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

Group of Specialists on Protected Areas  
(PE-S-ZP)

1994

APPLICATION FROM THE

TEBERDA NATIONAL RESERVE  
(Russia)

for the European Diploma

Appraisal Report

presented by

Mr P HUNKELER  
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## **I. Appraisal**

by

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### **1. Introduction**

The government of Russia has presented the application from the Teberda National Reserve for the European Diploma.

At its meeting in February in 1993, the Group of specialists on protected areas of the Council of Europe agreed that this application was worth considering. It acknowledged the reserve's European interest and decided to have an on-the-spot appraisal carried out.

The on-the-spot appraisal was conducted from 18 to 20 July 1993. The expert was accompanied by Mr Jean Pierre Ribaut of the Council of Europe Secretariat.

The visit provided an opportunity to encounter Mr Dzhapar S. Salpagarov, Director of the reserve, a number of wardens, the scientific staff, a sizeable staff delegation and, very briefly, some local government representatives.

Mr Amirkhan M Amirkhanov, Deputy Minister for the protection of the environment and natural resources, was present throughout our assignment; so was Mrs Eugenia A. Parnasova of the Department responsible for the management of nature reserves.

The visit was organised perfectly, and we wish to express our sincerest thanks to the many people who helped to make our assignment so fruitful. Special thanks are due to Mr Amirkhanov who gave us the benefit of his excellent knowledge of wildlife botany, to the Director of the Reserve and his assistants for their kindness and their warm welcome, and to Mrs Parnasova, an attentive interpreter and an excellent organiser.

Most of the headings used in this report are taken from the official European Diploma application form.

### **2. Body responsible for management**

Management of the reserve is entrusted to its Director who is responsible to the Ministry for the protection of the environment and natural resources of the Russian Federation.

3. Type of area

Strict nature reserve.

4. Geographical location

The reserve is located in the Republic of Karatchevo-Cherkessia. It occupies the upper valley of the Teberda river on the northern side of the Great Caucasus. There is a separate site (Arkhyz) in the Kizgich canyon. Altitudes range from 1260 to 4047 metres. 95% of the reserve territory is more than 2000 metres above sea level. Average temperatures are -7°C in January and 22.7°C in July. Annual rainfall is approximately 700 mm, and there are no drought periods. The central co-ordinates are: 43°30'N, 41°45'E.

5. Characteristics and scientific interest

5.1 Geology and geomorphology

All the rocks are precambrian (granite, gneiss, amphibolites and schists). There are moraines and fluvio-glacial or alluvial deposits on some valley floors. The southern boundary of the reserve follows the ridge of the Great Caucasus.

5.2 Hydrology

The principal river, the Teberda, is joined by several tributaries. Some hundred mountain lakes of all sizes are scattered throughout the reserve. The Arkhyz site is situated in the Kizgich canyon.

5.3 Vegetation and flora

From the valley floor to approximately 2400 metres the forests are extremely diversified, with spruce, beech, pine (15 different facies are discernable), birch and alder. Lignious species include Abies nordmanniana, Fagus orientalis, Pinus Kochiana, Betula litwinowii, Carpinus caucasica. Some of the trees, notably Abies and Picea, grow to impressive heights, especially in the sizeable and still unspoilt forests protected by the reserve since 1936. These interesting forests harbour some very ancient trees and some fine examples of the stages of forest regeneration.

Marshlands are numerous: they include one very large area in the Klukhor valley.

The higher zones feature meadows and alpine grasslands which harbour numerous spectacular or rare species such as Bromus variegatis, Lilium monadelphum, Paeonia caucasica, P. Wittmanniana, Rhododendron ponticum, and Primula renifolia (endemic to the reserve).

A number of species-rich hay meadows are preserved in the lower parts of several valleys.

The reserve provides a habitat for sizeable populations of numerous large animals: Canis lupus, Ursus arctos, Lutra lutra, Felis lynx, Capra sibirica, Rupricapra rupricapra caucasica, Cervus elaphus marail, Sus scrofa and Bison bonasus (reintroduced in the Kizgich canyon).

Bird species include Gypaetus barbatus, Gyps fulvus, Aquila chrysaetos, Tetraogallus mlokosiewiczii and T. caucasicus.

The reptiles include Vipera ursini, and among the insects, Carabus caucasicus, Rosalia alpina, Parnassius appollo, P. nordmanni, P. mnesmosyne, Erebia melancholica and Polymattus terberdinus are the most noteworthy.

#### 5.5 Agriculture and forestry

All commercial forestry came to an end in 1936 when the reserve was established. Even before the reserve came into existence, there were a number of practically unspoilt woodlands.

Farming is limited to small-scale animal husbandry in the immediate proximity of the wardens' houses which are scattered about the reserve. A number of clearly demarcated meadows are still mown once a year. The reserve's managers decide which areas shall be cut on which dates and with what equipment. All the hay is used to feed the wardens' cattle.

High altitude grazing is no longer practised.

#### 5.6 Human occupation and cultural heritage

A former silk route is said to have passed close to the reserve. The region has had a rich and eventful history.

### 6. European interest justifying the application

The following features of the Teberda reserve are those which make it a site of European, not to mention international, interest:

- Habitat diversity and quality  
Few mountain habitats are as diversified or have been protected for so long. The Caucasus lies at the crossroads of numerous influences and harbours species of local, eastern, arctic and Mediterranean origin as well as vestiges of the glacial period.
- Species-richness and the occurrence of numerous rare species  
The flora comprises 1260 species, 235 of which are endemic to the

Caucasus. The fauna comprises several rare or vulnerable large mammal, bird and insect species.

- Imposing landscapes  
With peaks rising to over 4000 metres, numerous glaciers, impressive waterfalls, mountain lakes, wild rivers and vegetation diversity, the site is one of exceptional landscape beauty.

## 7. Land tenure

The entire reserve is state-owned (Ministry for the protection of the environment and natural resources).

## 8. Protection scheme

The reserve was established in 1936. Its protection is subject to the regulations governing national reserves in the Russian federation.

## 9. Management

### 9.1 Zones

A distinction is made between:

- the reserve in the strict sense, covering 84,996 hectares (including the Arkhyz area, which is separate);
- the development areas of the Teberda and Dombai conurbations;
- the Dausky national refuge, which protects the reserve on the North-East side;
- A transitional zone of uncertain status providing what amounts to a very wide buffer zone which benefits from the information and environmental education activities pursued within the reserve itself.

A second "refuge" is to be established as a regional initiative. It will cover the area in between the two parts of the reserve.

In addition, a scheme establish a national park covering the whole of the southern part of the Republic of Karatechevo-Cherkessia is under review. This should make it possible both to safeguard the local natural assets and to encourage tourism.

### 9.2 Responsibilities

The reserve's Director is responsible for its management.



### 9.3 Personnel

In addition to the Director, there are several assistant directors with responsibility for scientific research, administration, security and other matters. The reserve also has a sizeable scientific team of its own.

### 9.4 Budget

The available resources cover the basic needs of the reserve which makes part of its livelihood from livestock, crops, greenhouses, garages, workshops, a hostel, etc. Limited resources do nothing to simplify day-to-day administration and scientific research.

### 9.5 Management of the reserve

Management of the reserve is largely left to nature. The only improvements, apart from the visitor facilities (see paragraph 9.5.4) are a network of footpaths for the wardens and a few access tracks for the use in the event of forest fires. The warden's main duty is to provide regular scientific surveillance and combat poaching.

#### 9.5.2 Fauna

The numbers of large mammals are counted regularly. Apart from the reintroduction of bison in the Arkys area, there has been no intervention.

#### 9.5.3 Agriculture and animal husbandry

The wardens are allowed to graze their cattle in the areas around their living quarters. Haymaking is practised under strict supervision in a series of valley-floor fields.

The only traces of former pastoral use are a few footpaths and, here and there, the flora typically associated with cattle shelters.

#### 9.5.4 Tourism

Most of the reserve is closed to tourism. Three valleys are accessible, but only for groups with guides. Authorisation must be obtained in advance (it is free of charge). Private cars have to remain at Teberda at the entrance to the reserve; from here, a bus is available to take visitors to Dombai, where they can be accommodated in hotels.

Tourist facilities are installed at two points in the reserve itself:

Outside Dombai, ski lifts and chair lifts built in the early 1960s take visitors or skiers up to 3,000 metres. In summer, these facilities operate only on Sundays. Their impact can be regarded as moderate: the installations themselves are

comparatively small and only limited use is made of them. The deep snow covering explains why the impact of the ski slopes (which do not alter the landscape to any great extent) is virtually invisible in the summer. More damage is caused by the tracks designed for the maintenance of the pylons and their anchoring structures. The terrain is somewhat unstable and erosion is frequent.

The facilities are old, and great efforts are required to keep them in working order. There are more and more problems in this respect. There are no plans to extend them (several studies have shown that the terrain is not suitable), but rather to move them to a more appropriate site outside the reserve.

In the Alibek valley there is a sizeable encampment for climbers with two small ski tows of very simple design. Although much used until recent years, the camp has had fewer visitors partly because of change of status which has deprived the climbers' associations of a large measure of state support, and partly because of increased transport and equipment costs. The management team of the reserve is considering taking over some of the accommodation blocks for its own use.

#### 9.5.5 Information and education

In the museum located in the reserve headquarters, there are numerous slide presentations showing the main animal species.

The main fabric of a much larger museum has been completed. The funds are not available at present for finishing and equipping the building but talks are under way to resolve the situation.

The guides are trained by the staff of the reserve.

A People's Academy of the Republic of Karachevo-Cherkessia has been in existence since 1987. Run by the staff of the reserve and with its support, this academy deals actively with problems of environmental protection throughout the Republic. It alerts the leaders of industry and the general public to problems of pollution and publishes information and recommendations on matters relating to ecology, the use of natural resources and health.

#### 9.5.6 Scientific research

Scientific research began as soon as the reserve was established in the 1930s. It has been pursued regularly with only one interruption during the war.

The major research subjects include geomorphology (there is a map to the scale of 1:50,000), the history of glaciations, the snow cover, climate, mountain lakes, flora and fauna inventories, the vegetation of the meadows and alpine grasslands, forests and marshes.



Inventories exist for the vascular plants (1280 species), mosses (300 species) and lichens (90 species). A herbarium of 6500 species has been compiled. There is a 1:25,000 vegetation map for the Arkhys area. All the different types of forest have been described. Sample plots are kept under regular observation, especially in the areas of virtually virgin forest.

From data obtained on meadows and grasslands, recommendations have been formulated on the use of the Alpine biocoenosis in the Northern Caucasus.

Work has been going on for a long time in the reserve to develop suitable methods of growing and reproducing ginseng (outside the protected area).

This research is carried out partly by the staff of the reserve and partly in co-operation with various Russian universities.

#### 10. Conclusions

On the basis of the information obtained and the on-the-spot inquiry, we suggest that the European Diploma, category A, be awarded to the Teberda national reserve.

In view of the quality of the site and its virtually absolute protection, category A would seem to be the most appropriate. Clearly, however, the existing tourist facilities must on no account be expanded, but should instead be minimised, as stated in the definition of category A. This should be a precondition of the award of the Diploma.

With regard to education and information, there should be a recommendation giving particular encouragement to the extension of activities already being undertaken.

A further recommendation is that the resources necessary for the reserve's minimum operation be made available in the medium term.

The European Diploma should therefore be awarded with the following condition:

- that the tourism facilities located near Dombai in the protected area and the climbers' encampment and ski tows located in the Alibek valley be neither extended nor developed;

and with the following recommendations:

- information and education activities should be stepped up as far as possible; one suggestion is that the new museum at Teberda be completed;

- everything should be done to ensure that the resources necessary for maintaining and, if possible, improving the operation of the reserve are made available.

11. References

An. Flora of the Teberda Reserve (vascular Plants). Transactions of the Teberda Reserve XIII. Stavropol Publishing House, Stavropol, 1991. (In Russian).

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Salpagarov, D.S. et al. Red Book of the Karachai-Cherkess Republic. Rare and disappearing species of fauna and flora. Stavropol Printing House. Stavropol, 1988. (In Russian).

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## II. Comments by the Secretariat General

The Secretariat can endorse all of the expert's conclusions, but would simply make the following remarks.

Here, as in the Oka reserve, there is an astonishing contrast between the extraordinary richness and density of the natural environment and the biological diversity on the one hand and, on the other, the shortage of resources: no fax machine or photocopying facilities for example.

Here too, the reserve's essential objective, in addition to conserving the natural heritage, is research; and the research programmes are both numerous and diversified.

One project which the Secretariat wishes particularly to encourage is the completion of the new "nature museum", the main fabric of which already exists and for which 200 million roubles are still needed. It is to be hoped that this sum can be rapidly found, perhaps in the form of a gift from a West European country in accordance with the recommendations of the Lucerne Conference - for it is a project of immense interest. The museum's design is innovative in more than one way, being resolutely directed towards education and training. The museum should, in addition, not only show and demonstrate the aims of the reserve but be in a sense a mouthpiece of all the reserves of the Russian Federation. If the funds can be found rapidly, construction work could be completed by 1995 and the museum inaugurated in the context of Nature Conservation Year.

With regard to the ski lift at Dombai, the only blot on the whole tapestry of landscapes of outstanding natural beauty, the impression gained by the Secretariat was that the facilities now in place - which carry few passengers - are in a poor state of repair and could gradually be removed from service altogether.

**III. Draft Resolution (94) ...**

on the award of the European Diploma to the Teberda National Reserve (Russian Federation).

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

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

Having regard to the proposals of the Steering Committee for Conservation and Management of the Environment and Natural Habitats (CDPE);

Having noted the agreement of the government of Russia;

After having deliberated,

Solemnly awards the European Diploma, category A, in accordance with the Regulations for the European Diploma (Resolution (91) 16), to the Teberda National Reserve;

Places the aforesaid area under the patronage of the Council of Europe until ... 1999.

**Attaches the following conditions to the award:**

1. that to the tourism facilities near Dombai in the protected area, and the climbers' encampment and ski tows located in the Alibek valley be neither extended nor developed;
2. that the practice of dropping skiers by helicopter continue to be prohibited;
3. that any measures of regionalisation or privatisation be such as to have no adverse effect on the reserve's present status of protection.

**Makes the following recommendations:**

1. information and education activities should be stepped up as far as possible, one suggestion being that the new museum at Teberda be completed;
2. everything should be done to ensure that the resources necessary for maintaining and, if possible, improving the reserve's operation are made available.