

Paper Reference(s)

6476/01

Edexcel GCE Geography B Advanced

Unit 6: Synoptic Assessment

Issues Analysis – Conflicts in the Cairngorms

ADVANCE INFORMATION

Do not open before Friday 1 May 2009

Do not write anything in this booklet. This must be taken into the examination on Wednesday 17 June 2009 in the morning.

RESOURCE BOOKLET

Items included in this pack

Resource Booklet

Insert 1 - Map

Instructions to Candidates

Work through the booklet to make sure you understand all the resources. You may seek help from your teachers or any other sources in this context. In the examination you will have to apply your critical understanding in an unfamiliar situation.

Whilst you may wish to do some background research on the internet on the Cairngorms National Park in order to understand the resources, you will be assessed only on your critical understanding of the resources provided in this booklet.

Information for Candidates

This booklet **must be taken into the examination**, which is on the morning of Wednesday 17 June 2009. Do NOT write anything in this booklet. Further copies of this booklet may be downloaded from the Edexcel website.

Notes may NOT be taken into the examination.

Advice to Candidates

In this synoptic exercise you will be assessed on your ability to synthesise knowledge, understanding and skills derived from your Advanced GCE Geography course.

You will also be assessed on the quality of written communication shown throughout your report.

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Conflicts in the Cairngorms National Park



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This exercise was prepared in consultation with:

- The Manager and Staff of Kindrogan Field Centre (Field Studies Council)
- Cairngorms National Park Authority (CNPA).

Do **not** contact staff at these institutions but do use the following websites in preparation.

Resources

www.cairngorms.co.uk – publications **all** downloadable in pdf including State of National Park 2006, Management Plan 2007

www.ski-glenshee.co.uk – for further details of the ski centre

Books for background reading

- ‘The Ecology, Land Use and Conservation of the Cairngorms’
Charles Gimingham, Packard, ISBN-1-85341-117-5 (obtain by inter library loan)
- ‘The Cairngorms’ published by Scottish Natural Heritage ISBN 1-85397-086-7 (a low cost publication)
- Geography Review November 2003: ‘The Cairngorm Mountains’
- Geofact Sheet No 197: ‘Glaciation in the Cairngorms’ provides useful background.

Introduction

‘The Cairngorms are regarded as the most important mountain system in the country and of international importance for nature conservation.’

Nature Conservation Review 1977

One of the first acts of the new Scottish Parliament in 2000 was to legislate for the two National Parks; Loch Lomond and the Trossachs (2002), and Cairngorms (2003).

Four aims of the Scottish National Parks are:

- To conserve and enhance the natural and cultural heritage
- To promote the sustainable use of natural resources
- To promote understanding and enjoyment (including enjoyment in the form of recreation) of the Parks’ special qualities
- To promote the sustainable social and economic development of the Parks’ communities.

Creating a National Park has enabled the integrated management of the area in order to resolve some of the key conflicts which had resulted from pressures on the environment. It has also provided solutions to some of the existing problems.

Factfile on the Cairngorms National Park (CNP)

- Covers about 5% of Scotland’s land area. 75% of the Park is privately owned.
- 39% of the CNP area is designated as nationally important for nature conservation.
- 25% of the CNP area is designated as being of European importance for nature conservation (Natura 2000 sites).
- Four of the five highest mountains in the UK and 49 ‘Munros’ (mountains over 3000 feet - 914m) are located within the boundaries.
- Home to 25% of the UK’s rare and threatened species with a rich biodiversity.
- Internationally important geology and landforms (especially glacial).
- Only extensive area of arctic-alpine habitat in Britain.
- Largest area of semi-natural woodland in Britain (Scots pine).
- Culturally important landscape (424 listed buildings, 60 scheduled ancient monuments). Rich pattern of crofts, farms and large estates.
- Approximately 16 000 people live within the Park area with a very sparse density of less than 1 per sq km.
- 1.4 million people visit the Park each year.

Figure 1 What people enjoy about the Cairngorms National Park

<i>Cairngorms features identified by visitors</i>		<i>Percentage of respondents</i>
1	Beautiful views and scenery	46%
2	The hills/wide spaces, rugged mountains	27%
3	Peacefulness and easy-going pace of life	25%
4	The trees and colours of the landscape	13%
5	The wildlife, plants and animals	11%
6	Nice walks, good hill-walking	11%
7	Fresh, clean, unspoilt area	11%
8	Friendly people	9%
9	Picturesque, very beautiful place	9%
10	Lots of things/activities to do	9%
11	Large, open spaces without seeing anyone	7%
12	The water, lochs and waterfalls	6%

(Source: Cairngorms National Park Visitor Survey, 2004)

Section A – The Cairngorm Environment




The Cairngorms, a near pristine wilderness area, has long been recognised as **the most important** area in Britain for nature conservation values, but it is also a fragile and vulnerable landscape.

1. Geodiversity

The Cairngorms is a granite **batholith**. It has unique assemblages of pre glacial, glacial and post glacial landforms and features, especially in the central mountainous area. The photographs illustrate some of the five categories of feature.

- (1) Weathered granite tors on the highest ground (pre glacial features)
- (2) Glacially eroded features, Cairngorm corries, glacial troughs and lochs
- (3) Glacial melt water features
- (4) Periglacial features such as block fields
- (5) Peat deposits and blanket bogs.

Figure 2 The geodiversity of the Cairngorms

 <p>Tors on the summit plateau of Ben Avon appear to have survived the last glaciation and reveal the form of the jointing in the granite.</p>	 <p>The effects of frost action on the granite are well displayed in the blockfields on the plateau of Ben Macdui.</p>
 <p>Plateau surface of the high Cairngorms looking west from near the summit of Cairngorm Mountain.</p>	 <p>The deeply carved glacial trough of the Lairig Ghru.</p>

(Source of all photos: Scottish National Heritage)

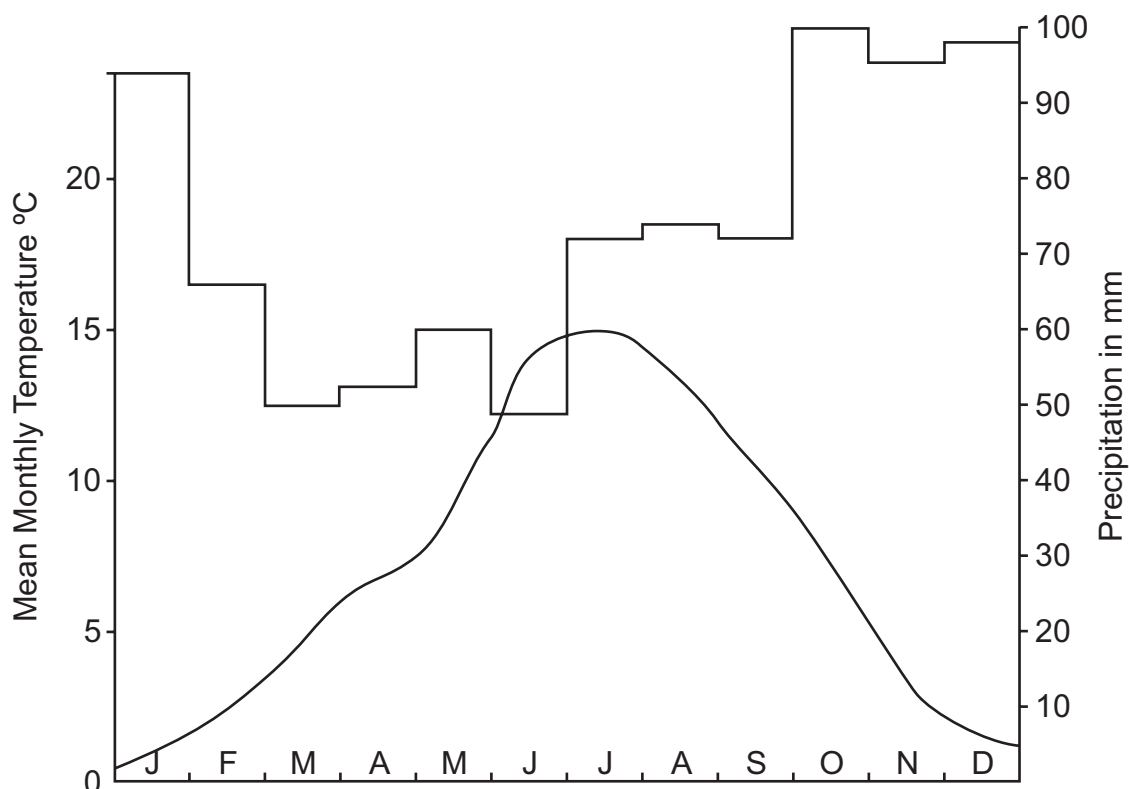
🗝 Identifying areas of highest value to safeguard against erosion and damage from over intensive hill walking and other forms of new style recreation.

2. Cairngorm Climate

Figure 3 The climate of Glenshee village

Sunshine Hours	24	56	94	129	167	165	142	124	104	66	31	18
Snow lying Days	14	12	13	8	4	0	0	0	1	6	10	12
	J	F	M	A	M	J	J	A	S	O	N	D

This is when snow covers 50% of ground



- The Cairngorms is the snowiest part of the UK, with May blizzards possible.
- Annual average of snow lying days ranges from 50 in Deeside to 200 on Cairngorm Mountain.
- The number of snow lying days has decreased in recent years especially at heights below 600m.
- Strong winds blow from prevailing SW direction with many gales.
- Precipitation varies from under 900mm in Deeside up to 2000mm on Cairngorm Mountain.
- Potential growing season is shorter than most areas in UK. Decreases by 11-20 days for every 100m increase in altitude.
- Frosts are common and freeze thaw processes have a major impact on landforms and soils.

🔑 To monitor the impacts of climate change on the potential for outdoor recreation.

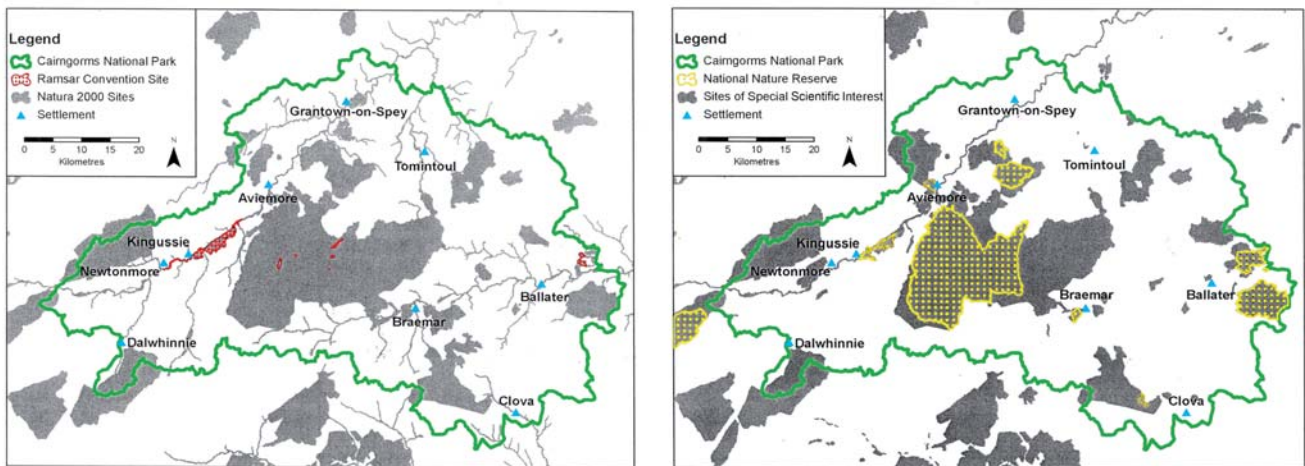
3. Soils and Biodiversity

The park contains a large area of rare undisturbed soils, especially in the sub alpine and pine zones above 500 metres. Eight of the SSSIs are considered to have soils of international importance.

☞ Commercial afforestation, footpath erosion, off road vehicle use, overgrazing and peat erosion all affect the soils and need to be carefully managed. Soil erosion from footpath erosion and heather burning is also significant.

The Park's biodiversity is of both national and international importance. The extent and scale of habitats, including native pine woodlands, high mountain plateaux, moorlands and heathlands, wider river valleys, farmlands and wetlands, hold a rich biodiversity including many rare (arctic and alpine species) and threatened species.

Figure 4 Designated conservation areas



As can be seen from Figure 4, 40% of the Park is designated for particular types of nature conservation. Only recently has the designation of the Park meant that integrated landscape scale approaches have been possible. Previously, management approaches were fragmented. Severe climate conditions combined with unstable slopes make the exposed areas of mountain vegetation very susceptible to damage and disruption (from heavy deer grazing, trampling by walkers, skiers and high altitude wilderness camping). As well as plants, the Cairngorms is a special region for breeding birds. Climate change is threatening many of the high mountain species such as ptarmigan and arctic hares. There are also many unusual insects and butterflies but these are not threatened directly by human impacts. Aquatic habitats are also significant with some threats from acidification, pollution and water abstraction.

☞ Enhancing the biodiversity by zonal management using a landscape scale approach to connect all habitats. Enhancement will encourage outdoor recreation and general tourism. Much recent damage from the effects of ski development needs expensive restoration.

4. Land Use and Land Management

Agriculture

The Cairngorms environment presents a challenge (exposure to Atlantic and Arctic weather, thin soils and inhospitable temperatures, remote from major markets, both hilly and mountainous). 69% of the total area is classified as low quality land (rough grazing). Livestock rearing is therefore dominated by sheep and beef cattle which have declined by around 15% in the last ten years. Farming was sustained by Least Favourable Area subsidies and also headage payments until the McSharry reforms when payment shifted towards less intensive agro-environmental grants for stewarding the countryside – an objective entirely congruent with CNPA policies. Whilst there are over a hundred crofts within CNPA, full-time farming is a declining activity with both farm and non-farm related diversification increasingly important since the 1990s as an economic lifesaver. Large estates, primarily for sporting activities continue to dominate.

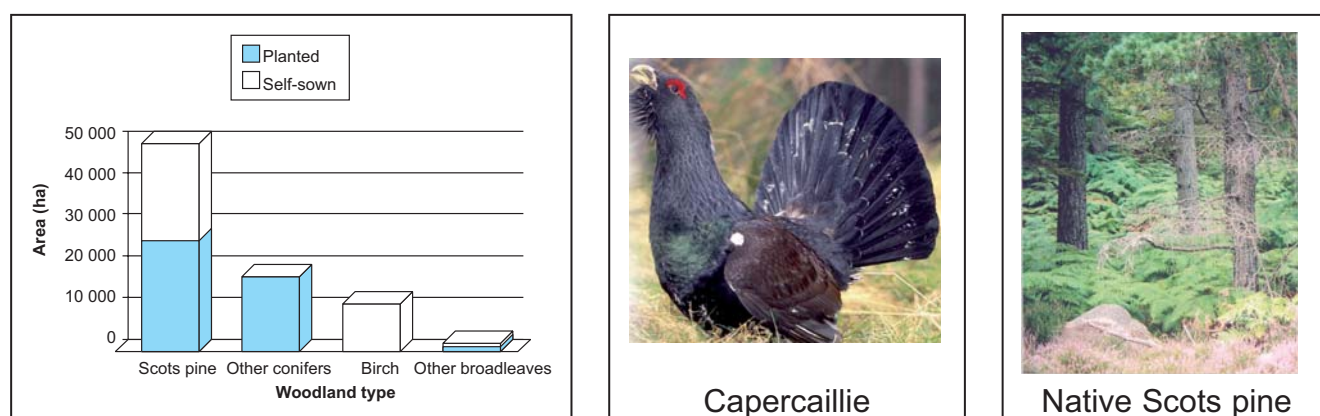
Establishing new opportunities in farming, including developing local supply chains.

Forestry

Figure 5 shows the main woodland types in the Cairngorms. The Park contains the most extensive area of Caledonian forests in Scotland (25% of land area under 600m), largely of native, self-sown Scots pine and birch. This forest is a distinctive part of the Cairngorms landscape and is very important for biodiversity (it is home to the pine marten, the capercaillie and the wild cat, as well as mosses, liverworts and fungi).

The conservation of this native forest (a valuable genetic pool) has to be a key factor in guiding future forest and woodland expansion. However, many of the estates are now using woodland grants to plant broad leaved but non-native species.

Figure 5 Forestry in the Cairngorms



Encouraging regeneration and restoration of native species remains a prime strategy preventing the spread of non-native species.

Developing multi-purpose uses of forests to encourage more sustainable forms of forestry management.

The deer problem

Red and roe deer are a valuable part of the natural and cultural heritage of CNP. They contribute significantly to the economic viability of some communities (via sport, stalking and venison) and are well-liked by tourists. Whilst deer can have a beneficial impact on some habitats, in many areas within the Park the deer population is having a significant and adverse impact by destroying native forests and heather moorland.

The impacts can be summarised as follows:

- Lack of regeneration of native woodlands.
- Grazing impacts on heather moorland which in turn leads to a loss of heather moorland for grouse.
- Conflicts between stalking and other outdoor pursuits. Managing the deer population at densities consistent with conserving the landscape is vital, using deer-proof fences (£10 per metre in 2000), to allow regeneration and also selective culling. Both methods are controversial.

🔑 Sharing best practice in deer management across the park.

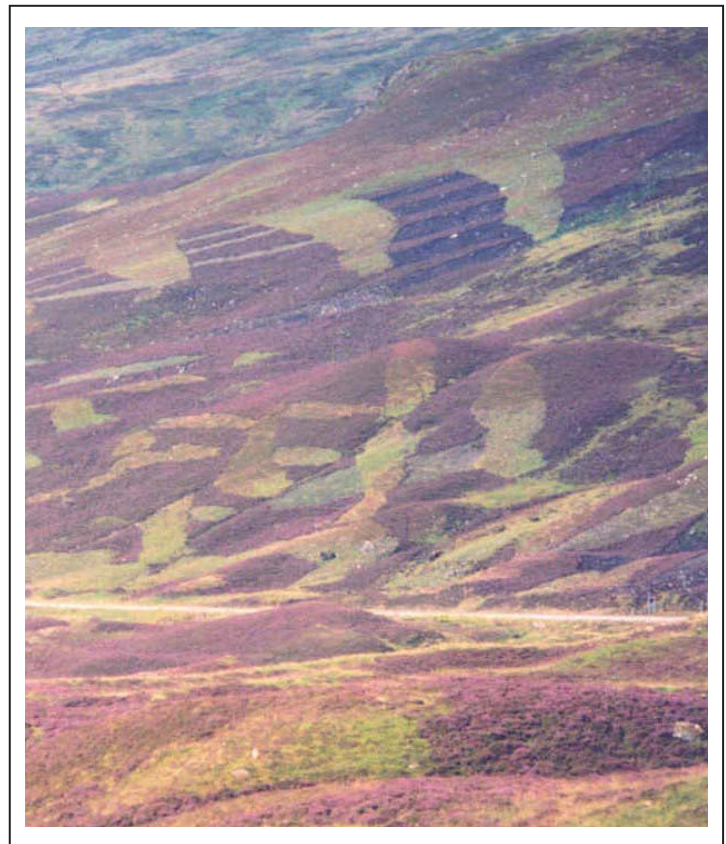
Grouse moorland management

The high plateau is surrounded by extensive areas of heather dominant moorland, which are managed by private estates for shooting (red and black grouse). In order to provide young shoots for the grouse, selective heather burning takes place each year. This can encourage erosion.

Grouse have suffered loss of habitat because of overgrazing formerly by sheep, now by deer.

Fishing, e.g. for salmon, has had problems as a result of acidification, pollution from pesticides and erosion of vegetation cover.

The impact of grouse moor management in Glenshee



5. Population and Settlements

The Park has a small population relative to its area, and can be classified as a very sparsely populated remote rural area. The population has an imbalance largely caused by **in-migration** of the 50+ age group, many of whom move to the Cairngorms market towns to retire (e.g. Braemar and Ballater) and the **out-migration** of the 18-30 age group who are seeking affordable housing and employment. The expected trends are shown in Figure 6.

Figure 6 Projected population trends

Age	2001	2006	2011	2016	2025	% change 2001-2025
0-15	2 853	2 741	2 457	2 056	1 891	-33.7%
16-24	1 240	1 337	1 439	1 529	1 110	-10.5%
25-39	2 988	2 463	1 946	1 797	2 075	-30.6%
40-59	4 687	5 188	5 432	5 377	4 381	-6.5%
60-74	2 659	3 012	3 672	4 213	4 923	85.1%
75+	1 408	1 543	1 697	1 917	2 858	103.0%
Total	15 835	16 284	16 643	16 889	17 238	8.9%

Housing

The overall supply of housing is affected by the significant proportion (20%) of housing stock which are made up of second or holiday homes. This exerts an upward pressure on prices, and moreover it takes a large number of homes out of the market. Only 38% of younger households are estimated as being able to afford to buy housing. The private rented sector is relatively important (farms, forestry and estate owned) but highly dependent on the accompanying jobs.



Providing a larger stock of affordable housing combined with more professional and entrepreneurial job opportunities is vital to stem the outflow of young people.

6. Economic Opportunities

As can be seen from Figure 7, there are significant differences between the Park employment profile and that of Scotland as a whole. The economic base of the Park is relatively narrow with public sector and tourism-related industries and self-employment underpinning the economy of the Park. Agriculture and estate related activity such as hunting and shooting are smaller sectors but of critical importance (422 full-time jobs and 126 full-time equivalent part time jobs – includes some self-employed and catering). Although the workforce is better qualified than the Scottish average, pay levels are lower, and more of the employment is seasonal. The Scottish Index of Multiple Deprivation, however, suggests that the only concern is for **accessibility** which leads to mobility and opportunity deprivation (all but one ward is in the bottom 25% for Scotland).

Figure 7 Employment profiles

Sector	Park %	Scotland %	Notes
Agriculture, hunting and forestry	5.7	2.1	
Fishing	0.1	0.3	
Mining and quarrying	1.4	1.2	
Manufacturing	7.2	13.2	Largely brewing and distilling, some growth in recent years
Electricity, gas and water supply	0.6	1.0	
Construction	8.0	7.5	
Wholesale and retail trade, repairs	12.6	14.4	
Hotels and restaurants	19.4	5.7	Largest job loss down 277 between 1998 and 2002. More recent figures show that tourism employment in the Park is now rising rapidly and by 2006 may have reached nearly 5000 jobs if all sectors are added together.
Transport, storage and communication	5.1	6.7	
Financial intermediaries	1.2	4.6	
Real estate, renting and business	9.0	11.2	
Public administration, defence, social security	4.1	7.0	
Education	6.3	7.3	
Health and social work	9.7	12.4	
Other (self-employed)	9.8	5.3	

(Source: 2001 Census for Scotland)

➔ Diversifying employment by promoting business and enterprise growth. Green businesses are a prime strategy because of the high quality of the environment. Investing in training for younger people is vital.

7. Infrastructure and Services

In comparison to many remote rural areas the area is well provided with social, educational and health facilities such as village halls and primary schools. Some gaps in services have been identified including childcare and facilities for youth. Transport services are relatively good for such a sparsely populated rural area and do provide a viable basis for travel to work for the normal working day. However the remoter areas are more poorly served especially West to East across the Park, making car ownership essential for many areas.

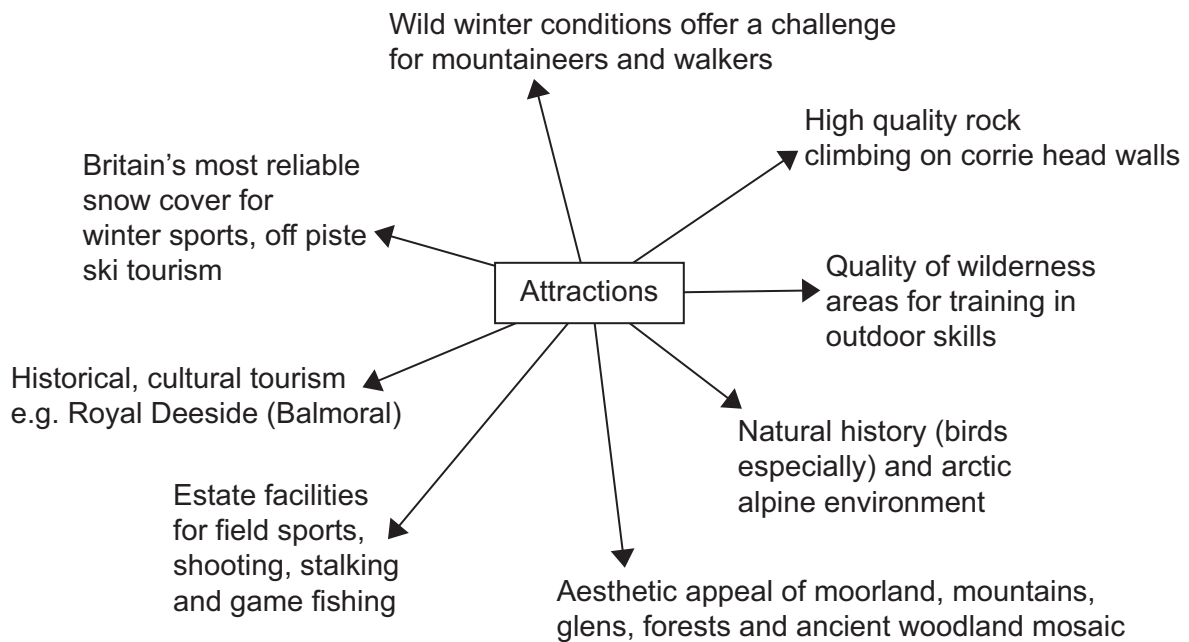
Telecommunications are improving, with the broadband revolution reaching most local exchanges and so enabling telecommuting. The Park area has above average numbers of voluntary organisations (indicative of a good community spirit) which fill the gaps, e.g. The Highland Real Nappy Project.

Developing small scale schemes for local renewable energy. Encouraging community-based schemes to keep rural services open such as Post Offices and pubs by using innovative solutions.

8. Tourism

Tourism in the Cairngorms is inevitably focused around open air recreation as shown below.

Figure 8 Tourism potential of the Cairngorms



The controversy over Lurchers Gully (a proposal to expand skiing, access roads and lifts in an area west of Coire Cas in the Cairngorm mountain area) and the subsequent building of the Cairngorm funicular railway showed there is often an employment versus conservation conflict. The main function of the CNPA is to manage the Park to promote understanding and enjoyment in ways that are consistent with the special environmental qualities via **Sustainable Tourism**. One challenge is to provide responsible access for recreation to land **and** water areas in CNP. Clearly zoning and permit systems to protect the most valuable habitats are essential by encouraging optimum flow and spread of visitors across the Park in **time** and **space** and minimising social and environmental impacts of tourism (e.g. congestion, and inter-recreational conflicts). The Park has a major educational and information role especially in **Sustainable Development** to all people living in and visiting the area.

➔ Diversifying tourist activities to offer an increasing range of outdoor pursuits and involving local communities in developing sustainable tourism businesses. This will both conserve the environment and strengthen local enterprise and the economy.

Figure 9 CNPA tourism survey 2003/04

<p>Who visits the Park?</p> <table border="1"><tr><td>Holiday makers 43%</td></tr><tr><td>Short breakers 19%</td></tr><tr><td>Day visitors 21%</td></tr><tr><td>Park residents 17%</td></tr></table>	Holiday makers 43%	Short breakers 19%	Day visitors 21%	Park residents 17%	<p>Most visitors are on holiday, staying away from home, but many are day visitors, including a significant number who live within the Park. Of the holiday/short break visitors:</p> <ul style="list-style-type: none">• around half spend their whole holiday in the Park• many also visit other parts of Scotland.
Holiday makers 43%					
Short breakers 19%					
Day visitors 21%					
Park residents 17%					

Visitors – quick facts:

15% of all visitors are from overseas
50% are from the UK but outside Scotland
23% have children with them
44% of 'short breakers' are from Scotland
43% on holiday are over 55.

The age profile of day visitors is different, spread more evenly across the age range:
63% of day visitors are 25-54
23% of day visitors are over 55

How much do visitors spend?
(average per day, short break)

£31 on accommodation
£21 on food and drink
£8 on shopping
£6 on entertainment
£3 on transport in the area
£69 in total each day

How successful is business in the Park?

52% say demand has grown in the last 3 years
BUT
65% say that to be profitable, they need more business

More business is needed Jan–April and Oct–Nov. Marketing and also other activities (for example, events) are needed, particularly for these times.

➔ Improving the information services so that people can find out more about the Park.

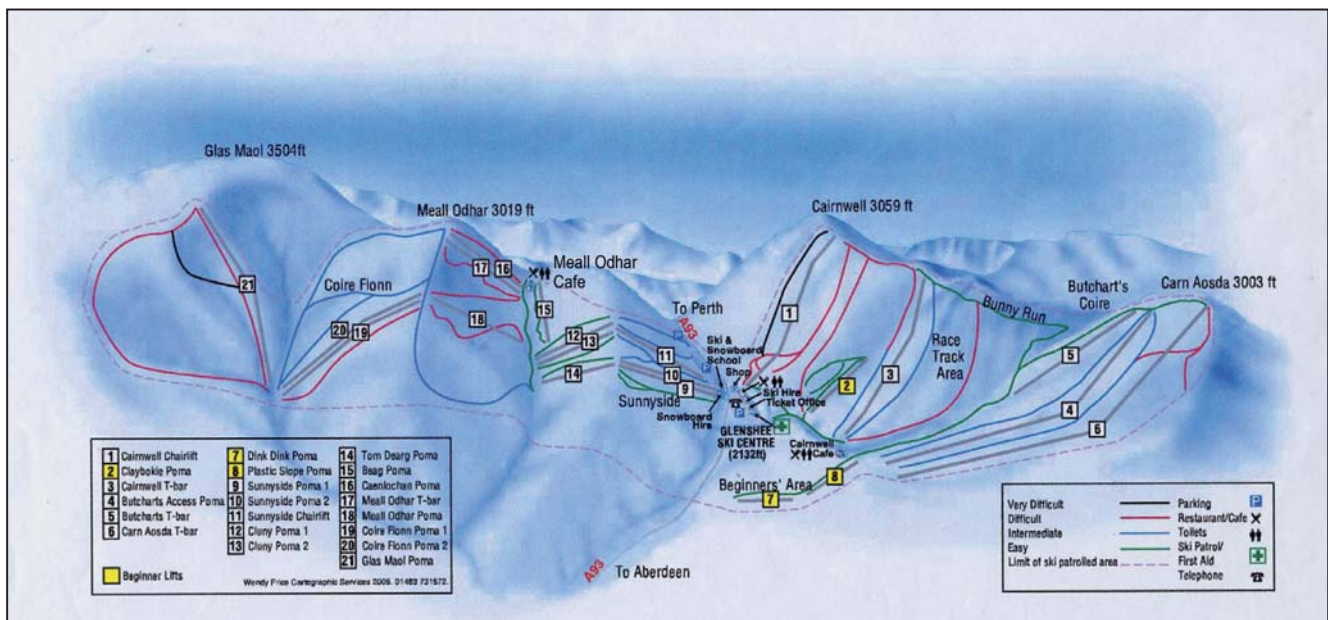
Section B – The Glenshee Ski Centre Debate – Develop or Die?

The snowfields at Glenshee stretch over 3 valleys and 4 high peaks giving access to 40km of marked pistes, as well as off piste skiing. The ski area covers 8 square kilometres and has a capacity for 6000+ skiers. With its diversity of pistes, Glenshee offers something for everyone. Beginners and novices are able to get to grips with skiing and snowboarding on the nursery slopes next to the main car park, with easy progression onto the seven lifts which start at car park level. The centre is also ideal for intermediate skiers/snowboarders with no less than 26 blue and red runs, varying from the long and exhilarating to the short and steep. Experienced skiers and boarders however, are able to test their skills on two excellent black runs – the ever popular Glas Maol black or the infamous mogul-strewn Tiger which has been a formidable part of the Scottish ski experience for years. In addition to the plethora of on-hill terrain, snowboarders are also treated to a specially designed Fun Park at Meall Odhar which has recently seen a face lift, following its introduction in 1991. With so much choice, it is easy to see why Glenshee should be Scotland's premier resort.

Skiing began in the 1930s with the first ski lift built in 1957, with steady expansion until 2000. Glenshee Ski Centre is arguably the leading Scottish ski centre in terms of continual investment in the infrastructure. Through this program of development on and off the slopes Glenshee became the first Scottish ski centre to introduce artificial snowmaking. It is also the largest in Scotland, based on the number of lifts and tows – 26 in all – with an uplift capacity nearly 50% greater than its nearest rivals. More recently, Glenshee installed a computerised ticket system aimed at increasing the general efficiency of the ticket office as tried, tested and approved by many of the top European resorts.

(www.ski-glenshee.co.uk Glenshee Ski Publicity)

Figure 10 Glenshee ski centre piste map



Unfortunately, in spite of all these advantages, in 2004 the Glenshee resort was put up for sale after suffering major losses in 2002/03 and 2003/04. This was largely because of competition from more reliable Eastern European resorts reached by cheap flights and also the impact of climate change which has led to milder winters with a lack of snow on many of the runs. Currently none of the runs start higher than 900 metres although most face North East. Paradoxically more extreme weather events occurred leading to access difficulties because of huge snow drifts on roads such as the A93. The resort was taken over by a management buyout led by the resort's operations manager thus saving six full-time jobs and up to 120 seasonal posts.

As you can see from the newspaper reports and blogs, 2007-08 was a wonderful season (the best for twenty years) with snow throughout late December to March and even prolonged into April by 'Arctic Blasts'. This does not mask the fact that a business plan needs to be made to manage Glenshee Resort, the most marginal in the Cairngorms, to be more climate proof during the ski season, although there are issues relating to the use of artificial snow, both ecological (damage from chemicals) and economic (cost of water and energy). There is a need to utilise the facilities for a year round range of outdoor activities as currently the ski season closes down in early April, and that's in a good season!

Figure 11 Media reports and blogs January 2008

Tip for skiers: slip north of the Border for best snow in a decade

(The Times, 19 April 2008)

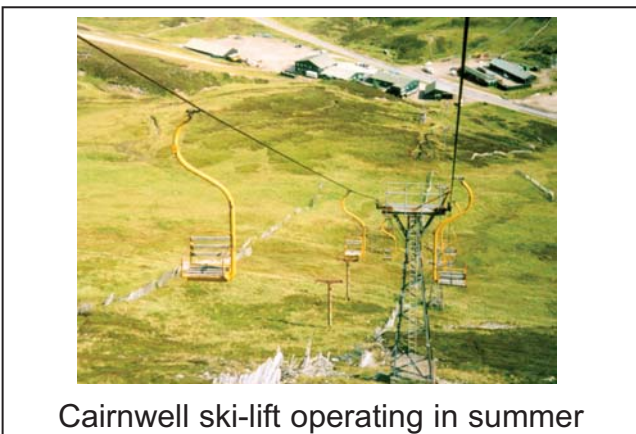
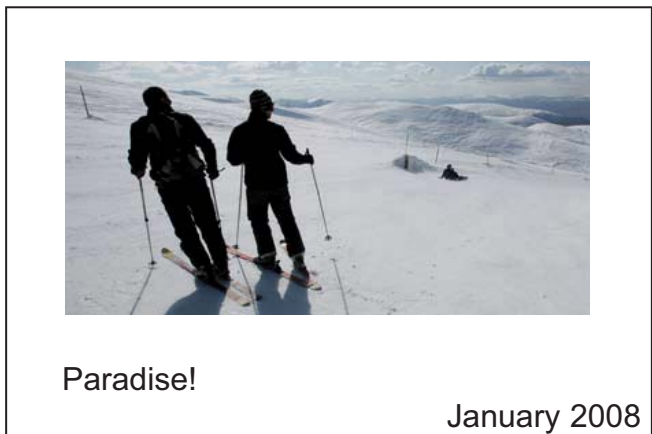
EDINBURGH, Scotland, Jan 2008 – while Scottish drivers have been cursing the recent mix of snow and high winds, ski areas and skiers have welcomed the best conditions in at least a decade.

“We have had 500 people on the slopes every day this week and today I'd say that we have got about 1500 ... there are clearly a lot of people who have taken sickies.” *Glenshee ski manager*

Re: Glenshee Snow
 Date Posted: 22.37hrs on Monday 14 Jan 08
 Very quiet today only 150 cars maybe and so never waited at any lifts and had a good day riding the steps on soft snow. Don't be too disappointed, the weekend's snow couldn't last and unfortunately got heavily rained on yesterday.

SAIS report is brilliant. Snow complete down to 400m. Think there might be nearly 20 lifts operating. The Tiger has good cover, Wow!
www.winterhighland.info/snowreport

Re: Not more climate cobblers!
“Unfortunately it's just getting too hot for the Scottish ski industry,” said David Viner, of the Climatic Research Unit at the University of East Anglia. “It is very vulnerable to climate change; the resorts have always been marginal in terms of snow and, as the rate of climate change increases, it is hard to see a long term future.”



The Proposals

Currently there are three proposals being considered for Glenshee which is within the National Park.

- (1) To build a mountain bike track and facilities for paragliding, climbing and high level walking. The mountain bike track would be within ski centre grounds but away from and separate from the ski runs. At the same time research would be carried out as to how to develop the ski-activity using artificial snow and improved access to the slopes as well as more cross country routes.**
- (2) To build a mountain bike track similar to the one on the Nevis Range on an existing ski run capable of hosting world championship events which could draw up to 20 000 spectators and provide a boost of £7 500 000 to the local economy. At the same time some skiing might continue.**
- (3) To abandon Glenshee as a ski resort thus accepting it as a lost cause. Allow the vegetation to recolonise and then redevelop the area for bird watching, nature walking and high level wilderness trails, possibly using selected former ski lifts for access.**

Some opinions from interested parties

1. Ramblers Group

As a member of the local Ramblers Group, you are concerned about the impact that mountain bikes will have on the already crowded roads, and the impact of the track on the natural environment.

- You see Glenshee as top quality high level wilderness walking.
- You believe the impact on the hills from the track and paragliders would make the area unusable for ramblers and hill walking generally.
- Mountain biking will have a devastating impact on fragile vegetation and its biodiversity.
- Anticipated large crowds will have the potential to affect all passive users of the area, not just ramblers.
- Coach parties will be caught in the traffic, causing great disruption. This may not be appropriate within Scotland's second National Park.
- You are concerned about the visual impact of the track, and feel that maybe the whole site should be returned to its natural state.

2. Local residents e.g. in Braemar and Glenshee

Living near Glenshee, and close to the proposed development, you are concerned about the impact that the mountain bikers will have on the already crowded roads and the impact of the track on the natural environment.

- It is clear that there would be a definite benefit to the economy of the area, especially for hotels and campsites, but will this be to the detriment of local residents? How much extra all year round employment will there be?
- Who would be in charge of security at the large events with potentially large crowds?
- How will large crowds affect local residents at the times the events occur?
- What else comes with mountain bike events? Will there be loud music? Will the paragliders be noisy? This would be a problem for retired residents.

3. UK Mountain Bike Federation (UKMBF)

UKMBF would like to see Glenshee as a premier mountain bike resort like the Nevis Range, where they have a world class mountain bike track. 19% of respondents to the CNPA tourism survey said they would like to take part in mountain biking during their stay.

- UKMBF are willing to pay for the track.
- UKMBF will put **some** money toward the cost of improving the lifts, so they will take bikes and riders to the top of the runs.
- SportScotland have shown an interest in the development and have money to invest.
- The season runs from April to November and fits in perfectly with the skiing.
- The members have a very strict Code of Conduct for safety.

The development would:

1. Allow for greater provision for mountain biking
2. Provide mountain biking summer schools
3. Become part of the Mountain Bike World Cup circuit.

Research <http://www.nevisrange.co.uk/summer/biking/biking.asp> and see the potential.

4. Paragliders

As a member of the Scottish Hang-gliding and Paragliding Federation (SHPF) and British Hang-gliding and Paragliding Association (BHPA), you helped to forward the idea of using Glenshee as a mountain bike and paragliding venue.

- You would like to see a world class mountain bike track and lifts that have been adapted for paragliders – like the ones at the Nevis Range.
- The development would allow for greater provision for paragliding.
- The SHPF and BHPA are willing to contribute to the cost of the lifts if necessary. The rest of the money for the lifts will have to be provided by the Ski Centre or through public/private investment (i.e. lottery funding).
- SportScotland have shown an interest in the development plans and have money to invest.

Research <http://www.undiscoveredscotland.co.uk/fortwilliam/nevisrange/index.html>

5. Local Hoteliers

Local hoteliers in Glenshee and Braemar would be severely affected if the Glenshee Ski Centre were to close completely; skiers bring much needed winter revenue to business people like you, although even in a good season this is over by early April.

- Mountain biking would add to the business you already receive in the summer from passing tourists. Summer is the peak time, so there may be no vacancies.
- If mountain biking were to be developed, this would help to offset any losses from a poor winter ski season.
- Glenshee already feels the effects of human impact with skiing – why put the bikers anywhere else? Glenshee Ski Resort is within the National Park, but only just.

6. Conservationists

You are concerned about the direct and indirect environmental impacts of not only the ski-runs, but also the all year expansion. You are worried about issues of physical and perceptual carrying capacity.

- **Caen Lochan** is a real concern. It is an **SSSI** located just 1½km south-east of Coire Fionn, part of the Glenshee ski area, and is renowned as one of the most important upland sites in Britain for arctic-alpine plants, as well as having over 100 species of butterflies and moths.
- It is a fantastic area for birds including many rare ones such as ptarmigan, golden eagles and dotterels.
- Currently the use of Coire Fionn is regulated by detailed planning considerations which determine the length of the ski season. Glenshee is a popular starting point for hill walkers who are currently the most frequent visitors to the area East of Glenshee.
- What will be the impact of the spread of skiing activities, e.g. cross country?
- Whilst the Cairnwell (see Figure 10) is the likely site of a mountain bike trail, Coire Fionn would be very suitable – what would be the impact on ecology and other users?
- Which of the proposals would be the **least** ecologically and environmentally damaging?

Section B developed from material provided by Kindrogan Field Study Centre (FSC).

Section C – Priorities for Action in Cairngorms National Park 2007-12

Strategic Objective 1 - Conserving and Enhancing the Park's Natural Environment



- Biodiversity
- Geodiversity
- Culture and traditions
- Sustainable use of resources – energy, air and water
- Integrated Land Management in forests, woodlands, moorlands, farming areas and estates

Strategic Objective 2 - Meeting the Needs of those Living and Working in the Park



- Encouraging sustainable development of the Park
- Sustainable communities
- Sustainable economy and employment
- Housing (especially affordable)
- Transport, communications and infrastructure
- Waste management

Strategic Objective 3 - Helping Visitors to Enjoy and Understand the Park



- Creating a world class experience for visitors
- Sustainable tourism
- Outdoor access and recreation for all
- Developing learning and understanding of the special qualities and the difficult management challenges
- Involving people in the development and management of the Park
- Providing a world-class information service

(Source – Cairngorms National Park Plan)

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