

# Natural Landscape of the Cairngorms National Park in Scotland - Its Conservation and Tourism -

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## ABSTRACT

Ecotourism has a concept of conservation as a basis, for economic and social values are derived from the sustainable use of natural resources. This study aims to introduce natural landscape of the Cairngorms National Park in Scotland and to describe its conservation and tourism in the Park, in order to provide the implication of landscape conservation of National Parks in Korea. Although the National Parks of Scotland were officially established long after those of England and Wales, their important features had already been internationally recognised and designated as Sites of Special Scientific Interest(SSSI), National Nature Reserve(NNR), or National Scenic Area(NSA). These focus on landscape conservation and are managed by Scottish Natural Heritage(SNH). The Cairngorms National Park focuses on landscape conservation and recreation, and has been the subject of a number of initiatives attempting to assess landscape resource potential and its current and future management. This implies that a carefully preserved landscape has the effect of a tourism resource in which tourists look for novelty embedded in the typicality of the landscape of the National Park. The typical landscape which is conserved in the Cairngorms National Park is understood as both an objective representative and a subjective ideal involving the meaning of the landscape. This is implicit in the tourist booklet that promotes the sightseeing activities of tourists. It is thus important that National Parks should be focused both on managing landscape as well as promoting tourism.

*Key Words: Scottish Landscape, Landscape Conservation, Sightseeing, Ecotourism, Typicality*

## 1. Introduction

Demand for eco-friendly tourism development focusing on natural environment and landscape is increasing. Ecotourism emphasizes both a conservation of natural environment and an offer of educational service based on the scarcity of ecological resources, for economic and social values are derived from the sustainable use of natural resources(Lee, 2006b; Hong, Kim, 2002). Ecological resource including natural landscape is also illustrated as one of the most important resource types in green tourism(Yun, Im, 2004). A tourist is searching for the place of novel experience that comes from diverse ecological resources. A tourist response to place is readily identified, because most

tourist travel involves seeking out places for visual enjoyment. For instance, the tourist experiences the specific place when taking photographs. Attractions are experienced primarily through capturing the image to produce a souvenir. The visual experience can be appropriately scrutinised by this sightseeing activity. Tourists visit new places for the fulfilment of recreational needs, and view the landscape with fresh eyes. They are sensitive to visual elements of landscape that satisfy their pleasure, when they seek interest in their visual settings. There are four main concepts that should be considered regarding these types of tourists: 1) They experience natural landscape *in situ* 2) They are sensitive to visual surroundings, 3) They intend to know or understand landscape, and 4) They

share a typical image of landscape with others.

Potential strangeness that is not common in everyday life might excite the sightseer to travel(Cohen, 1974). This concept suggests a relationship between the sightseer and the significance of the sight that is visited. The effectiveness of finding the typical in unusual surroundings necessarily relies on the difference between the sight and the everyday or ordinary(Urry, 2002). It is certain that tourism is not all about the simply visual. Although there are visual aspects of landscape or particular scenes that are different from those encountered in everyday life and there is the most important element in tourist attention, there has become something beyond visualisation in tourist activity. There are complexities of experiencing pleasure in relation to sightseeing, because pleasure relies on variation of stimulation, emotion, and socially constructed needs and desires. Cultural characteristics of sight and sightseer are also important. In addition, there is something more related to educational purposes in sightseeing activity as Cohen(1974) suggested. Tourists may also have the goal of education, edification, broadening of personality and the attainment of culture through tourism (Cohen, 1974).

Given the importance of visual perception, however, it is important to recognise a visual aspect of sightseeing as a central characteristic. Sightseeing is a search for stimulating views above all. The highest fulfilment through tourism lies almost entirely on scenic value. Experiencing the natural landscape not only gives immediate pleasure, but also forms the remembrance of a pleasurable environment. When shared with others, furthermore, remembered sights become part of social status. The most significant factor for sightseers to search out is necessarily scenery related. It is commonly accepted that the development of tourism depends on the attractions or amenities that can be offered. In the case of the sightseeing natural landscape as a tourist activity, the sightseer travels primarily to see the visual attractions of unique features of natural sight, which differentiate it from others, and the sight or experience of which gratifies the visitor.

Clawson and Knetsch(1966) suggested that the prominent features and unique characteristics of the landscape were highly preferred by the tourist in the National Parks. People visiting the National Park are tourists, in a sense that they are interested in sightseeing landscape of the National Park.

Landscape conservation of the Cairngorms National Park in Scotland is regarded important, although the Park is still emphasising the use of natural resources(Conroy *et al.*, 1990). Beautiful scenery is the most important factor to attract visitors into the National Park, and the Cairngorms has plenty to offer visitors in terms of natural scenery(Duffield *et al.*, 1978). A tourist booklet showing a typical landscape of Cairngorms is used to introduce Scottish landscapes that embodies Scottish life remaining centred on sentimental and romanticised thoughts of the Highlands(Gold and Gold, 1995).

## II. Landscape of the Cairngorms National Park

The concept of National Park in Britain is often traced back to William Wordsworth(1770~1850) eulogising the beautiful scenery of the Lake District in England. In his book 'Guide to the lakes', he said 'All visitors deem the district a sort of national property in which every man has a right and interest, who has an eye to perceive and a heart of enjoy'. This idea had transmitted into the Right of Way campaign, which focused on the public right to access to countryside along with increasing recreation demand. The Right of Way campaign also played a crucial role in the development of recreational places in Scotland. The twelve National Parks in England and Wales were designated under the National Parks and Access to the Countryside Act of 1949 and will soon be joined by the new designation of the South Downs(Figure 1). In Scotland, Loch Lomond and the Trossachs became part of the National Park system in July 2002, and the Cairngorms in September 2003.

The Cairngorms National Park, located in the central Highlands of Scotland(latitude 57° N. and longitude 3°40' W. approximately), is the second National Park in Scotland. The Cairngorms NP, which extends up to 1,309m above sea level, is also the largest in the British Isles, about 3,800km<sup>2</sup> (Cairngorms National Park, 2005). As in the ecological sense, the mountain area should also involve its surrounding regions. Hence the Cairngorms NP includes Strathspey district to the northwest, Lochnagar to the southeast, and Glenshee to the south, as well as the Cairngorms central massif.

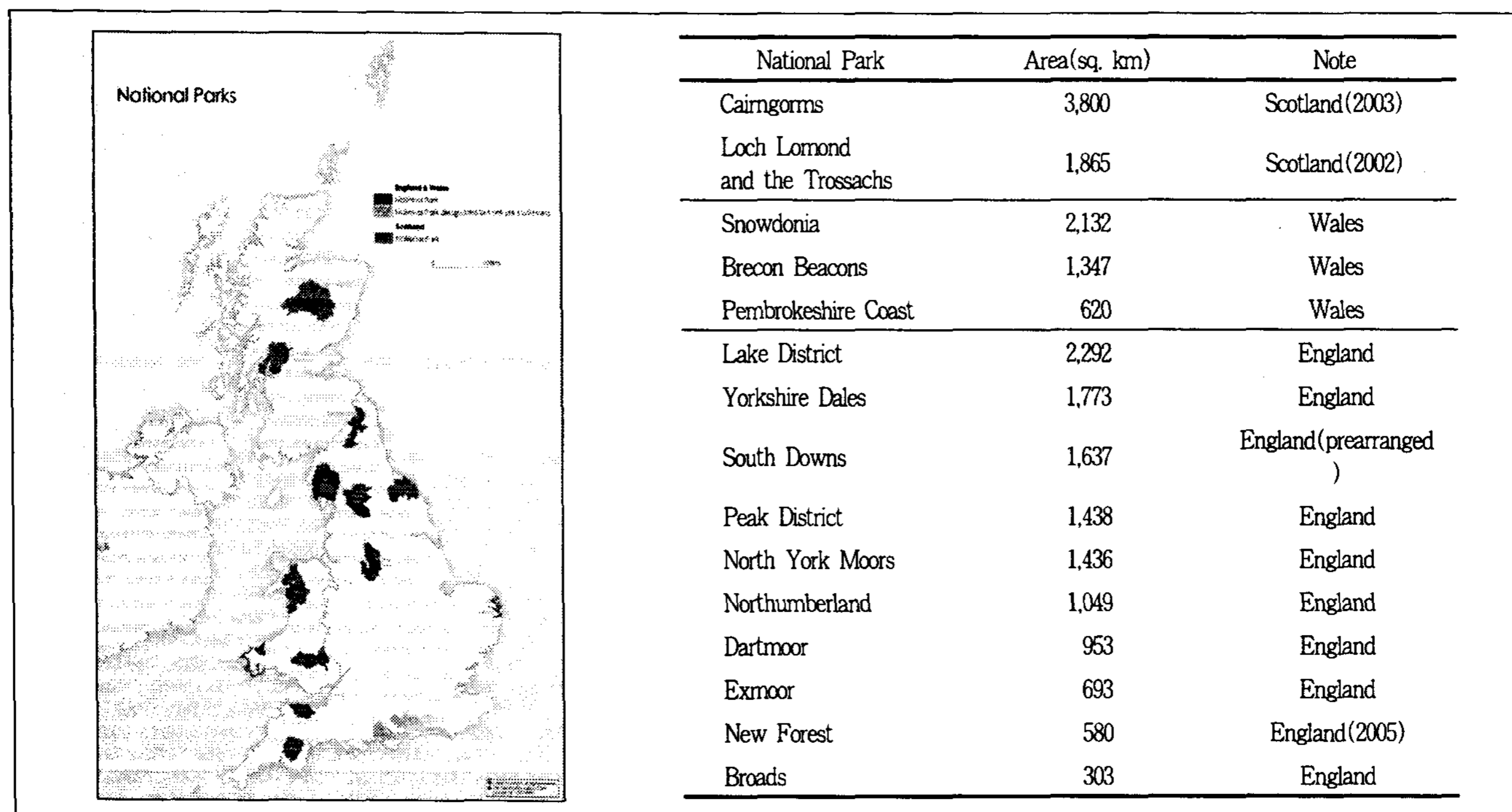


Figure 1. National Parks of Britain(Association of National Park Authorities, 2005).

The Cairngorm massif is the largest area of arctic and alpine plateau in Britain. To the northwest it is bounded by the Spey valley and to the southeast by the Dee valley. The most impressive topography of the Cairngorms, distinguishing them from other mountain systems in Britain, is characterised by the extensive summit plateau, with accompanying crags, corries, and glacial features of lochs, glens and cliffs(Murray, 1962). Ben Macdui, the highest peak in the Cairngorms, reaches 1,309m and thus it is the second highest peak in the British Isles. Braeriach(1,296m) and Cairn Toul(1,291m) are the next highest, and Cairngorm is the fourth highest at 1,245m. The summits of the mountains are generally broad and flat(Figure 2). The Cairngorm plateau is divided by glens and glacial troughs. There are two glens that penetrate into the massif, Glen Derry and Glen Dee. These two glens lead to two passes respectively, the Lairig an Laoigh(48km) and the Lairig Ghru(43km).

Glen Derry divides the massif into the western and eastern Cairngorms, separating Ben Macdui from both Beinn a Bhuird and Ben Avon that are characterised by a broad flat plateau with numerous rocks. Glen Dee and the Lairig Ghru separate Braeriach and Cairn Toul from Ben Macdui and Cairngorm. Braeriach and Cairn Toul are divided by Garbh Choire. The Lairig Ghru is a famous footpath passing through the heart of

the Cairngorms, linking Speyside with Deeside. It shows the heart of pine woods and wide open hillscares of the Lairig itself that takes between 6 to 10 hours to complete the walk. There is a sharp slope into the Lairig Ghru on the western side of the Ben Macdui plateau. On the eastern side, however, there is a glacial trough called Glen Avon that lies between Cairngorm and Ben Macdui. The Lochnagar massif is located to the southeast of the main Cairngorm massif. This is relatively small and reaches an altitude of 1,150m. Lochnagar is dissected by corries on the northern side, with Glen Muick to the east. Lochs are also important landmarks of the Cairngorms NP. Loch Avon, Loch Muick and Loch an Einich are representative and have an important position on an international level.

Several attempts to describe and classify the plant communities of the Highland of Scotland have been made. Among them, the extensive survey by McVean and Ratcliffe(1962) has provided a good reference-basis. Afterwards, Ratcliffe(1981) has provided comprehensive description of the vegetation of the Cairngorms area. The most distinctive and ecologically important component of vegetation in the Cairngorms is the tundra-like plant communities such as mountainous heath, and extensive grassland on rock debris. The whole area including heather moorland and mountainous

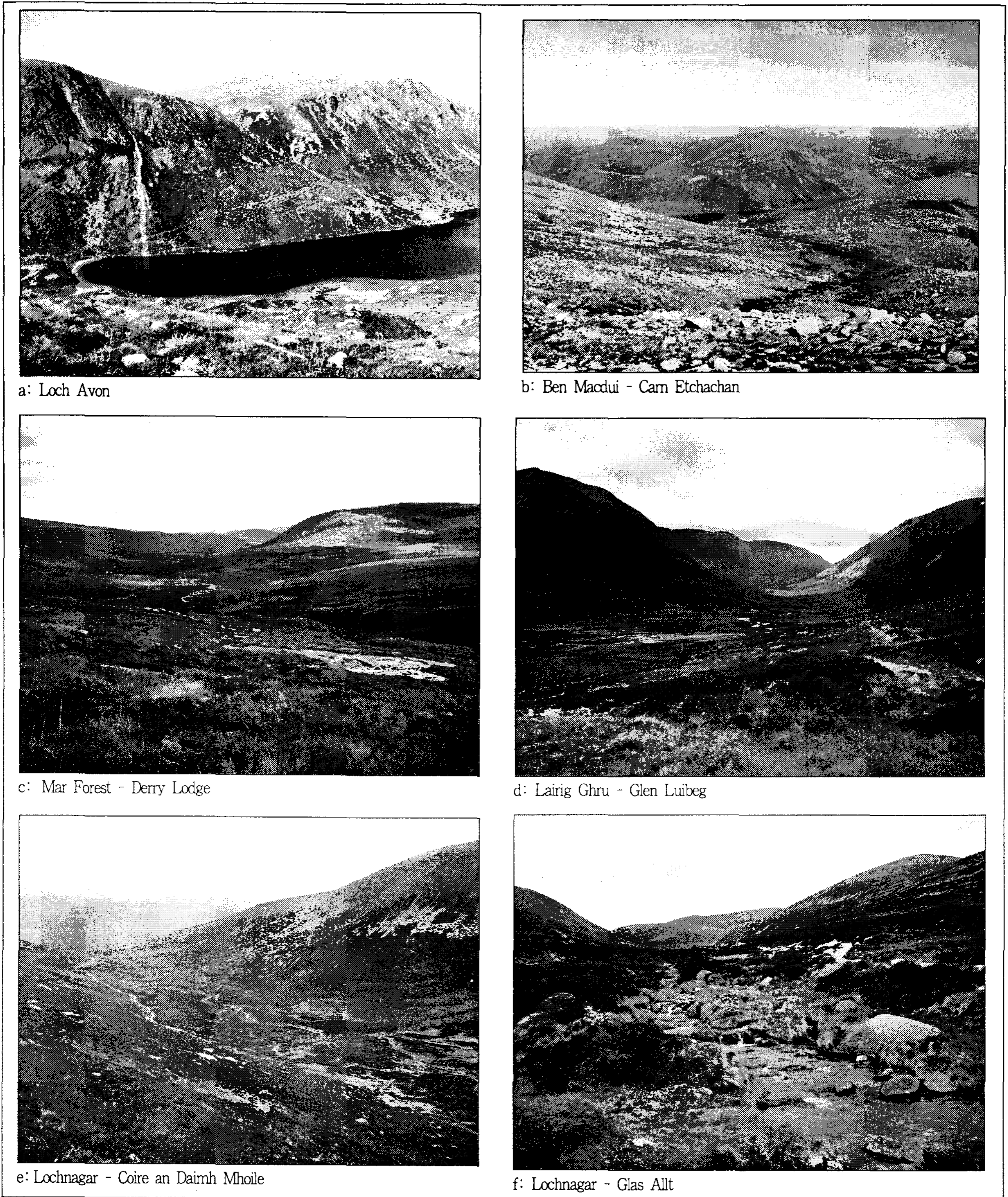


Figure 2. Cairngorms National Park

wetlands is a proposed World Heritage Site(McCarthy, 1998). The characteristics of those areas are represented as the low density of tree cover with low shrub and heather under storey habitat, and as wide space distribution of open heather moor

land.

On the other hand, at low altitudes there is an extensive area of native pinewood. Among the most distinctive natural heritage features leading to both the habitat and the landscape

Table 1. Plant species in the Cairngorms NP

| Common name       | Scientific name                 | Common Name    | Scientific Name           |
|-------------------|---------------------------------|----------------|---------------------------|
| Bearberry         | <i>Arctostaphylos uva-ursi</i>  | Aspen          | <i>Populus tremula</i>    |
| Blackthorn        | <i>Prunus spinosa</i>           | Birch          | <i>Betula pubescens</i>   |
| Blaeberry         | <i>Vaccinium myrtillus</i>      | Juniper        | <i>Juniperus communis</i> |
| Cotton grass      | <i>Eriophorum vaginatum</i>     | Larch          | <i>Larix decidua</i>      |
| Deer sedge        | <i>Trichophorum caespitosum</i> | Lodgepole pine | <i>Pinus contorta</i>     |
| Heather           | <i>Calluna vulgaris</i>         | Norway spruce  | <i>Picea abies</i>        |
| Heath rush        | <i>Juncus squarrosus</i>        | Scots pine     | <i>Pinus sylvestris</i>   |
| Purple moor grass | <i>Molinia caerulea</i>         | Sitka spruce   | <i>Picea sitchensis</i>   |
| Woolly hair moss  | <i>Racomitrium lanuginosum</i>  |                |                           |

are the extensive areas of ancient semi-natural woodland that are mainly composed of Scots pine and birch. Basically a feature of the Scottish Highland vegetation is its altitudinal zonation. Table 1 shows the main plant species found in the Cairngorms NP. In spite of a great deal of clearance of forests, the land around Cairngorm and Lochnagar contains the largest area of natural forest in Britain. On Speyside there are the forests of Rothiemuchus and Glenmore. On Deeside there are remnants of forest in glens Derry and Dee, and Mar forest. Under natural conditions and on the acid soils, the potential tree limit is estimated between 610m and 680m(Girningham, 2002).

The main species of the forests are *Pinus sylvestris*, *Betula verrucosa* and *Betula pubescens* which are found in the glens and the lower slopes. Although the heather moors frequently extend beyond the potential tree limit, the heather becomes shorter above this limit. Above the limit of heather, the degree of exposure or shelter and the length of snow bed increasingly affect the nature of the zonation. Poore and McVean(1957) have suggested a simplified diagram to reveal this effect(Figure 3). The vegetation of the montane habitats is generally affected by the length of snow cover, which depends on the shelter or exposure produced by the topography. Because of a lack of woodland the slopes often present an appearance of heather extending from the lower levels to altitudes of about 900m(Girningham, 2002). Above 760~850m the heaths become shaped into a dense flattened mass. Other alpine dwarf shrubs in this region include *Arctostaphylos uva-ursi*, *Empetrum nigrum*, *Salix herbacea* and *Loiseleuria procumbens*.

### III. Landscape Conservation and Tourism in the Cairngorms National Park

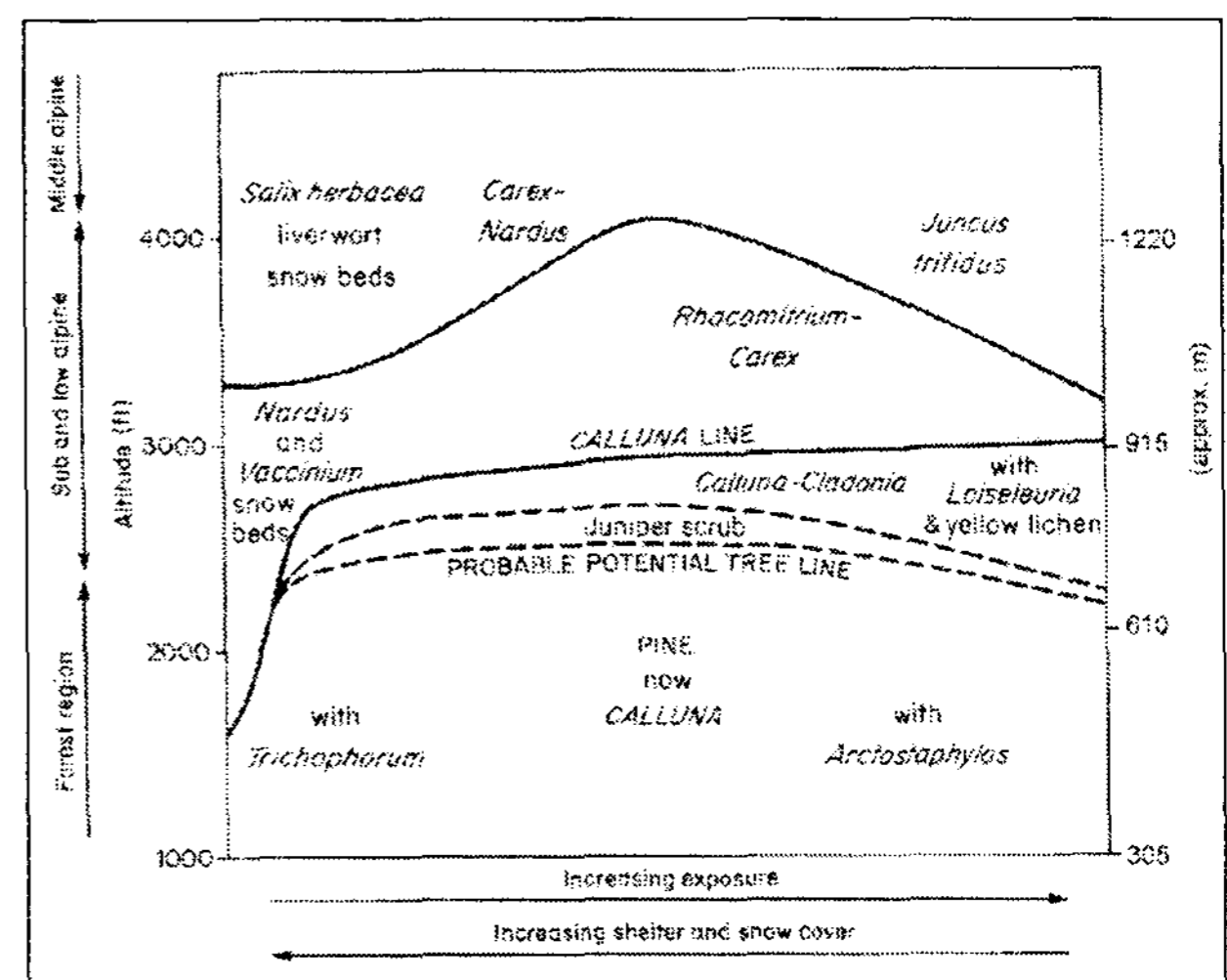


Figure 3. Plant communities in the Cairngorms(Poore and McVean, 1957).

The reasons for establishing National Parks are to preserve or conserve decreasing natural habitats, wildlife species, and landscapes, and to manage growing public interest in these. Many researchers and the public have focused on the shape of the Parks to protect against the artificial change of a natural landscape. Guidelines for protected area management categories have been suggested by the IUCN(International Union for Conservation of Nature and Natural Resources) in order to establish understanding among different categories of protection area. There are categories I through VI(Table 2). In categories I~III human intervention is usually prohibited, whereas in category IV~VI human activities for management and recreation are accepted. The IUCN categorisation is based on the management objectives in which nature reserve for species is emphasised as well as human activities for recreation.

A lot of the British National Parks could be classified as Category V or protected landscapes, because human inter-

Table 2. Categories and Examples of Guidelines for Protected Area Management

| Category                            | Definition and Example   |
|-------------------------------------|--|
| Ia. Scientific Reserve              | Protected area managed mainly for science<br>e.g. Snares Islands Nature Reserve, New Zealand   |
| Ib. Wilderness Area                 | protected area managed mainly for wilderness protection<br>e.g. Polar Bear Pass National Wildlife Area, Canada                                       |
| II. National Park                   | protected area managed mainly for ecosystem protection and recreation<br>e.g. Yellowstone National Park, USA   |
| III. Natural Monument               | protected area managed mainly for conservation of specific natural features<br>e.g. Victoria Falls National Monument, Zimbabwe                       |
| IV. Habitat/Species Management Area | protected area managed mainly for conservation through management intervention<br>e.g. Lueneburger Heide Nature Reserve, Germany                     |
| V. Protected Landscape/Seascape     | protected area managed mainly for landscape/seascape conservation and recreation<br>e.g. Dartmoor National Park, UK; Setonaikai National Park, Japan |
| VI. Managed Resource Protected Area | protected area managed mainly for the sustainable use of natural ecosystems<br>e.g. Bustard Fish Habitat Reserve, Australia                          |

Source: International Union for Conservation of Nature and Natural Resources(1994)

action has been taken through long centuries. For instance, the Dartmoor National Park in England is categorised as V by the Guidelines. According to the Guidelines, the primary purposes of category V are on the protection of specific natural or cultural landscape, or the maintenance of cultural attributes and on tourism and recreation. Although the National Parks in Scotland were officially established long after those of England and Wales, their important features had already been internationally recognised and designated such as Sites of Special Scientific Interest(SSSI), National Nature Reserve(NNR), or National Scenic Area(NSA). A large amount of the land area in Scotland is under the protection of conservation designations. These statutory designations largely focus on nature conservation, and landscape conservation, which protects wildlife, habitat, and landscape of the countryside. The organisations in Scotland that give assistance to nature and landscape conservation are the Scottish Natural Heritage(SNH) under the Wildlife and Countryside Act. In the last few decades there has been an increase in nature conservation designations, whereas the protection of valued landscapes has remained fundamentally the same for many years(Scottish Office, 1996). With the principle designations including SSSI, NNR, and NSA, there are more designations, both statutory and

non-statutory which may be applied.

Sites of Special Scientific Interest(SSSIs), designated by the SNH under the Wildlife and Countryside Act 1981, are important areas of nature conservation including habitat and wildlife in order to protect the special site from damage. SSSIs are of importance for the overall maintenance of biodiversity of species and habitats. There is a specific guideline for their special protection. The use of the land is not altered by SSSI status, but local authorities and land owners are obliged to consult their conservation organisation on any activities which may affect the site(Scottish Office, 1996). National Nature Reserves(NNRs), declared by the SNH, are also areas of national or international importance for nature conservation for the purpose of study, research and the preservation. Nature reserves are declared under the Wildlife and Countryside Act 1981. The NNR is either owned by the SNH or managed under agreement between the SNH and the owner to ensure that the nature conservation interest is maintained.

National Scenic Areas(NSAs) are nationally important areas of outstanding natural beauty. They represent some of the best examples of Scotland's grandest landscapes. The Countryside Commission for Scotland in 1980 introduced NSA that substituted earlier categories of importance for scenic interest

Table 3. Numbers and Areas of designations in Scotland(McCarthy, 1998)

| Designation                         | Number | Area(ha)  | Designation                      | Number | Area(ha)  |
|-------------------------------------|--------|-----------|----------------------------------|--------|-----------|
| <i><u>National</u></i>              | 1,398  | 892,840   | <i><u>Local designations</u></i> |        |           |
| Site of Special Scientific Interest |        |           | Local Nature Reserve             | 23     | 8,139     |
| National Nature Reserve             | 70     | 113,239   | Designed landscapes              | 275    | 60,616    |
| National Scenic Area                | 40     | 1,001,800 | Regional Parks                   | 4      | 86,125    |
| Natural Heritage Area               | 0      | 0         | Country Parks                    | 36     | 6,426     |
| <i><u>International</u></i>         |        |           | Environmentally Sensitive Area   | 10     | 1,439,231 |
| Special Protection Area             | 53     | 87,263    | Forest Parks                     |        |           |
| Special Area of Conservation        | 108    | 506,944   | Forest Nature Reserves           | 5      | 136,000   |
| Ramsar site                         | 31     | 57,258    | Woodland Parks                   | 17     | n/a       |
| Biogenetic Reserve                  | 2      | 2,388     |                                  | 9      | n/a       |
| Biosphere Reserve                   | 10     | 37,640    |                                  |        |           |
| World Heritage Site                 | 1      | 853       |                                  |        |           |
| Council of Europe                   | 2      | 5,350     |                                  |        |           |

(Scottish Office, 1996). NSAs are not intended to represent the whole landscape of Scotland, but to stand for natural beauty associated with Scotland. Hence, NSAs focused on diverse landscapes with various combinations of different landscape features such as lochs, rivers, woodlands and mountains(Scottish Office, 1996). To develop landscape within NSAs, Local authorities are required to consult with SNH. However, there are no funds endowed to the designation. Also, Natural Heritage(Scotland) Act 1991 invalidated its statutory power to designate NSAs(Scottish Natural Heritage, 1995). The designation can be seen fundamentally as a planning designation, so that some development and change in land use is accepted(Scottish Office, 1996). Other designations also showed how much the Scottish landscape embraced exotic beauty and regarded internationally important(Table 3).

There have been a lot of discussion and debates to establish National Parks in Scotland that were officially started in 2002 at Loch Lomond and Trossachs(Paterson, 2002). For instance, the Scottish Office(1996) said, 'It is important to recognise that the size or importance of area of land is not necessarily directly related to the degree of regulation associated with designation'. When the National Park was suggested first in Scotland, it was insisted that the National Park had two fundamental purposes: preservation of scenery and conservation of useful species(Lambert, 2001). Regarding this, the Cairngorms area was salient to preserve Scotland's scenic beauty and to promote recreational facilities. In order to app-

reciate a beauty of natural landscape, visitors started to come to the Cairngorms area in the last decades of the eighteen century. They were enthusiastic to travel, and observed people, scenery, and customs. Some visitors were much taken with contemporary aesthetic theory as popularised in text by William Gilpin and other writers on the picturesque(Andrews, 1989). Gilpin(1973) felt that the distant mountains formed the picturesque component of the highland view, especially in their immensity, colouring, and the way in which they could frame a vista.

From 1955, Cairngorms area became famous for recreational provision, which introduced lots of tourist accommodation and facilities. These remarkable changes were principally brought by two factors: the winter sport development in Cairngorms, and the construction of large multi-purpose holiday centres. Likewise, the Cairngorms National Park has already been recognised as a recreational site embracing a scenic beauty. A survey in the Cairngorms revealed the importance of sightseeing as a recreational activity. The survey in the Cairngorm area, conducted by Mackay Consultants(1988) showed that sightseeing was one of the most influential purposes of the visit. The Consultants asked the respondents to state all the recreation activities that they had undertaken when in the Cairngorm area. Table 4 shows the results in which the most popular activities were sightseeing(70%), followed by short walk(60%). At present time, the Cairngorms National Park focuses on landscape conservation and recreation, and has been

Table 4. Activities of visitors to the Cairngorms area(Mackay Consultants, 1988)

| Activity          | %  | Activity              | %  | Activity         | % |
|-------------------|----|-----------------------|----|------------------|---|
| Sightseeing       | 70 | Camping               | 18 | Training course  | 3 |
| Stroll/short walk | 60 | Birdwatching          | 16 | Geological study | 3 |
| Hillwalking       | 48 | Climbing              | 9  | Zoological study | 3 |
| Visited day lodge | 43 | Natural History study | 7  | Skiing           | 1 |
| Used chairlift    | 42 | Botanical study       | 5  |                  |   |

the subject of a number of initiatives attempting to assess landscape resource potential and its current and future management. Management of the Cairngorms National Park largely focuses on five sectors: Protection and conservation of the high land, Protection and regeneration of native woodland, Management of deer and maintenance of heather moorland, Social and economic well-being of local communities including recreation and access, and Nature conservation and landscape(Scottish Executive Social Research, 2003).

#### IV. Discussion

The purpose of this study was to introduce natural landscape of the Cairngorms National Park in Scotland and to describe its conservation and tourism in the Park, in order to provide the implication of landscape conservation of National Parks in Korea. Despite the importance of recreation and tourism, species preservation is a major issue in the National Parks of Korea. Timber production in the National Park of Korea usually could not be accepted, because of a strict national legislative system for protection of natural species. This is also explained by the stewardship of the National Parks. While the National Parks in Britain includes significant private land ownership, the National Parks in Korea are mostly owned by the national government(70.1%), as opposed to private owners(18.1%). So, the National Parks in Korea can be more strictly controlled for conservation management than those in Britain.

Nevertheless, landscape conservation of the Cairngorms National Park in Scotland addresses an important implication on managing National Parks in Korea. Landscape of the Cairngorms National Park is properly preserved and also used as recreation site for tourism. This implies that conservation of landscape induces tourists searching new sites for maximising pleasure from sightseeing. A carefully preserved landscape has the effect of a tourism resource in which tourists look for

novelty embedded in the typicality of the landscape of the National Park. Typicality is defined as a representativeness of categories(Rosch, 1973). Individuals categorise physical landform and land use patterns by the use of concepts such as mountain, moorland, and meadow. Along with this representativeness of typical landscape, the ideal of typical landscape can be produced on the basis of subjective knowledge of landscape meaning(Lee, 2006a). A National Park is certainly related to the typical landscape of the region, because of consistent landscape conservation effort in the Park. As the Cairngorms National Park shows the typical landscape of central Highland region of Scotland, so does the Jirisan National Park show the typical landscape of southern mountain region of Korea. Specific area is typical to specific region, because of different social and cultural history.

Landscape meaning arising from this social and cultural history attached to typical landscape determines the ideal landscape to the individual, social, or cultural memory. As an expression of culture, the idealised landscape is often represented by artistic works or popular media such as tourist guidebooks, posters and phone books. The standard representation of Scotland and Scottish life remains centred around sentimental and romanticised thoughts of the Highlands. Gold and Gold(1995) tried to interpret a tourist booklet for the typical landscape of Cairngorms. For instance, the Glen More Forest Park in the Cairngorms was represented by a booklet produced by the Forestry Commission to describe the parks to the public. In short, landscape conservation is strongly related to tourism in the case of the Cairngorms National Park. The typical landscape which is conserved is understood as both an objective representative and a subjective ideal involving the meaning of the landscape. This is implicit in the tourist booklet that promotes the sightseeing activities of tourists. The principal aim is to ensure appropriate public access to the land, subject to the maintenance of landscape and nature conservation interests. Sometimes conflict or the potential for conflict



exists between activities and with the varied aims of management. Visitor pressure on the Park will require the introduction of carefully formulated policies to allow wise and sustainable use of the landscape resources. It is thus important that National Parks should be focused both on managing landscape as well as promoting tourism.

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