the APRS, an advisor of the

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1 SSSIs protect specific features such as flora and fauna, geology or shape and form of the landscape. See glossary for detailed description.
3 Ibid.
Forestry Commission and also a member of the Scottish Landowners Federation. Under Berry a policy emerged of creating much larger National Nature Reserves (NNR) than in England and Wales, beginning with the purchase of a complete mountain, Beinn Eighe, in 1951. Three years later an even larger National Nature Reserves was created in the Cairngorm Mountains, next to the Forestry Commission’s Glen More National Forest Park.

Beinn Eighe was destined to strain the relationship between the Forestry Commission and the Nature Conservancy. Long before the purchase it had been recognised that the remnants of an ancient Scots pine woodland had to be protected and preserved. During the war the southeast end of the Beinn Eighe wood was partially felled and the Nature Conservancy believed that this wood had to be restored. The condition of the pinewood remnants can be deduced from comments by Henry Beresford Peirse, director of the Scottish branch of the Forestry Commission, recorded in the minutes of a meeting with the Scottish Branch of the Nature Conservancy in the autumn of 1952:

In the seven years since the last heavy felling, the wood had deteriorated so much that [Beresford Peirse] feared it might revert to moorland or to birch scrub if no active steps were taken to protect the natural regeneration of Scots pine.

The Forestry Commission agreed with the Nature Conservancy that action was needed to prevent further loss of old growth pines. The discussion about how to prevent further loss focussed on the question of whether to actively interfere by means of planting to allow natural regeneration. It was here that the Forestry Commission showed its true face as an organisation focussed on timber production and not conservation. This is not surprising because building up a timber reserve was the *raison d’être* of the Commission.

During a visit to Beinn Eighe in July 1952 Beresford Peirse, stated that ‘the actual regeneration of this area could […] be done by the Forestry Commission’. The Forestry Commission felt that a forestry project should not be undertaken by two different organisations, but by the appropriate agency that was specially set up to carry out state forestry in the United Kingdom: itself. Beresford Peirse saw two advantages in doing this, the first being ‘that the Nature Conservancy
would be relieved of a heavy expenditure’. Secondly, the Commissioners believed that the Nature Conservancy was not created to manage forests and would better leave the difficulty of arranging management and supervision of the woodlands in the capable hands of the Forestry Commission.

Figure 7.1: Pinewood with Beinn Eighe in the background.

Photo: Bob Jones, from www.geograph.org.uk with permission.

With this proposal Beinn Eighe was in fact close to being taken over by the Forestry Commission. However, the Nature Conservancy was concerned that the activities of the Forestry Commission would result in the loss of the ancient pine woodlands in the nature reserve. It was due to the intervention of Captain C. Diver, Director General of the Nature Conservancy, that the Conservancy in Scotland was forced to re-think its position with regard to Beinn Eighe in late 1952. He believed that a survey of the pinewoods in the nature reserve had to be carried out before further action was taken. In early 1953 Donald McVean started his now famous study on the ecology of Scots pine at Beinn Eighe. The resulting report concluded that large-scale forestry operations were not necessary to ensure the continued existence of the ancient pine woodlands.

9 Ibid.
He recommended a non-interventionist management strategy for these woodlands and this became the basis for the Beinn Eighe reserve's woodland management plan as it finally appeared in 1954.\textsuperscript{10}

After the Beinn Eighe episode, the Nature Conservancy developed a cautious attitude towards the Forestry Commission. A 1953 plan by the Forestry Commission and the Department of Agriculture to place the whole of the Spey catchment area under forest was not received with enthusiasm by the Nature Conservancy.\textsuperscript{11} It was for this reason that McVean drew attention to the need for closer liaison with the Forestry Commission to gain a fuller understanding of the forestry agency’s activities. The Chairman, John Berry, stressed the need to secure woodlands as nature reserves before they disappeared.\textsuperscript{12} The result of these two experiences of the Nature Conservancy was that the Forestry Commission lost its primacy over forest management. It confirmed that ecologists as well as foresters had the right to manage state owned woodlands.\textsuperscript{13}

### The 1958 Working Party

The Forestry Working Party that was set up after the Zuckerman Report had the task of advising the government on future forest policy. In order to gain a proper picture of forestry in the United Kingdom the Working Party invited organisations involved in forestry, landscape management or conservation to submit a memorandum with their views on the work of the Forestry Commission. The Nature Conservancy acted swiftly and submitted their memorandum of evidence in February 1958. In this piece the Nature Conservancy presented its views regarding the scope and activities of the Commission and its relationship with them.

The memorandum opened by stating that the Forestry Acts of 1919 and 1945 took some account of amenity, but that they failed to anticipate the problems related to the integration of forestry and nature conservation. It was also observed that the Forestry Commission underestimated the pressures on the forest estate caused by a rising demand for use of the forests for recreation. This failure was most noticeable on the ground. In their many dealings with the Forestry Commission, the Nature Conservancy had found that the readiness of the Commission’s staff to co-operate in matters important to nature conservation were often hindered by the Commission’s statutory powers or financial restrictions. The major obstacle seemed to be that the Commission was too

\begin{itemize}
\item \textsuperscript{10} Ibid., p. 196.
\item \textsuperscript{11} NAS: SNH1/1, Signed minutes of first and subsequent meetings, meeting 29 January 1953.
\item \textsuperscript{12} Ibid., meeting 5 November 1953.
\item \textsuperscript{13} Smout et al., \textit{A history of the native woodlands}, pp. 287-288.
\end{itemize}
narrowly restricted to activities directly concerned with producing timber at the quickest possible rate. The Nature Conservancy concluded that this was misguided forestry practice and urged for a forest policy with a much wider scope that included the conservation of ancient woodlands and veteran trees, and provision for recreation. The memorandum also suggested that forestry could help to develop a more balanced rural economy and landscape, possibly added to satisfy the Treasury. But how could this be achieved? To address this practical question the Nature Conservancy referred to a development on the other side of the ocean. In the United States the Forest Service was developing a management system that was known as ‘multiple use’. The main principle of this system was that all resources and values in the landscape are managed under an integrated management plan. The intent was that this would produce sustainable forests that provided the greatest overall benefits, economically, socially and environmentally. It was suggested that the Forestry Commission introduced this type of management system in Britain.

Another aspect criticised by the Nature Conservancy was the attitude of the Forestry Commission to ‘vermin’: ‘the vague language in the Forestry Act of 1919 regarding damage by rabbits and hares or other vermin has an almost medieval flavour’. It was recommended that the Forestry Commission should draw up a list with species that could be hunted and those that had to be protected and the Nature Conservancy was happy to assist the Forestry Commission in this. However, it took, six years before the Commission looked seriously into the matter of wildlife hunting and protection. In February 1964 the Forestry Commission announced that it had appointed Peter Garthwaite, division officer at Basingstoke, to the new post of Wildlife Officer. His responsibility was to coordinate and develop the Commission’s policies and practices of wildlife conservation and management in England, Scotland and Wales, in liaison with the Nature Conservancy and other bodies. The aim of the Commission was to develop methods of control to harmonise the conservation of wildlife with the need for timber production.

The Nature Conservancy concluded the memorandum stating that the relations with the Forestry Commission were excellent and that it was ‘…unnecessary here to refer to the numerous problems of mutual interests which constantly arise and are settled by mutual arrangement’. Like the relationship between the Forestry Commission and the conservation bodies in the inter-war years,

15 Ibid., p. 11.
most disagreements were solved discretely, in a conciliatory manner. But this was all going to change with the democratisation and increased mobility of society that would follow in the 1960s and 1970s.

**The inter-war conservation organisations**

The conservation organisations that emerged during the 1920s and 1930s largely continued after the war as they had done before. But there was a major change: the momentum of action had shifted away from the ‘old’ conservation organisations to the newly formed Nature Conservancy. However, the Association for the Preservation of Rural Scotland and National Trust for Scotland as well as the closely related Glasgow Tree Lovers Society continued to exert some influence in matters of landscape conservation and amenity. The protection of broadleaf trees continued to be an important issue for these organisations and there was some disquiet about the under planting and felling of oak trees in Scotland by the Forestry Commission. But in 1950 the responsibility for timber felling licenses was transferred from the Board of Trade to the Forestry Commission. In a letter to *The Times*, the Honorary Secretary of the Glasgow Tree Lovers Society, Evelyn MacKenzie Anderson, expressed the hope that these new powers would make the Forestry Commission ‘come alive to the dangers of wholesale felling’ and to ‘the value of hardwoods among the conifers’. This suggests that the Commission had not much interest in the preservation of native broadleaf trees and amenity aspects.

Forestry and landscape aesthetics was still very much the preserve of the privileged and wealthy; public complaints about forestry were few, increasing little during the immediate post-war years. In the decade before the war the APRS and National Trust for Scotland combined received only a handful of complaints about Forestry Commission plantations disfiguring the landscape. In the period 1945-1970, the number of complaints recorded increased only slightly, with only five complaints recorded. A survey of two national and two regional Scottish papers (*The Glasgow Herald*, *The Scotsman*, the *Stirling Observer* and the *Oban Times*) confirmed this lack of concern about forestry plantations. The survey yielded only one letter and one article critical of the impact of forestry in the period 1945-65, which both appeared in the *Oban Times*. The article, published in 1955, relates to the impact of the massive afforestation programme on sheep farming and largely concerned a dispute between farmers on the West Coast and Western Islands and the Forestry Commission. The farmers were concerned that

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19 Archives APRS and NTS.
they would be pushed out of business if the Forestry Commission bought more land for planting. The sheep farmers doubted if forestry could compensate for the economic loss that would follow the disappearance of sheep farming.20

More relevant to this discussion is a letter on forestry planning that was published in the *Oban Times* in August 1965 in which a holiday maker from Cheshire, a certain Mr. Hall, complained about the conifer plantations on the west coast of Scotland. He wrote that he was ‘very dismayed to see new planting on the seaward side of ...the coast’. He continued:

> Trees are an economic necessity but for goodness sake let us keep a sense of proportion. Often the strip of land to seaward is narrow and, if left unplanted, would surely be but a modest price to pay toward the saving of a superb view.21

The man was clearly not opposed to forestry, but disliked the coniferous plantations obscuring a nice view, as well as the changing the landscape he had become familiar with through many holidays in Scotland. It is interesting to note that the author of the letter was from England and not a Scotsman. He complained as an outsider and aware of this he finished his letter with the observation that:

> It seems to me that there is a great deal too much apathy on behalf of the people [...] who stand to lose their present enjoyment [of the Scottish countryside]. Raise your voice, Scotland!22

This one lone voice contradicts a survey that was conducted by Chris Yarrow, a forestry student at University College of North Wales, Bangor, in 1964. This survey asked a sample of 214 people across Britain, including 32 who know Scotland well, what they thought of afforestation and the visual impact of forest plantations on the landscape. Afforestation was generally accepted as ‘desirable’ but not everywhere. Forestry in mountainous areas was for most respondents more acceptable than that on downs, moorland or in agricultural areas. A majority of 60 per cent of respondents thought that the Highlands were the most favourable region for large-scale afforestation while 40 percent thought it was not a good idea.

In terms of the choice of tree species an overwhelming majority of 97 per cent of respondents preferred pure stand conifer plantations in mountainous areas and only three per cent were against this. However, when given a choice of pure or mixed plantations, a large majority favoured mixtures, seemingly contradicting

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22 Ibid.
the previous statement. In terms of visual impact of forestry on the landscape 60 percent of respondents disliked trees geometric patterns, although some 40 percent were indifferent or found straight rows of trees pleasing. 23

Jim Atterson, former Conservator for Scotland, confirmed the virtual absence of resistance against the planting of conifers in Scotland. Through the 1960s and 1970s he could not remember ‘much being said against planting in Scotland by the general public, even conservationists’. 24 Atterson believed that even ecologist Frank Fraser Darling did not object to the activities of the Forestry Commission. Indeed, Fraser Darling was not against forestry per se but he was probably one of the Commission’s most severe critics. In his book Highlands and Islands he criticised the Commission’s planting policy for being ecological primitive, as the principle of planting monoculture high forest, ‘has been obsolete for half a century on the Continent’. 25 Although Fraser Darling was sceptical about certain aspects of the work of the Forestry Commission, he still believed that afforestation was in essence a good thing. He believed that the mistakes of the past could be corrected and by the 1960s he was already seeing signs that the Forestry Commission was trying to introduce a more holistic approach encompassing considerations of amenity, recreation and conservation:

As the Commission develops and widens its outlook it will be solving […] part of the problem for the caring for the wild life [of the Highlands]. Already the Forestry Commission has done more towards the establishment of national parks and […] reserves than any other body. 26

However, others did not share Darling’s opinion and by the early 1960s the National Trust for Scotland indicated that it was not entirely happy with the achievements of the Forestry Commission. In June 1961 the National Trust for Scotland commissioned a landscape survey to William H. Murray, one of Scotland’s most distinguished mountaineers, with the aim ‘… to delineate areas of outstanding natural beauty, to report on the distinguished character of these areas, and to assess change’. 27 The survey was completed by the autumn and the results were published in a booklet in early 1962, and contained some very critical observations of the plantations created by the Forestry Commission.

The areas of the survey were confined to the Highland region because it was thought that this area of unspoiled country was most vulnerable to the

24 Personal comment Jim Atterson.
26 Ibid., p. 260.
modern world and ‘most likely to be overtaken by change’. Murray was an active campaigner to protect wilderness areas of Scotland from ill-considered development, including forestry. He observed to his regret that the face of the Scottish Highlands was changing markedly due to the activities of the Forestry Commission and the North of Scotland Hydro-Electric Board, who were building large dams for the generation of electricity. He found that the layouts of the forests were often highly regular, with rectangular blocks of conifers, vertical fence lines and horizontal upper margins where the trees were planted up to a contour line. That was a complaint often heard since the publication of Murray’s report and it was not going to disappear for the rest of the 20th century.

Murray’s assessment of the Forestry Commission was not all negative, and like Darling, he saw some of the afforestation activities of the Commission as an effort to improve the beauty of the landscape. Murray thought that some of the planting would bring back the forests to Scotland and ‘in them […] is the main hope for the restoration of woods and other flora and fauna that would otherwise be lost’. In Murray's opinion this woodland restoration had to be carried out carefully, but he doubted if the Forestry Commission was the right organisation for the job as he observed that in some cases valuable old stands of Scottish pines had been lost when under planted with exotic conifers. To prevent the loss of valuable woodlands and to protect the landscape Murray advised that the activities of the Commission were inconsistent and should be monitored and warned that ‘mere declarations of policy on amenity by the […] Commission can never be taken on trust, […] for their work has been too unequal to justify trust’.

Murray concluded his assessment by calling for a central planning body to protect Scotland’s natural heritage, otherwise he feared that the combined activities of the Forestry Commission and the Hydro-Electric Board, would irreparably damage and destroy Scotland’s natural heritage. The survey itself did not make a huge difference with regard to the attitude of indifference of the general public towards forestry in Scotland, but it was clearly a sign of a growing awareness of the impact of forestry on the Highland landscape.

At the same time the complaints concerning the activities of the Forestry Commission received by the conservation organisations in Scotland remained, not surprisingly, low in the period between 1945 and 1970. The handful of complaints that were received and the way they were dealt with followed a similar pattern as before the war. In the autumn of 1952 Isabelle Lindsay from...
Bearsden had sent a letter to the National Trust for Scotland to complain about the fact that the Forestry Commission did not allow natural regeneration in Glen Falloch, west of Loch Lomond. Both the Association for the Preservation of Rural Scotland and the National Trust for Scotland had high level contacts in the Forestry Commission and therefore the Trust referred the letter to Beresford Peirse, Director of Forestry for Scotland. He took the matter very seriously and even found time to visit the forest by, and replied to the complainant, inviting her to meet with Mr. James, conservator for the south of Scotland and the Glasgow area, to discuss her objections.\(^{32}\) There is no record of this meeting, so it unclear whether this meeting ever took place.

In another case the APRS responded in similar fashion. In April 1960 the Association received a letter from a member of the Glasgow Tree Lovers Society drawing attention to the felling of broadleaves by the Forestry Commission in the Queen Elizabeth Forest Park (Ard Forest).\(^{33}\) Sir Samuel Strang Steel, Former Chairman of the Scottish National Committee of the Forestry Commission, pointed out that this was probably only a selective felling and suggested asking the Commission for further information. In a reply the Conservator of Scotland West explained that it was the policy of the Commission to grow hardwoods where the soils allowed and that some selective felling was indeed carried out. The Conservator offered to talk with the correspondent.\(^{34}\)

This was the typical pattern of interaction between the Forestry Commission and the conservation organisations: if an individual had some complaint about forestry practices, he or she was invited to discuss their concerns with forestry officers. The Forestry Commission appeared to take complaints seriously and to encourage its officers to look into these matters. This also applied to concerns raised by local councils, as indicated by an internal memo of the Assistant Forestry Commissioner for Scotland, Mr. Forres, in December of 1961:

\[
\ldots\text{local authorities have certain responsibilities in the matter, and it is important that their views should be sought in all appropriate cases as well as considerations being given to any representations they may make to us.}\]

\(^{35}\)

They could probably deal with individual complaints because the numbers were so low that it was easy to handle.

At the highest political levels the views of the well established organisations, such as the National Trust for Scotland and the APRS, were actively sought.

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\(^{32}\) Letter from Sir Henry Bereford Peirse, Director of Forestry for Scotland, to the National Trust, 17 October 1952. Archive National Trust for Scotland.

\(^{33}\) Minutes Council Meeting APRS, 3 May 1960, Archives APRS.

\(^{34}\) Ibid.

\(^{35}\) NAS: FC11/24, Amenity, Memo by Assistant Commissioner (Scotland) 20th December 1961.
When the Government Working Party on forest policy was set up in 1962, the Association for the Preservation of Rural Scotland were invited to submit their views on amenity and forestry. The Working Party was informed that the council of the APRS ‘[...] were strongly of the opinion that more planting of broad-leaved trees of hardwoods should be undertaken’. The APRS also stressed that popular viewing points should be left unplanted in new forestry schemes. In addition, the opportunity was taken to express concern about the gradual disappearance of hedgerows from the landscape because pastoral landscapes were being replaces by forestry. The hedgerows remained an important topic for the APRS throughout the 1960s, but other issues were starting to eclipse the concern over the impact of forestry on the landscape. In the wake of the public concerns over pesticides in the wake of Rachel Carson’s publication of *Silent Spring*, the APRS became involved in a campaign against water pollution by chemicals, while the National Trust for Scotland focussed increasingly on the management of its own properties. In the case of forest restoration and landscaping the Trust asked for advice from well-known landscape architect Sylvia Crowe about how to make its forests blend into the landscape. Crowe was a distinguished landscape architect and the author of a standard work on landscape design entitled *Tomorrow’s Landscape*. It was in this book that she first defined the principles of how to fit forest plantations more naturally and less intrusively into the landscape.

Although the Forestry Commission would later hire Silvia Crowe as well, it did not necessarily mean that the National Trust for Scotland entirely agreed with the Forestry Commission’s policies and practice. It criticised the commercial plantations of the Commission and thought that this was not an example the Trust had to follow on its own properties. By the start of the 1970s, most of Scotland’s traditional conservation bodies, such as National Trust for Scotland and the APRS were preoccupied with issues other than forestry, such as environmental pollution or management of their own estates. It was public opinion by the end of the decade that became the most critical voice in issues of forestry and landscape impact. This was the result of the democratisation and increased participation of all sectors of society during the 1960s and 1970s, including nature conservation and environmental activism, ending the era in which ‘gentlemen conservationists’ were the guardians of nature.

It was a Britain-wide organisation, the Ramblers Association, which staged a first campaign against blanket forestry in the early 1970s. In the autumn of 1971 the Association published a pamphlet entitled *Forestry: time to rethink*,

37 APRS, Leaflet, 1926-1996, 70th Anniversary.
in which they argued that indiscriminate planting of the Scottish Highlands with fast-growing conifers was doing great damage to the countryside. The pamphlet attacked all arguments that the Commission had used to justify their afforestation programme, including the need for strategic reserves, less reliance on imported timber, employment, and provision for recreation. The Association called for an immediate stop to the further expansion of the afforestation programme and called for a full-scale Government enquiry into the affairs of the Forestry Commission.\(^{40}\)

In response to the Ramblers Association’s pamphlet Lord Taylor of Gryfe, the then Chairman of the Forestry Commission, issued a statement to the press. He argued that the claims made by the Ramblers were unjustified and that the Commission’s activities provided employment, recreational opportunities and would decrease the reliance on timber imports in the long term. Most importantly, he stated that forestry did not harm the landscape and that forest plantations increased biodiversity harbour ‘a wide range of flora and fauna’, to a greater extent than the bare moorland they had replaced. Lord Taylor added that the Commission did not fell any deciduous trees in ‘areas of amenity importance’ and left many wilderness areas unplanted and delegated the management of these areas as nature reserves to the Nature Conservancy or local conservation groups.\(^{41}\) By the early 1970s the top-down approach to landscape management was still very much alive within the Forestry Commission and any criticism was met with a reiteration of the often-cited justifications for the forestry policy that had been used since the inter-war years.

A second response to address criticism of forest policy or forestry operations was technocratic in nature. For example, in the early 1960s the Forestry Commission had appointed a landscape architect to make their forests aesthetically more pleasing in response to long-standing criticisms of the appearance of forest plantations and, more importantly, to increasing numbers of tourists visiting the forests.

**Landscaping the forests**

In February 1944, Desmond Heap, a well-known planning lawyer, made some critical observations on the appearance of the conifer plantations created by the Forestry commission.\(^{42}\) In a speech delivered in Leeds to the North of England Division of the Town Planning Institute he stated:

\(^{42}\) Heap was a lawyer, the Comptroller, and City Solicitor to the Corporation of the City of London and the former Deputy Town Clerk of Leeds.
... I do know that the ranks of coniferous trees planted by the Forestry Commission in pursuance of what are supposed to be the best interests of afforestation are a perfect eyesore wherever I have seen them and are definitely prejudicial to the amenities of the countryside [...] and so, as I reflect on planning matters, I often think what a pity it is that some better method of afforestation could not be thought of [...] than the setting up of row upon row of coniferous trees.\textsuperscript{43}

These criticisms of the appearance of the forestry plantations did not dissipate during the decades following the Second World War, and in 1964 the Forestry Commission appointed Sylvia Crowe as landscape consultant. Her appointment was a direct result of the ministerial statement on forestry of July 1963 following the first five-year Forestry Review. This statement included for the first time the provision of recreational facilities and aesthetic considerations in forest policy and was also a response to the objections of the highly regular and rectangular forest plantations that were found in the Highlands.

Crowe’s task was ‘to assist [the Commission] in making their forests as attractive in appearance as they must be efficient in production’.\textsuperscript{44} According to Crowe, landscape patterns evolved naturally by geological and climatic processes and in order to make sound decisions on amenity issues it was necessary to analyse and understand the character of the underlying landscape. She argued that the constituent landscape elements, such as existing types and patterns of vegetation and land use and the colours of the rocks and the soil, and the shape of the relief, define the visual character of a particular landscape. In Crowe’s opinion the distribution and combination of these elements determined the pattern and the nature of the forest, for example a particular mix of tree species or homogenous stands, to make it look right in any given landscape.\textsuperscript{45}

The method that Crowe used to fit forests into the landscape was based on three interrelated principles. The first of these principles was the introduction of contrast between different landscape elements. In her opinion this was essential to maintain a balanced and attractive landscape pattern and to achieve this there had to be a contrast between areas of open ground and of planting and variation in the type of tree species, farm crops and other vegetation.\textsuperscript{46}

The second principle, the choice of species with relation to the landscape, determined the appearance and character of that landscape. Crowe believed that the character of the forests in Scotland was mainly determined by conifers but that hardwoods had to be used where possible to break the monotony:

Over the great majority of Forestry Commission land in Scotland, [...] where conifers can be accepted as the only possible timber trees, the landscape requirements can be met by the occasional introduction of hardwoods related to access routes, [...] and the retention of existing hardwoods where they make an important contribution to the pattern of the landscape.\(^{47}\)

In Crowe’s view, the trees had to be matched to the site, not with regard to the soil, aspect or biological considerations, but to make it blend with the existing landscape elements and forms. She also advised the Commission to keep the existing hardwood trees in place when a new plantation was started and not to under-plant these with conifers, which made them invisible in the landscape. Crowe concluded that under-planting and ring-barking were undesirable practices and that broadleaves had to be saved and integrated into plantations. Apart from aesthetic considerations, Crowe recognised the importance of hardwood belts in coniferous forests for linking habitats and concluded that ‘this pattern also provides the ideal habitat for bird and animal populations’.\(^{48}\)

The third principle considered by Crowe was the shape of forestry plantations in the landscape. ‘Planting shapes’ refer both to the pattern of different species within the forest and to the outline of the forest as a whole. Crowe advised the Commission to follow the natural variation of soil and topography and that size and shape of plantations should be related to the shape and scale of the terrain. She used the pattern of planting to avoid straight lines and the creation of forest blocks and to accentuate the shape of the hills instead of blanketing them.\(^{49}\)

Finally, felling operations have an extreme impact on the landscape and to avoid damage to the scenery, Crowe applied the same principles used to create new plantations. In Crowe’s opinion, harvesting operations could be used as an opportunity to erase straight lines in the landscape and rectify the shape of plantations.\(^{50}\)

Crowe’s ideas evolved over time from landscape design, which is fitting forests into the landscape and beautifying them, towards an objective of multi-purpose forestry with more emphasis on nature conservation. Crowe recognised the

\(^{47}\) Ibid., p. 13.
\(^{48}\) Ibid.
\(^{49}\) Ibid., p 18.
importance of forests for timber production but also for nature conservation and recreational purposes. In order to do so Crowe advised the Forestry Commission to draw up a long term management plan to make the best use of all forest resources and ‘to ensure that no one use will conflict with another, and to bring all uses together into a landscape which will both function well and look well’. But Crowe never lost sight of the prime objective of her employer and she realised that nature conservation and recreation were always subsidiary to the prime aim of producing timber. In this context she observed that ‘conservation of resources should always take precedence over demands for [recreational] use’.

During a meeting on multi-purpose forestry organised by the Royal Scottish Forestry Society in 1972, an officer from the Forestry Commission, Brian Holtam, acknowledged the importance of Crowe’s work in educating the Forestry Commission and giving its officers ‘a better understanding of the landscape and some of the simple measures which could be [...] effective in making improvements’. But he continued by saying that there was a ‘danger of losing sight of the prime object for most of British forests’ — the production of timber. Nevertheless, the influence of Crowe’s ideas spread gradually through the Forestry Commission, which undertook landscaping projects and design courses for foresters. In 1972 a forest officer was sent on a landscape design course at Newcastle University. By 1978 he was involved in a wide variety of tasks, including the design of an important planting scheme at Beinn Ghuilean on the Kintyre peninsula in western Scotland. The Forestry Commission introduced a landscape design policy in 1978 but the initial focus was lost as emphasis on financial objectives increased during the early 1980s. Subsequently the importance of landscape aesthetics was re-established but now in connection with a whole body of environmental policies that would be implemented by the late 1980s. These developments will be explored in more detail in chapters nine and ten.

52 Crowe, The Landscape of Forests, p. 41.
53 Ibid., 41.