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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)***

Strasbourg, 1 - 4 February 1993

Teberdinsky National Reserve

***Application for the European Diploma
presented by the Russian Government***

THE TEBERDINSKY NATIONAL RESERVE

Description

Country: Russia, Republic of Karachaevo-Cherkessia

Name of the area: Northern Caucasus

Body responsible for its management: Ministry of Ecology and Natural Resources of the Russian Federation

Name and address: Teberdinsky national reserve

357192, Republic of Karachaevo-Cherkessia, Teberda, Baduyskaya, 2

Area: 84996 ha

1. Type of area:

Typical high mountain area, 95% of the reserve territory is located at a height over 2000 m above sea level, heights ranging from 1260 to 4047 m. Two areas of the relief are distinguished: high mountain and medium mountain ones.

2. Description of geographical location and/or sketch or outline on a map (scale 1: 50,000 or thereabouts):

The reserve is located at a northern slope of the Great Caucasus and occupies the upper valley of the Teberda River, in a transition zone between the Central and North-Western Caucasus. A separate site is situated in the Kizgich canyon with the river of the same name which is the tributary of the Bolshoy Zelenchuk River. Coordinates: 43°22' - 43°42'N, 41°27' - 41°58'E.

3. Characteristics and scientific, aesthetic, cultural or recreational value justifying conservation:

Preservation and study of mountain-forest and mountain-meadow ecosystems of the Western Caucasus. Scientific character: Studying the natural behaviour of the processes in the natural complexes of various height zones in the eastern part of the North-Western Caucasus, revealing the effects of anthropogenic factors, especially regulated tourism, on reserve ecosystems, developing measures of their protection and restoration.

The reserve is of great nature-protective value, and is noted for considerable aesthetic resources. The Teberdinsky reserve was originally established (1935) to preserve recreational conditions of Teberda and to preserve adjacent forest massives having both recreation-climatic and also great water- and soil-protective value. The water accumulated and preserved in the forests annually irrigates 200 thous. ha of arid Stavropol steppes.

Due to the established regime, the reserve assumes the aspect of natural mountain landscapes, the number of valuable animal species notably increasing (*Lyrurus mlokosiewizi* Facz, *Tetraogallus caucasicus* Pall. - 3-4 times, bear - 1.5-2 times). The number of *Capra caucasica* Guld has stabilized.

Pasturage-induced soil bogging has terminated, the upper forest boundary has elevated, rare species of flora and fauna included in the Red Book of Russia have been developing successfully.

The Teberdinsky reserve also occupies a special place among Russian reserves due to the existence of regulated tourism which historically appeared and developed simultaneously with the reserve. Tourists can see the beautiful landscapes of the reserve: age-old fir-tree and pine forests, picturesque alpine and subalpine meadows, mountain peaks of the Main Caucasus ridge, glaciers, waterfalls, high mountain lakes.

Taking into account the unique nature of the reserve complex, the state of its protection, high level of scientific research, intensive publishing activity, ecological education, a suggestion was submitted to the Bureau of the International Coordinating Council under UNESCO Program "Man and Biosphere" to give the Teberdinsky reserve the status of biosphere one.

4. European interest justifying the application:

Complicated high mountain relief of the Teberdinsky reserve accounts for the extreme diversity of natural conditions and wonderful richness of flora. 1260 plant species grow in the reserve, 235 being endemics of Caucasus, and one species - *Primula renifolia* Voloj - grows only in the territory of the reserve. The peculiarity of local plant communities lies in the fact that, along with typically Caucasian species, they include representatives of the northern forest and even Arctic flora, Mediterranean and Preasian, steppe, desert elements, relicts of the tertiary period.

Vertebrate fauna: 49 mammals, 170 birds, 7 reptiles, 4 amphibians, 3 fish.

Insects are diverse and numerous, butterflies being especially notable: *Papilio machaon* L., *Iphiclidides podalirius* L., *Parnassius apollo* L. (strictly protected species), *Parnassius mnemosyne* L., etc.

The Teberdinsky reserve is a reservation for a number of rare species of flora and fauna. 13 plant species growing in the reserve are included in the Red Book of Russia: 6 species of Orchidaceae, 4 species

of Poaceae, *Crocus vallicola* Herb., *Colchicum speciosum* Stev. and *Paeonia caucasica*. Far East ginseng is being cultivated in a special nursery garden.

Aurochs (*Bos bonasus bonasus* L. and *B. bonasus caucasicus*), the biggest of the European wild animals, has been reacclimatized in the reserve. At present the number of herd amounts to 50 head.

Rare bird species are protected over the reserve territory: *Tetraogallus caucasicus* Pall., *Lyrurus mlokosiwizi* Tacz., *Cypaetus barbatus*, *Aquila chrysaetos homeyeri*, *Gyps fulvus fulvus*.

An ornithological group of the Northern Caucasus has been working on the basis of the reserve. The reserve is a coordinating centre for the studies of fauna, ecology and bird migration in the Northern Caucasian region.

5. Ownership title:

State property.

6. Protection scheme:

The Teberdinsky reserve carries out its activity in compliance with the requirements to the reserve in Russia stipulated in the Regulations of the state natural reserves in the Russian Federation approved in the Decree of the Russian Government No.48 of 18 December 1991. Protection regime is determined by the Individual Regulations of the reserve, as well as instructional letters of the Russian Ministry of Ecology. An inspection for reserve protection was established and is acting to provide the set-up regime.

7. Planning and management plan:

The central estate of the reserve is situated in Teberda town. The museum of nature, open-air cages with wild animals are offered to the attention of tourists and sightseers. An excursion area in Dombai and its suburbs is also established in the reserve. 700 thous. people annually visit this area. Excursion routes and a rope-way are offered to them in Dombai.

The reserve is an initiator of an ecological centre in the region and A.N. Formozov People's Academy of ecology and nature use.

8. References to published descriptions:

Reserved Teberda. Stavropol, 1986 (in Russian).

The Teberdinsky reserve. N.N. Polivanova, Cherkessk, 1989 (in Russian).

Collected photographs "Teberdinsky reserve".

Teberda State Reserve

Additional material

The geographical location

The northern border of the reserve passes along the Mukhu and Djamagat rivers; the southern border - along the Main Caucasus Mountain Range, from peak Klukhor-Bat1 in the east to Djalovtchata in the south-west. The watershed mountain range between the Teberda and Daut rivers is the eastern border, and the watershed between the Teberda and Boljshaja Marka rivers is the western border. Furthermore, there is an individual site in Arkhyz, whose northern border passes along the right-side bank of the Arkhyz river from the place where the Arkhyz comes together with the Psyj river to the confluence with the Kizgich river, then it passes along the right-side bank of the B. Zelentchik river up to the place where it receives the Linevoy stream. The eastern border passes from the place where the Linevoy stream falls into the B. Zelentchik, upstream the Linevoy till its sources, then to island Bezymyannoe, across the stream to island Rybnoje. Then along the eastern bank of island Rybnoje up to an altitude 2 843.6 m. Then up to the peak of Morg-Syrty mountain of 3 141.5 m over the same mountain range till the mark 2 794.3 m. Then southward along the upper forest border to the place of Kizgich up to the mark 300.3 m at the mountain range Ujum. Then along the mountain range Ujum over marks 3 077.6, 2 902, 2 967.5 till the border with the Main Caucasus Mountain Range. Then along the mountain range Chagat-Chat, over marks 3 512; 4 325; 3 637.8; 2 718; 72 845.9 downward along the ravine up to the confluence of Arkhyz and Psyj rivers.

Over the recreational territory of Teberda State Natural Reserve it is allowed:

1. Trip to the excursion region of Dombai in public transport with a special pass. Maximum permissible load - 60 buses a day.
2. Pass of tourists, excursionists, mountain-climbers over specially developed routes confirmed by the Ministry of Ecology of Russian Federation.
3. Mountain skiing in the Mussa-Achitara mountain and Alibek glade. The maximum permissible ecological load on the mountain is not more than 500 persons a day.

Each group is escorted by an instructor who is responsible for passing the route and visitors behaviour. The reserve cannot be entered freely. The visitors get special pass where the route they should follow is indicated.

There are 5 big hotels in the recreational zone (from 300 to 600 beds). In the preserve zone 13 Kordon-houses are situated.

The central building of the reserve is situated in Teberda-town, Karachayevo-Cherkesskaya Republic, Badukskaya Str., 2.

The borders of the Dautskiy Sanctuary

The northern and western borders pass along the valley of the Kuban river, then along the Makhar river to the Main Caucasus Mountain Range (the southern border). The western border of the sanctuary passes along the western and northern borders of the reserve (Dautskiy watershed), then along the Djamagat river until the site, where it falls to the Teberda river, then along the valley of the Teberda river up to the village Novaya Teberda.

- In 1990, 1991 700,000 people visited the reserve annually, within the 6 months of 1992 there were 100,000 visitors.

- The reserve is guarded by 47 people.

- The centralized financing of the reserve by the Ministry for the Ecology and Nature Resources made:

- 726,000 rubl. in 1991

- 6 bln. rubl. in 1992

In 1991 the reserve received 100,000 rubl. at the expense of economic activity.

I. FAUNA AND FLORA ACCORDING TO HABITATS

1. Mountain forests

a) flora

Fagus orientalis Lipsky
Quercus robur L.
Carpinus caucasica Grosch.
Pinus Kochiana Klotzsch ex C. Koch
Abies nordmanniana (Stev.) Spach.
Betula litwinowii Doluch.
Alnus incana (L.) Moench.

b) fauna

Apodemus sylvaticus L.
Sus scrofa L.
Cervus elaphus maral Ogilby
Ursus arctos meridionalis Midd.
Canis lupus L.
Martes foina Erxl.
Martes martes L.

2. Alpine meadows

a) flora

Festuca woronowii Hack
Bromus variegatus Bleb.
Calamagrostis arundinaceae (L.) Roth
Rhododendron caucasicum Pall.
Pulsatilla aurea (Somm. et Levier) Juz.
Gentiana oschtenica (Kushn.) Woronow
Anemonastrum fasciculatum (L.) Holub.
Anemonastrum speciosum (Adam ex G. Pritz) Galuschko
Campanula biebersteiniana Roem. et Schult

b) fauna

Microtus majori Thom.
Microtus (Chionomys) gud Sat.
Capra caucasica Guld.
Rupicapra rupicapra caucasica Ljd.
Mustela erminea L.

Lyrurus mlokosieviczii Tacz.
Tetraogallus caucasicus Pallas
Aquila chrysaetos L.
Gypaetus barbatus L.

II. SPECIES OF ESPECIAL VALUE FOR CONSERVATION

Endangeround species.

Disapearing fauna and flora enlisted in Red Data Book

1. Flora

a) paramount vascular

Celastraceae

Euonymus nana Bieb.

Colchicaceae

Colchicum speciosum Stev.

Iridaceae

Crocus vallicola Herb.

Liliaceae

Lilium Kesselringianum Mischz.

Orchidaceae

Cephalanthera longifolia (L.) Fritsch

C. rubra (L.) Rich.

Dactylorhiza sanasunitensis (Fleischm.) Soo

D. triphylla (C. Koch) Czer.

Epipogium aphyllum (F. - W. Schmidt) Sw.

Orchis coriophora L.

O. mascula (L.) L.

O. militaris L.

O. picta Loisel.

O. ustulata L.

Paeoniaceae

Paeonia caucasica (Schipcz.) Schipcz.

P. wittmanniana Hartwiss. et Lindl.

Poaceae

Elytrigia stipifolia (Czern. ex Nevski) Nevski

Festuca sammieri Litardiere

Hordelymus europaeus (L.) Harz.

Stipa pennata L.

S. pulcherrima C. Koch

Primulaceae

Primula renifolia Volg.

Solanaceae

Atropa caucasica Kreyer

Taxaceae

Taxus baccata L.

b) Lichenes

Lobaria pulmonaria (L.) Hoffm.

Lobaria amplissima (Scop.) Forss.

Usnea florida (L.) Wigg.

c) Mycota

Sparassia crispa (Fr.) Fr.

2. Vertebrals

a) birds

Aquila chrysaetos homeyeri Severtzov

Gypaetus barbatus aureus Hablizl.

Gyps fulvus fulvus Hablizl.

Falco peregrinus brookei Sharpe.

Neophron perenopterus perenopterus L.

Aegyptus monachus L.

Lyrurus mlokosiewiczii Tacz.

Sitta krueperi Pelz.

b) mammals

Bos bonasus bonasus L. x *B. bonasus caucasicus* Turkin et Satunin

Lutra lutra meridionalis Osnev

Nyctalus lasiopterus Schreber

Pipistrellus pipistrellus Schreber

3. Invertebrals

a) beetles

Carabus caucasicus Adams

Rosalia alpina (L.)

b) Neuroptera

Ascalaphus macaronius Scopoli

c) butterflies

Phassus schamyl Christoph.
Manduca atropos L.
Celerio vespertilio Esp.
Callimorpha quadripunctaria Poda
Callimorpha dominula L.
Catocala sponsa L.
Catocala fraxini L.
Papilio machaon L.
Iphiclides podalirius L.
Parnassius apollo (L.)
Parnassius mnemosyne (L.)
Parnassius nordmanni Men.
Polyommatus daphnis (Den. et Schiff.)

d) Hymenoptera

Xylocopa valsa Gerst.

III. ENDANGROUD SPECIES IN NATIONAL OR REGIONAL SCALE

1. Flora

Poaceae

Stipa caucasica Schmalh.

Liliaceae

Lilium monadelphum Bleb.

Corylaceae

Corylus colurna L.

Betulaceae

Betula raddeana Trautv.

Rosaceae

Sorbus subfusca (Ledeb.) Boiss.

Laurocerasus officinalis L.

Comarum palustre L.

Anacardiaceae

Rhus coriaria L.

Asulfoliaceae

Ilex colchica Pojark.

Aceraceae

Acer hyrcanum Fisch. et Mey.

Ericaceae

Rhododendron ponticum L.

Menyanthaceae

Menyanthes trifoliata L.

2. Vertebrals

a) birds

Tetraogallus caucasicus Pall.

Alectoris graeca caucasica Suschk.

Bubo bubo interpositus Rothsch. et Hart.

Aegolius funereus caucasicus But.

Phoenicurus erythrogaster Guld.

Carduelis flavirostris brevirostris Moore

Carpodacus rubicilla Guld.

b) mammals

Mustela lutreola caucasica Nov.

Felis silvestris silvestris Schreb.

Felis linx L.

Cervus elaphus maral Ogilb.

Rupicapra rupicapra caucasica Lydek.

Capra caucasica Guld.

3. Invertebrals

Butterflys

Erebia melancholica Herr. -Schaff.

Polymnatus teberdinus Shel.

Saturnia pyri Schiff.

THE SCHEME MAP
Of the zones of TEBERDINSKY BIOSPHERE STATE RESERVE

