

COUNCIL
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CONSEIL
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Strasbourg 20 October 1989
APEZP27.90

PE-ZP (90) 27

STEERING COMMITTEE FOR THE CONSERVATION AND MANAGEMENT
OF THE ENVIRONMENT AND NATURAL HABITATS (CDPE)

Committee of Experts - Protected Areas

Siebengebirge Natural Reserve
(Federal Republic of Germany)

On-the-spot appraisal

(19-21 April 1989)

EXPERT REPORT

by

Charles Stauffer
(France)

with comments by the Secretariat

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Forty years
Council of Europe
Quarante ans
Conseil de l'Europe

1. GENERAL

The European Diploma was first awarded to the Siebengebirge Natural Reserve in 1971 (Category C), since when it has been renewed three times. Its further five-year extension is due to be considered in 1990.

The Directorate of Environment and Local Authorities asked me to carry out an on-the-spot appraisal, paying particular attention to the motorway construction project intended to link the Rhine to the A3 motorway, and to the various points mentioned in Resolution (86) 12 of the Committee of Ministers of the Council of Europe, namely:

1. Preserving [natural forests])
2. Increasing [the percentage of near-natural)
plantations])
3. Coppicing) See Appendix 1
4. No extension of forest roadways)
5. No authorisation for summer toboggan run etc)

2. INSPECTION

The visit to the site took place from 19 to 21 April 1989 in the company of Mlle L'Hyver representing the Directorate of Environment and Local Authorities of the Council of Europe.

Mr F Brock, of the Verschönerungsverein für das Siebengebirge (VVS), took us to the "Margarethenhöhe" meeting point where we were welcomed by:

- Dr. Dette, Head of Department No. 5, Government Offices, Cologne;
- Mr Hallweg, Town Planning Adviser, Government Offices, Cologne;
- Dr. Fasbinder, President of the VVS (who was accompanied by Mr Brock, Director of the VVS);
- Mr Leonhard, Local Forestry Manager for the VVS.

Also present were:

- Mr Heimo von Elsbergen, Chief Conservator of Forests for the Rhineland;
- Mr Schwontzen, Head of the Siegburg "Forstamt" (Forestry Department);
- Dr. Krause, Director of the Federal Nature and Environment Research Institute;
- Mr Henke, Adviser to the Federal Nature and Environment Research Institute;
- Mr Schonball of Bad-Honnef, interpreter.

We would like to thank them all for their kind welcome.

After climbing the Oelberg, we met in a room of the VVS centre to discuss the general problems of the Siebengebirge, including:

- the high-speed train project;
- the problem of the motorway spur;
- the follow-up given to the recommendations in Resolution (86) 12 set out above.

We shall deal with these points in more detail later.

VISIT

Accompanied by Mr Schwontzen and Mr Henke, who were our guides throughout our stay, we began at the northern end of the range, following a route traversing a number of important places (see appended plan).

3. PRINCIPAL CHARACTERISTICS OF THE AREA

The Siebengebirge Nature Reserve, a mountain range to the south-east of Bonn on the right bank of the Rhine, occupies 4,200 hectares of which 92% are under woodland.

It has the hilly outline characteristic of old volcanic ranges. It is the northern most mountain range of the Rhine valley and contains the most northerly vineyard in Germany. The Oelberg, with an altitude of 468 metres, is the highest of its 40 wooded hills.

Pressing needs for building materials in the 18th and 19th centuries, resulted in the volcanic rocks of the Siebengebirge being mined in an irresponsible manner, promoting a violent reaction from the local population in 1869 and later the creation of the first nature reserve in the Federal Republic, under the impetus of the VVS.

The geological wealth of the range (Devonian with volcanic features from the tertiary period), and its great variety of aspects and climatic influences, make it attractive in a number of ways.

Thus its climax forest consists of beech, interspersed on the warmer and drier slopes by xerothermic oakwood with hornbeam and wild service trees. All of this has been subject to human influences, the forest having formerly been exploited to produce vine-props, and more recently some of the traces of the last war having been erased by felling wood damaged by gunfire. The resulting landscape is a varied woodland intermingled with dense conifer plantations from an earlier period.

One of the few recreation areas in the midst of a heavily populated region, the Siebengebirge receives several million visitors a year.

4. CURRENT SITUATION OF THE SITE

4.1 Legal and land status

The Land framework law on nature protection (Naturschutzverordnung) will be renewed on 2 September 1989.

This revision assumes that the nature reserve will retain all its present boundaries, which include, to the east, the route of the A170 motorway and contain areas of particular ecological interest, as well as some classified as integrated nature reserve.

The Federal Government has acquired the private forest of Petersberg and is currently developing a hotel there for VIP guests of the Federal Republic. This work has necessitated the partial clearing of the summit of the Petersberg for the construction of a heliport.

At the same time, all areas which could possibly be the scene of an assassination attempt on any of the Federal Republic's VIP guests are being closed off in the interests of security.

The site which we were able to inspect on the slopes of the Petersberg bore no resemblance to a normally managed forest site.

It can be expected to be periodically closed to the public, with a new type of environmental damage, namely overflying by helicopters.

One compensatory measure has been the creation of an integrated nature reserve over an area of some 15 hectares.

4.2 Body responsible for administration

In reality, apart from the Petersberg, administration of the range is in the hands of two bodies.

These are the VVS with its special rights and more political function, and the Forest Department with more technical responsibilities.

5. ROAD AND RAIL INFRASTRUCTURE

5.1 Roads

The range is currently crossed by a network of eight roads.

The absence of a link between the B42 Ramersdorf interchange and the A3 motorway means that traffic on the existing routes, principally route (5) Koenigswinter-Ittenbach, the only access to the A3 north of Ittenbach, is extremely heavy.

The motorway link is still planned, and if realised would relieve the pressure on a number of cross-country roads, so considerably reducing daily traffic jams and the attendant side effects.

It is clear that the route across the Siebengebirge, if constructed, will have to go underground in order to preserve the integrity of the nature reserve, which would not survive the construction of another cutting.

Obviously careful attention needs to be given to the siting of the tunnel exit so as to minimise all kinds of difficulties, and the ecological and botanical value of the forest environment will have to be respected.

5.2 Railways

A new high-speed train line is planned.

For obvious reasons this route, from Cologne to Frankfurt, needs to pass as close as possible to Bonn.

Two main routes are being studied, one following a narrow and mountainous corridor along the left bank of the Rhine, the other on the right bank of the Rhine via Siegburg and Limburg-Rhine/Main, with a number of variants, including two (variants 0 and 1) which impinge on the Siebengebirge Reserve.

Those responsible for the Reserve are profoundly concerned about these two routes, since both would abut on to the divide already opened up by the A3, thus further separating the eastern section of the range from the central section.

They are also alarmed about route 1 passing through Bonn Central Station and rejoining route 0 via the north of the Petersberg.

High-speed trains create serious visual and noise disturbances as well as quite noticeable shock waves at both the entrance and the exit of tunnels.

Consequently, route 2, which follows the left bank of the Rhine, would be the best for this site.

The presence of a motorway with its access roads, together with cross-country routes, plus a high-speed railway, would create intolerable conditions for a reserve of this kind.

6. DAY-TO-DAY MANAGEMENT OF THE ENVIRONMENT

6.1 Forest management

Mix of species - long-term objective.

- Conifers

The long-term objective is gradually to replace the conifers present in the reserve with native broadleaved trees (principally beech) appropriate to the environment, with the ratios being brought down initially to 25.75% in favour of broadleaved trees.

This is a valid objective in general, but the case for the lay-term and complete elimination of conifers in a reserve with a Category C Diploma is open to question. Judiciously planted conifers add greatly to the beauty of the landscape, adding another shade to the spectrum of colours, although of course there is no place for monoculture spruce plantations. The mix should be achieved gradually, by individual trees on small stands, aiming at 25.75%; there is no reason why the proportion should fall below this level.

It remains to be seen whether the framework law currently under revision will accept this compromise.

- Wild cherry

It was noted that a large number of wild cherry trees have been introduced over a wide area. These form part of the natural flora, but the seeds are dispersed principally by fruit-eating animals, which enables them to take root mainly on forest edges or in slow-growing clearings. They never grow naturally in large stands and are very rarely present in beech woods.

Here too it is necessary to assist nature in its work without allowing too many of these trees to grow in the wrong places, resulting in a mass of white at blossom time.

- Poplars

Poplars were introduced by some individuals around the 1960s, but the species does not occur naturally in the range, and has no place there. The natural plant mix in this region is alder and beechwood with willow and here and there a few aspens.

- Planting methods

Planting in straight lines is to be discouraged, again for the sake of the landscape; trees must be planted so as to obtain irregular lines, particularly near paths used by the public.

Finally, clean cutting of trees would make forestry work less noticeable to the public, and less likely to be criticised, except in the case of traditional forestry techniques (coppicing and pollarding) (RAMBAU).

- Natural regeneration

The feasibility of natural regeneration is being tested in certain enclosures, and if it is successful, it should be followed up.

AREAS SUBJECT TO POLLARDING AND COPPICING

With a view to maintaining the typical forestry techniques of the last century, and in accordance with the recommendations of the expert who reported in 1985, a few parcels of woodland have been set aside for coppicing and pollarding. This experiment will only be useful if applied to considerably larger areas, so as to eliminate the currently excessive "forest edge" effects. The parcels in question are 379D and 376B.

6.2 Fauna

The large wild fauna consist essentially of roe deer and wild boar, with occasional red deer entering the reserve, though these are eliminated as the range is not classified as a (red deer) area.

Although the presence of wild boar creates no problems for the reserve, the same is not true of roe deer whose numbers in some places jeopardise the balance of the flora, necessitating the creation of unsightly enclosures.

A considerable increase in the hunting quota in certain sections of the range would make it possible to counter this problem; an alternative is culling, which would overcome the problem completely.

There is much to be said for keeping red deer out of the reserve. On the other hand the creation of nesting places for mallard in disused quarries does not further the primary objectives of the reserve. If animal species settle of their own accord in appropriate places, that is another matter, but the nesting places in the case in point (Weilberg) are artificial and unjustified.

7. PUBLIC RECEPTION AND INFORMATION POLICY

Since the reserve was set up, every effort has been made to give the public the best possible reception. For example, numerous shelters and viewpoints were set up, as well as tables and benches and of course explanatory notices and direction signs.

The current tourist pressure, in particular from certain groups which do not treat such amenities properly, has prompted the management to reduce the number of shelters, becoming too expensive to maintain.

Purchase of Drachenburg Castle

The recent purchase by the Land of Drachenburg Castle with the aim of managing it as part of the Reserve opens up new possibilities for public information.

The managers of the Reserve envisage a large-scale permanent exhibition in the entrance lodge.

Educational trail and arboretum

Close to the Stockerhof forester's lodge, a particularly well preserved example of local architecture, an educational trail is being created in four sections featuring firstly various techniques for the use of wood in constructing enclosures, secondly the various rocks present in the range, thirdly the different types of forest, and finally, the most important section, an arboretum containing (in a rather restricted area) various varieties of indigenous and exotic trees.

It seems a pity that this tool of popular education is not more widely used for visits organised by the VVS.

Restoration of castles

The restoration of the Loewenburg ruins adds another element to the wealth of the reserve. Protection of the architectural heritage (eg the Stoeckerhof forester's lodge) goes hand in hand with preserving the diversity of the landscape. On the other hand, vines have been reintroduced on the southern slopes of the Drachenburg insensitively, totally disfiguring the landscape; it would have been possible to do this in a more thoughtful way taking account of the old low walls which are still visible.

8. SAFETY PROBLEMS IN INTEGRATED NATURE RESERVES

Under local case law the local forester bears civil liability for accidents to third parties caused by the accidental fall of dead trees or branches in his area of the forest.

The administration cannot allow its officials to run this kind of risk, and recommends that they cut off all dry branches and fell dangerous trees principally along routes used by the public.

This is understandable, but illogical if the intention is that tree populations should be allowed to grow naturally. Legislation should therefore put an end to this ambiguity so as to enable the public to walk in these reserves without exposing individual foresters in charge of particular areas to the risk of legal proceedings.

9. HEALTH OF THE FOREST: Mapping of biotopes

The time chosen for making the expert report was not ideal for assessing the phenomenon of acid rain.

We observed that some populations of spruce showed yellowish colouring.

According to the local forestry service, all the trees in the area come into category 2 of the "DEFORPA" classification.

We were also told that freshly felled beech trees tended to blacken very quickly, although it was not possible to say why.

In our view, reserves such as the Siebengebirge should be utilised for carrying out in-depth research of this nature.

It may be noted that in the course of forest management operations the whole of the state-owned part of the forest (Staatswald) has been mapped in detail.

Similar mapping of the whole range is to be recommended.

10. MOST RECENT WORK

In recent years, those managing the forest have endeavoured to rehabilitate the wetlands - on the whole successfully, with the wetlands now home to numerous amphibians. Work has recently been carried out to bring the River Ennert, which was canalised underground when the area was subject to industrial exploitation, to the surface again, but has not yet been weathered, so that its appearance is thoroughly artificial, the banks being bare and much steeper than they would be naturally.

CONCLUSION

At the time of writing, we have not yet received the maps of tree species which we requested from the local forestry service, and we also await details on the exact health situation of the forest.

Nevertheless, from our inspection, sadly marred by the weather, it has been possible to conclude that the reserve as a whole meets the requirements for a Category C Diploma.

We therefore propose that the committee renew the Category C Diploma for a further five years and make the recommendations set out below.

We nevertheless reserve the right to modify these recommendations in the light of additional information still to be supplied.

RECOMMENDATIONS

In view of the continuing threat to the reserve from the building of motorways, and recently also from the high-speed train project, we urge that every effort be made to maintain the integrity of the site.

We call for action to reduce the disturbances caused by internal road traffic between Koenigswinter and Ittenbach.

We propose that the areas subject to coppicing and pollarding be expanded so as to allow them to develop fully.

We suggest that not too many wild cherry trees should be introduced within populations of other trees, but that their planting should take account of their natural distribution.

We propose that every effort be made to avoid planting in monotonous straight lines.

We echo the concern of the previous expert regarding the threat posed by the large number of game animals to the use of natural regeneration techniques.

We suggest that spruce should not be eliminated altogether but should be retained in the interests of the landscape.

We reiterate that poplar trees should be eliminated and that it is essential for all unwooded areas to be maintained.

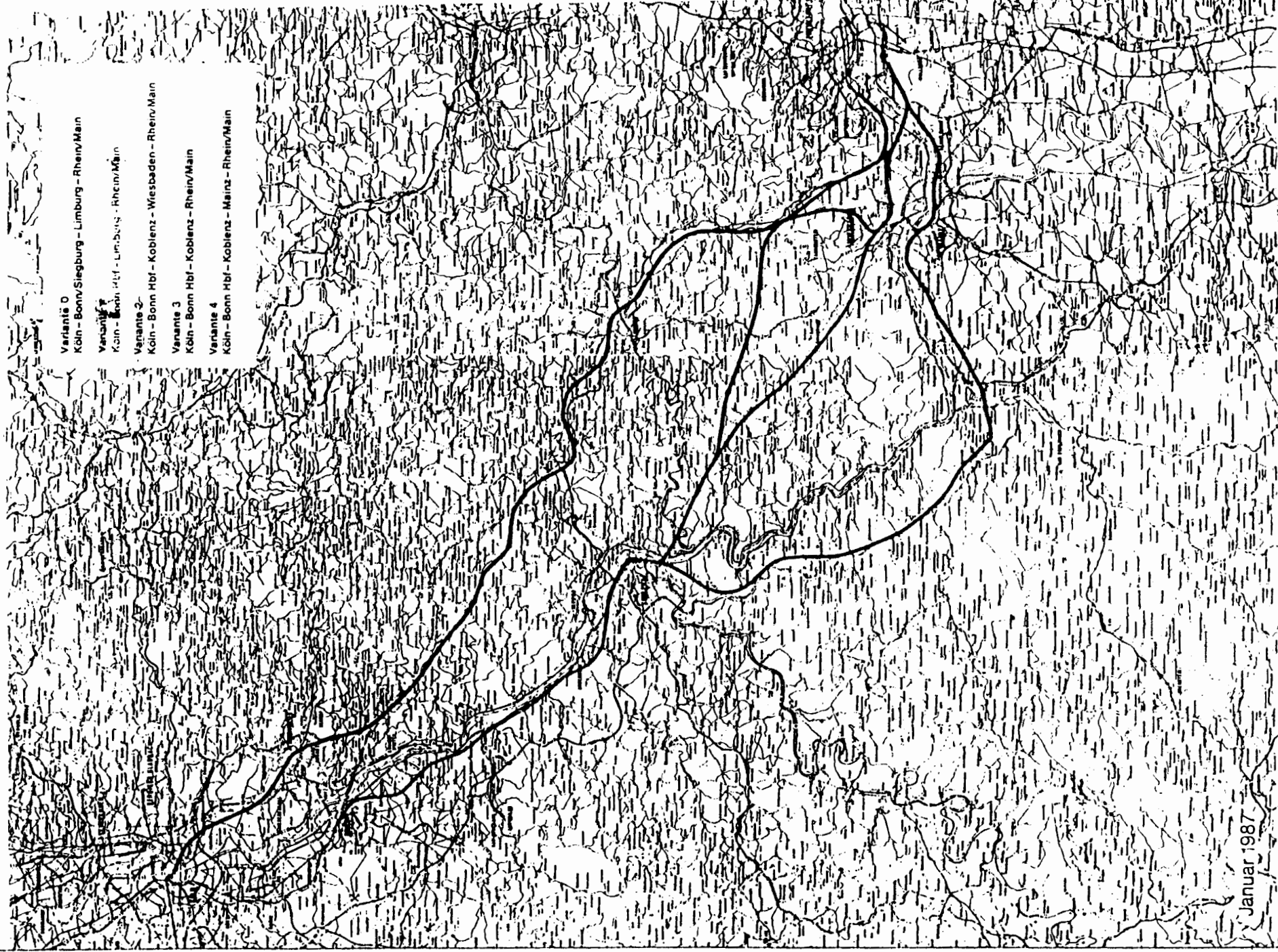
If the area under vines is extended, account should be taken of the historic structure of vine growing with terraces being preserved when still useable.

Lastly, we believe that logging must remain a feature of the reserve, where it has a long-standing tradition, guaranteeing the diversity and health of tree populations.



Neubaustrecke Köln - Rhein/Main

Großräumige Alternativen



Variante 0
Köln - Bonn/Siegburg - Limburg - Rhein/Main

Variante 1
Köln - Bonn Hbf - Limburg - Rhein/Main

Variante 2
Köln - Bonn Hbf - Koblenz - Wiesbaden - Rhein/Main

Variante 3
Köln - Bonn Hbf - Koblenz - Rhein/Main

Variante 4
Köln - Bonn Hbf - Koblenz - Mainz - Rhein/Main



COUNCIL OF EUROPE COMMITTEE OF MINISTERS

RESOLUTION (86) 12

ON THE RENEWAL OF THE EUROPEAN DIPLOMA AWARDED TO THE SIEBENGEbirGE NATURE RESERVE (FEDERAL REPUBLIC OF GERMANY)

*(Adopted by the Committee of Ministers on 19 June 1986
at the 398th meeting of the Ministers' Deputies)*

The Committee of Ministers, under the terms of Article 15.a of the Statute of the Council of Europe,

Having regard to Resolution (65) 6 instituting the European Diploma ;

Having regard to Resolution (71) 21 awarding the European Diploma to the Siebengebirge Nature Reserve ;

Having regard to the proposals of the European Committee for the Conservation of Nature and Natural Resources (CDSN),

Renews the European Diploma awarded to the Siebengebirge Nature Reserve in Category C until 21 March 1991 ;

Attaches to the award the following recommendations :

1. Natural forests of ecological value should be preserved, in particular the Nonnenstromberg and the few pockets of ancient woodlands, and they should be protected from all forms of exploitation ;
2. The percentage of near-natural plantations should be increased, in particular of deciduous trees, and no exotic species should be planted ;
3. A few pockets should be subject to coppicing and should not be exploited as timber ;
4. There should be no extension to the network of forest roadways ;
5. No authorisation should be given for the construction of a summer toboggan run or any other project likely to result in the serious impairment of any part of the site.