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# CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND NATURAL HABITATS

# Group of Specialists on the European Diploma of Protected Areas 24 March 2014, Strasbourg

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# APPLICATION VASHLOVANI PROTECTED AREAS GEORGIA

Document prepared by Tamar Kvantaliani, Agency for Protected Areas of Georgia



**Council of Europe** 

**European Diploma** 

**Information form for Candidate Sites** 

Site Code (to be given by the Council of Europe)				

# 1. Site identification

# 1.1.Site name

Vashlovani Protected Areas - ვაშლოვანის დაცული ტერიტორიები

1.2. Country	Geo	orgia						
1.3. Date candidature	2	0	1	4	0	2	2	8
1.4. Site information compilation date	2	0	1	4	0	2	2	7
	Y	Y	Y	Y	M	M	D	D

# 1.5.Addresses: administrative authorities

National Authority	Regional Authority	Local Authority
Name: Agency of	Name:	Name
Protected Areas	Address:	Address:
Address:	Tel.:	Tel.:
Tel.: 2 75 38 89	Fax:	Fax:
Fax. : 2 75 23 53	E-mail:	E-mail:
E-mail: info@apa.gov.ge		

#### 1.6. Addresses: site authorities

Site Manager	Site Information Centre	Council of Europe Contact
Name: Merab	Name:	Name: Khatuna
Pirosmanishvili	Vashlovani Protected	Kokuashvili
Address:	Areas administration	Address:
Dedoplistskaro.	Address:	Dedoplistskaro.Shiraki
Rustaveli St.#1	Dedoplistskaro.	St.65
Tel.: <b>577101850</b>	Baratashvili St.#5	Tel.: <b>577101849</b>
Fax:	Tel.:	Fax:
E-mail:	Fax:	E-mail:
M.pirosmanishvili@yahoo.	E-mail:	khatunakokuashvili@
com	vpadirection@yahoo.com	yahoo.com

#### 1.7 Summary description

Vashlovani Protected areas consist of a tessellated pattern of natural undisturbed landscapes and habitats together with areas that have been under human influence of various degrees for centuries and thus forming a cultural landscape with a majority of secondary formation. The most natural and well preserved formations can be found in the areulebi habitats, with juniperus and juniperus/ Pistacia mutica formations being the most prominent the steep and dynamically eroding slopes of the Areulebi show various formations of rock xerophytes in totally undisturbed condition.

Also Pistacia mutica formations on the steppe and shrub habitats in are good natural conditions.

#### 1.8. European interest justifying the application

Vashlovani Protected Areas and especially Vashlovani reserve is the living environment and shelter of many animals (bear, swine, wolf, fox, jackal, rabbit, badger, chukar) including critically endangered and rare secies (striped hyena, lynx, otter, snake eagle, eurasian black vulture, griffon vulture, black stork, mediterranean turtle, ect) precipices massifs of Vashlovani National Park is the living place ob big birds of pray for here is the vital environment for their survival.

Biodiversity is characterized by high endemism and rarity represented by 4 endemic species *Pyrus sakhokiana, torularia eldarica, golatella edarica, campanula kachetica.*Species of Georgian's "Red Book' are *pistacia mutica, ciconia nigra, iris iberica, tulipa eichler, paeonia maiko, wild quince, wild wine, wild walnet tree, barberis iberica, Georgian oak*, add more IUCN, red data book of Georgia.

#### 1.9. Selection methodology

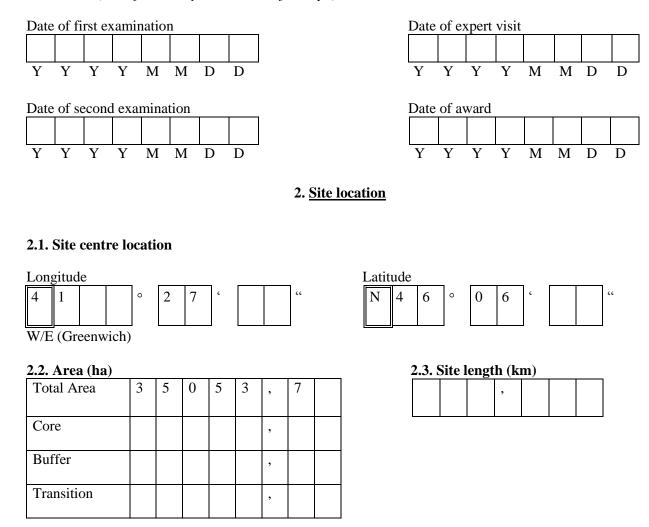
Criteria for Diploma have been sent to Protected Area Administrations, which have management plan. Based on internal selection, Vashlovani Protected Areas got highest scores and was selected as the candidate for submission.

#### 1.10. Main aim or motivation

The original vegetation formations of the protected areas represent a unique genetic treasure. The genetic ancestors of many plants cultivated in eastern Georgia are found in the protected areas: grape (Vitis vinifera), walnut (Juglans regia), quince (Cydonia oblonga), pear (Pyrus sachokiana), mulberry (Morus spp.), wild oat (Avena sativa).

This is the main motivation why the Protected Areas are protected.

#### **1.11. Dates** (to be filled in by the Council of Europe)



#### 2.4. Altitude (m)

1 5 0 2 6 0 0	
	0

#### 2.5. Administrative region

Region name	% c	ove	r
Deoplistskaro District	7	,	2
Marine area not covered by the terrestrial part			

#### 3. Natural heritage

#### 3.1. General abiotic description (Geomorphology, geology and hydrogeology)

The relief of the protected areas and the surrounding territory is formed from neogene and sedimentary rocks of quaternary period. Surface limestone appears at the Artsivis Kheoba Natural Monument. The tectonics of the region is characterized by narrow anticlines and general expanded sloping directions of Caucasus, which are separated from each other by faults. Among the morpho-structural forms the following are significant: eroded valleys, river terraces, surfaces, narrow ravines, alesilebi, pseudo-karsts, mud volcanoes, denudation surfaces, etc. Dry climatic caused the specific forms of relief. One of the protected areas' most remarkable geological features is the Takhti-Tepha mud-volcano Natural Monument. The volcano is located on the crest of a ridge. On top of the hillock there is a single, round mud crater between 3.5 and 4 metres in diameter. The crater and the small sized breathing holes around it are permanently active. Mud, oil and gas spill out from the breathing holes, the ejected mud sometimes merging in one flow and streaming down into the canyon.

The region of Vashlovani Protected Area is the driest and most waterless territory in Georgia. The main hydrological body on the protected areas is the River Alazani; the River Lekistskali (Mlahsetskali) is a comparatively small river. These rivers are characterised with abounding in water all year round. On the territory of the protected areas, not a single river of significant size merges with the Alazani. Alazani valley, storing huge amount of ground water, plays a crucial role for the Alazani arterial basin. The small salty springs at the beginning of Pantishara gorge and at the end of Vashlovani are drying. Small salty springs at the beginning of Pantishara gorge and at the end of Vashlovani dry on the place. The river bads of Mamachai, Pantishara gorge, Datvi gorge, Alfadara, Goristskali (Takhistskali), Batsilo gorge, Kumuro gorge are dry for most time of the year; water flows there only during rains, and becomes more mudflows.

#### 3.2. Habitats

Communities of *Artemisia* (*Artemisia lerchianae*) - *Artemisia* communities are the main formation in the semi-desert (desert) plants in Georgia. *Artemisia lerchianae* is xerophytic and halophytic shrub-grass plant of high ecological amplitude. Because of relatively small degree of soil salinity in semi-desert landscapes of the protected areas *Artemisia* communities are most common species. They are distributed on the plain areas, as well as on slopes and hills. *Artemisia* communities is mostly distributed in the light and heavy loamy, gray-brown and gray-dark-brown soils with low and medium salinity.

Salsola nodulosa communities is a leaf succulent half shrub. It is xerophyte, halophyt plant associated with gypsous substrate and is characterised for loamy and loamy-sandy slopes of foothill of tertiary period.

Foot hill desert and Phrygana-like vegetation landscape – occurs in Pantishara gorge, Kaladara, Komro (Kumuro), Duzdagi, Mijniskure, Usaxelo Mta and in Vashlovani hollow. The area is

characterised by loamy and loamy-sandy hills lacking a real soil layer. The landscape intrazonaly is presented in the areas of arid forest. The following main habitats are defined:

a) Foothill desert habitat – is fragmentarily presented all over the landscape area. The vegetation is mainly presented by communities of *Salsola nodulosa*, *Artemisia lerchianae* and *Gamanthetum pilosusae*. Typical plant species include: *Salsola nodulosa*, *Artemisia lerchiana*, *Gamanthus pilosus*, *Reaumuria alternifolia*, *Stachys fruticulosa*, *Suaeda dendroides*, *Eremopyron orientalis*, *Zygopphyllum fabago*, *Agropyron pectinatum*, *Caccinia raunolfia*, etc.

Arid sparse forest landscape occurs on 100-600 m a.s.l in Vashlovani National Park. It is presented in Eshmaki, Mamachais and Pantisharas gorges, Vashlovani depression, on the ranges of Khalagari, "Didi Chrdili" and "Patara Chrdili"; Khumuros and Bugha square, in Mijnis Kure and Usakhelo mountain, Natlistskali, Takhistskali (Ghoristskali), Alfadari, Chaibulaki and Sarqlisyure gorges.

Pistachio woodland is develops on lower slopes and soft forms of the relief (on wave-like hills and plains, alluvial cones, edges of gorges).

- c.b) The habitats best is preserved on Vashlovani depression. It occur also in Natlistskali and Pantishera gorges, Takhistskali and Alfadara (Ufadara) Gorges, Mijniskure and other areas. The juniper arid sparse forest (*Junipereta*; *J. foetidissimae J. polycarpos*) habitats occur throughout the whole landscape. It covers mainly middle and high areas of the slopes and is developed on the northern slopes with high exposition. Here are presented different plant communities. Typical species are: *Paliurus spina-christi*, *Jasminum frutican*, *Berberis vulgaris*, *Lonicera iberica*, *Cotinus coggygria*. In some communities in the forest understory dominated species is *Caragana grandiflora*.
- e) Maple (Acereta ibericae) habitat is very rare. In small patches it is distributed in the gorges linked

with the River Alazani (e.g. Arfadari gorge). Other species occurring in this habitat: *Paliurus spina-christi*, *Quercus iberica*, *Cotinus coggygria*, *etc*.

Steppes on the protected areas occur in the upper part of the Natlistskali Gorge, Ganomrebi, Chigoetkhevshi, Zilicha and areas of Black Mount. For this landscape gray-brown, black and humus-carbonate soils is typical.

- b) Two types of habitats are identified in the landscape: Botriochloetum steppes and Needle grass steppes:
- b.a) Botriochloetum steppes (*Bothriochloeta ischaemum*) is presented in the protected areas in Vashlovani depression, Nagomrebi, Chighoeltkhevi, Natlistskalis gorge, areas of Shavi Mta, etc. The landscape is fragmentally presented on the terraces of the River Alazani. The biggest patches are remained at Kakliskure (Mijniskure). Small patches are nearby village Sabatlo and mouths of Alfadari and Migniskure gorges.
- b) Flood plain forests are presented by two types of habitats: poplar (*Populeta hybridae*) and stands of oak (*Quercus pedinculiflora*). Poplar is more common, while distribution of oak is very limited.

#### 3.3. Flora

Because of divers natural factors of Vashlovani Protected Areas five ecologically and plant phytoceonologically different xerophytic, hemixerophytes and mesophytic types has been developed in quite narrow hypsometric variability region (from 100 m to 1000 m a.s.l.). These are: desert, semi-desert, steps, arid sparse forest and deciduous forest zones. In addition there are other inta-zone types, such as floodplain forest, rock xerophytes, *paliurus* on foothills and plants characterised for loamy.

Out of 600 plant species recorded in the protected areas 28 species are Caucasus and 5 Georgian endemic species. Out of the Caucasian endemics the following should be mentioned: *Berberis iberica, Pyrus georgica Kuthath.*, *Tulipa eichleri Regel.*, *Iris iberica Steven* and etc. and out of Georgian endemic species, the following need to be highlighted: *Campanula kachetica*, *Onobrychis kachetica Boiss. et Buhse*, *Paeonia tenuifolia* L. *Pyrus sachokiana Kuth. and Sosnowskya amblyonepsis* (Ledeb.) Wadenitz.).

13 woody species listed in "Red List" of Georgia are presented in Vashlovani Protected Areas, among which are: *Acer ibericum* M. Bieb. ex Willd., *Populus euphratica* Oliv., *Juglans regia* L., *Quercus pedunculiflora* C. Koch, *Pistacia mutica* Fisch & Mey, *Pyrus sachokiana* Kutath., *Juniperus foetidissima* Willd., ect. From the agro-biodiversity point significant species are: *Vitis silvestris* G.G. Gmel., *Cydonia oblonga* Mill., etc.

#### 3.4. Fauna

The territory, distinguished by its rich vegetation cover, represents a good habitat for many animals. There are 62 species of mammals, 135 bird species, 30 reptile species, 20 fish species, and four species of amphibians. Number of invertebrates is unknown. Eight species of large carnivores live in the protected areas. The fauna is also rich in bats (*Chiroptera*), of which *Myotis emarginatus, Rhinolophus hipposideros* Bechtein., *Rhinolophus mehelyi* are noteworthy. Among Caucasian endemic species, there are *Sorex raddei*, *Bufo viridis*, *Bufo bufo*, *Hyla arborea*, *Rana ridibunda*, *Barbus mursa* etc. In the whole Caucasus region *Ablephorus pannonicus* can be found only on the territory of the protected areas. There are also endemic species of Iran-Anatolium *-Mesocricetus brandti*.

35 animal species listed in the Red List of Georgia are presented on the territory of the protected area, among them 10 species of mammals, 20 species of birds and 4 species of reptiles. Among rare and threatened species there are: *Testudo graeca, Ciconia nigra, Tadorna feruginea, Neophron percnopterus, Haliaeetus albicilla , Falco peregrinus, Aegypius monachus, Tetrax tetrax, Rhinolophus mehelyi, Ursus arctos, Panthera pardus tuliana; Gazella subgutturosa subgutturosa.* 

#### 3.5. Landscape

Vashlovani Protected Areas are significant with diversity of landscapes. Landscape biodiversity is caused by change of climate zones (from the South to the North), diversity of relief-soil conditions, different geological origin, etc. Existence of different landscapes on not that large territories of protected areas, and often, their mosaic alternation, make protected areas very attractive and interesting to tourists and scientists.

On the territory of Vashlovani Protected areas are presented mainly the following landscapes: plain semi-deserts (desert), foothill deserts and phrygana-like plants, arid sparse forest, steppes, shibliak type hemi xerophytes shrubs, foothill deciduous forest, lowland deciduous forest and rocky-limestone ecosystems. Besides described landscape types, in small territories are presented also *Allium rubelum* higrofile, "areulebi" and "volcanic" types of landscapes.

Zone regularity is noticed in the distribution of the landscapes from the South to the North: 1. Arid forest landscape, 2. Steppes landscape, 3. Foothill deciduous forest landscape. Other types of landscapes are included in the above mentioned landscape areas in an intra-zonal way. Their development depends on specific of relief-soil conditions and geological origin.

### 4. Cultural heritage and socio-economic context

#### 4.1 Cultural heritage

1. Vashlovani Protected Areas is situated in a historical area - Qiziki; this place has been known by this name since the fifteen century, whereas in the older sources (I c. BC - I c. AD according to Strabon) the region is referred to as Kambechovani. This part is characterized by many cultural-historical monuments, including a dome-type temple of Ascension (IX c.) near Ozaani, Khornabouji fortress (e.m.a.), monasteries of Bodbe and Khirsa, Bodbe cave complex, Ninotsminda ensemble (VI c.), Tamari tower and St. Elya's church. Khornabuji castle, dated VI century, is situated in Dedoplistskaro, ruins of 5 000 year old Kambisena archeological monument, archeological centre in village Tavtskaro and Pirosmani museum in village Mirzaani

(were many paintings of Pirosmany are exhibited) (Historical-cultural monuments situated on the protected area, Annex 11).

- 2. On the territory of the protected areas there is an untouched heritage of biodiversity. Desert and semi desert natural sites have been assumed as special places for spiritual renewal. There are two monastery complexes, one temple, and many caves for monks. Ancient pistacia trees (400-500 year old) are very special: naturally old oil coming from its timber is used as incense in church service; it has a special fragrance and quality. In former times, incense collected in such an environment was used by monks and ecclesiastics.
- 3. The major part of the protected areas, apart from their exceptional natural value, has traces of ancient culture. Vashlovani is very rich in this respect: there are ancient sites of human civilization, such as ruins of towns and villages belonging to ancient era (the town of Khoranta, the villages of Ufadara and Kaladara), also churches (Black mountain monastery) and fortified buildings of later periods (Khornabuji fortress-touwn, Choeti fortress, guard stations in Pasntishara and Mijnis Kure gorges). A significant part of the Silk Road passes through the territory of the protected area (Natlistsklis gorge, Kumuro, Eldari lowland). It should be noted that most of the territory has not been studied and from this point of view the possibility of some interesting future discoveries is very high.
- 4. Shells of the easily noticeable molluscs maintained in sediments of bare roks. These molluscs are the oldest inhabitants of Vashlovani, from the time when the area was covered by sea.
- 5. In Datvi gorge on Vashlovani Protected Areas, fossilized bone of elephant were discovered (the biggest is a back bone of 87 cm, dated at 2 000 000 years old).

#### 4.2 Socio-economic context

- 1. The natural resources of Dedoplistskaro region are oil and limestone. From industrial enterprises should be noted JSC "Artsivi Gorge", which can produce about half a million tons of limestone a year. The limestone is also produced by the "Rustavcementi" and "Kaltsiti." Exploration and extraction of oil reserves are carried out by Frontera "Eastern Georgia".
- 2. The main direction of the economy of the Dedoplistskaro Municipality is agriculture, including field-crop cultivation and livestock-breeding. From field-crop cultivation most developed is grain cultivation (wheat, oats, and barley), sunflower, small amount of corn manufacturing and processing; among livestock -breeding cattle breeding and milk processing. From existing enterprises are: mini milk processing, mini oil distillery, small productivity mills, 15 schools, a regional hospital and 4 ambulance station, 3 kindergartens, 1 house of culture, about 10 hostels, the railway connecting Ltd; the urban and rural population is about 30 000, Dedoplistskaro has a population of 15,000 people. The agricultural land area in the municipality is 47 040 ha, and annual grains and technical crops are sown.

#### 5. Educational and scientific interest

Eco-education programme carried out by administration is part of its public relations strategy. The programme involves school pupils and teachers, university students and lecturers in eco-educational events. Involvement of local population in eco-educational and environmental events would support protected areas sustainable management. Thus, it is necessary to develop special eco-educational programs for different target groups of different age. The aim of eco-educational programme

- a) share with public importance and role of protected areas for country and also for humans future and from their side support idea of protection of countries natural heritage.
- b) develop high ecological awareness in public;
- c) have high public involvement in order to solve environmental problems;
- d) have support from public in order to improve ecological conditions in the protected areas;
- . Eco-educational program takes into account different types of interpretations in order to fully

understand wildlife and ecosystems, underlines role and importance of protected areas in biodiversity protection. The programme supports educational programmes on nature protection at schools and higher educational institutions, as well as supports distribution of target and interesting information among visitors and local population.

The administration cooperates with educational institutions in support zone. In eco-educational programme are mainly involved school pupils and teachers, university students and lecturers.

. In schools of Dedoplistskaro region events on different ecological problems, such as contamination, etc, are carried out annually.

The administration has all necessary infrastructure and equipments to conduct fruitful ecoeducational and cognitive activities together with educational institutions. In the administration building there is an exhibition hall wish information desks. Eco-educational programme considers conduction of eco-seminars, lessons on the field, eco-games which are developed for different age groups and levels. Presentations are given and documentary films on Georgia's protected areas are shown.

Administration has a potential to increase the number of events and involved people though the cooperation with interested organizations. While planning the eco-educational programme the following should be taken into account: available resources; justification of the programme in terms of its impacts on the long term objectives of the protected areas; alternative means of programme implementation, for example support from partner organisations, such as the Friends' Association of Vashlovani Association, in conduction of some activities, so that with limited resources available to the administration is able to conduct other events.

Publication of booklet, brochures, information leaflets, organisation of meetings with different stakeholders (local self-government, farmers, hunters), etc. Dissemination of information on public involvement in the management of Vashlovani Protected Areas and information on objectives of the protected areas

#### 6. Site description

#### 6.1. Vulnerability

The original vegetation formations of the protected areas represent a unique genetic treasure. The genetic ancestors of many plants cultivated in eastern Georgia are found in the protected areas: grape (*Vitis vinifera*), walnut (*Juglans regia*), quince (*Cydonia oblonga*), pear (*Pyrus sachokiana*), mulberry (*Morus spp.*), wild oat (*Avena sativa*).

#### **6.2. Protection status**

Vashlovani Strict Nature Reserve (10143 ha) and National Park (24610.06 ha) form a contiguous area, the eastern border of which is marked by the River Alazani, which is also the state border with Azerbaijan. The two natural monuments - Artsivis Kheoba (100.4 ha) and Takhti Tepha (9.7 ha) - are located far away from the strict nature reserve and the national park. The Alazani Floodplain (204.4 ha) Natural Monument is situated relatively close to the Vashlovani Strict Nature Reserve and National Park. In total Vashlovani Protected Areas cover 35067.56 ha.

#### 6.3. Ownership

State

#### **6.4. Documentation**

U.N. development Programme "Sustainable management of pasture in Georgia"

#### 7. Site management

#### 7.1. Management plans

1. Protected Areas defined by the Law on "the Creation and Management of Tusheti, Batsara-

Babaneuri, Lagodekhi and Vashlovani Protected Areas" in according with categories provided by the Law on "the System of Protected Areas", were established to fulfill the objectives given below, namely:

- a) Vashlovani Strict Nature Reserve: to maintain nature, natural processes and genetic resources in dynamic and untouched conditions and conduct monitoring, scientific research and educational activities.
- b) Vashlovani National Park: to protect comparatively large ecosystems of national and international importance, distinguished by their natural beauty, for vital and recreational activities.
- c) Alazani Floodplain, Takhti-Tepha and ArtsivisKheoba Natural Monuments: to protect comparatively small unique natural areas of national importance and rare natural and natural-cultural formations.
- 2. The Law on "the Creation and Management of Tusheti, Batsara-Babaneuri, Lagodekhi and Vashlovani Protected Areas" establishes that the main goals for creating of Vashlovani Protected Areas are:
- a) to ensure permanent development of natural processes, protection of the protected areas remarkable in Kakheti for their biological diversity, historical and cultural viewpoint, renewal and a wise use;
- b) to protect, renewal and maintenance of natural ecosystems, landscapes, animals and plants, especially those listed as threatened species in the Red List of Georgia;
- c) to support development of legislation for recreation, ecotourism and farming in the natural, historical and cultural environment in the protected areas;
- d) to ensure protection, renewal and wise use of land, water, animals and plants (including forests) and other natural resources pertaining to the protected areas; creation of favorable conditions for education and scientific research; protection and renewal of historical and cultural landscapes and monuments; protection of the natural bio-ecological regime of water objects and their monitoring.

#### 7.2. Budget and personnel

Total state budget of Vashlovani PAs is 128 318 GEL. The staff consists of 34 persons.

#### 8. Map of the site

#### 8.1. Physical map:

National map number	scale	projection
	Site map – 1:130 000	WGS 84 Utm 38N
	Topo map – 1: 50 000	
Reference to availability of boun	daries in digitised form	

#### 8.2. Map of designated sites described in 6.2

Provide this information on a map with the same characteristics as above.

#### 8.3. Aerial photograph(s) included:

		Yes No		
Number	Area	Subject	Copyright	Date
	L		J	
Number	Place	9. <u>Slides</u> Subject	Copyright	Date
1	27/06/2013	Bugha Square		
2	27/06/2013	Trail to Datviskhevi		
3	20/05/2013	Eagle Gorge		
4	5/08/2013	Usakhelo viewpoint		
5	20/05/2013	Alazani floodplain		
6	5/08/2013	City of Swallows		
7	13/10/2013	Mud Volcano		
8	27/05/2013	Pantishara-Datviskhevi	1	<del></del>

Khornabuji Castle

Annex 1 – Topo map of the site

23/06/2013

Annex 2 – GIS map of the site

Annex 3 – Slides

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#### Appendix 1: Criteria for the award of the European Diploma of Protected Areas

The criteria are in keeping with the various conservation objectives to be met by any protected area eligible for the European Diploma of Protected Areas, together with the protective measures needed for their achievement.

Having regard to the differing protection status of protected areas in Europe, it is necessary to refer to general criteria and specific criteria.

#### General criteria

The following general criteria should be taken into consideration for every area for which an application is submitted.

#### A. European interest

The applicant area must comprise representative elements of the biological, geological and/or landscape heritage which are of exceptional European importance (protection of the biological and/or landscape heritage – scientific, cultural, aesthetic and/or recreational qualities).

These should be, according to the area:

- 1. areas of particular importance for the conservation of biological diversity in Europe. They may comprise:
- remarkable or threatened examples of plant or animal communities, as well as areas inhabited by a large number of species;
- highly representative samples of types of habitats and plant or animal communities constituting typical examples of the various kinds of ecosystem in Europe;
- habitats in a an unfavourable state of conservation;
- habitats of endemic species or species in an unfavourable state of conservation, particularly endangered species;
- breeding grounds of animals protected under the Convention on the Conservation of European
   Wildlife and Natural Habitats (ETS No. 104) and resting and feeding areas for migratory species.
- 2. areas aimed at conserving remarkable natural phenomena or geological or physiographic formations characteristic of the Earth's history. These may include:
- sites or complexes of major importance for the conservation of significant evidence of the Earth's history;
- noteworthy palaeontological sites;
- outstanding examples of geological, geomorphological, volcanic, hydrographic, physiographic or biogeographical phenomena;
- particularly grandiose or spectacular examples of protected natural features such as waterfalls, caves, rock formations, glacial cirques, glaciers.
- 3. areas of particular importance for the conservation of landscape diversity in Europe. Thesemay comprise:

- sites or landscapes of outstanding aesthetic or cultural value or of a spectacular nature;
- complexes conserved as evidence of the history of the countryside or woodlands in Europe;
- country or wooded areas which are cultivated using extensive methods and constitute typicalexamples of European landscapes.

#### B. Protection measures

The area for which and application is submitted must:

- 1. have a legal protection status, by means of an act or decree of the competent authorities certifying that the area is adequately protected;
- 2. be taken into account in regional planning in order to prevent the approval of projects which run counter to the objectives of the area;
- 3. be the subject, if possible, of a zoning, which must indicate the objectives of each sub-division described; the boundaries between the area for which an application is submitted and the surrounding area must be clearly marked on a plan or a geographical map, particularly where there are nearby protected areas with different objectives (as is often the case in a biosphere reserve); failing that, the uses of the land which are authorised should be clearly indicated;
- 4. be the subject of a development and management plan (finalised or in preparation). As management constitutes an important point in judging the application, the various aspects of management will need to be presented in detail and objectively assessed, principally with regard to those entailing more extensive subsequent development;
- 5. be assessed taking into account the impact that the surrounding area has or is likely to have on it;
- 6. have an organisation which provides guarantees concerning staff and financial resources. The latter must be sufficient to ensure management that meets the objectives of the protection area. A staff organisation chart applicable at the time of lodging the application, and a presentation of the budget for the two previous years, will constitute useful information for evaluating the form of management of the applicant area.

#### Specific criteria

#### The specific criteria serve to explain why the area concerned has been given protected status.

One of the two groups of specific criteria should be taken into consideration, as the case may be.

# A. The essential goal of the protected area is to preserve biological and landscape diversity and ecosystems.

The applicant area which meets this goal must also meet the following specific criteria:

- 1. existence of strict regulations on any artificial change in the environment or any biological and geological depredation (no hunting, fishing, picking, cutting or uprooting), with certain possible exceptions for justifiable scientific purposes aimed at controlling or maintaining certain species and/or environments;
- 2. absence of permanent human occupation and of economic activities such as agriculture, forestry, mining, industry and tourism (no development). Certain traditional activities may be authorised for the sole purpose of maintaining the environment. Certain obligations, previous to the award of the Diploma, can be allowed to continue, provided they are localised and controlled and do not interfere with maintaining the biological and landscape diversity of the area. An attempt should be made to minimise or even eliminate them;

- 3. guarantees that the existing human activities and installations in the surrounding area cannot damage the physical and biological integrity of the protected area;
- 4. supervision, arrangements for patrolling by wardens or any other means with the possibility of enforcement, such as the power to report offenders;
- 5. no access for the public unless specially authorised and in any case regulated and/or channelled in a manner appropriate to the habitats;
- 6. presentation, in keeping with the ecological interest of the area, of research and monitoring programmes.
- B. The objective of the protected area is to preserve biological and landscape diversity, together with harmonious and sustainable development of socio-economic and educational functions.

The applicant area which meets this objective must also meet the following specific criteria:

- 1. the type of use of the land must be clearly indicated, especially where agriculture, forestry, tourism, leisure activities, buildings and infrastructures are concerned, as well as the respective owners;
- 2. permanent human occupation and socio-economic activities must be conceived in such a way as to uphold the principles of sustainable development; they must not damage the integrity of the natural and cultural values of the protected area;
- 3. hunting and fishing may be tolerated providing that it is subject to a strict regulation to avoid weakening the animal population;
- 4. there must be adequate supervision, including the possibility of enforcement, in order to prevent damage those aspects specifically protected;
- 5. public access must be authorised and regulated; in certain cases it may be unrestricted. Provision must always be made for reception centres and educational facilities in order to channel the public and thereby avoid damage.

#### Appendix 3: Terms of reference of experts carrying out on-the-spot appraisals

Experts mandated to carry out on-the-spot appraisals of applicant areas shall, in particular, examine the following matters:

I. European interest (to be confirmed)

#### II. Merits and protection system

- 1. The body responsible for administration and management of the area, particularly its attributions, powers, budget and human resources.
- 2. The state of conservation and the effectiveness of existing protective regulations vis-à-vis internal and external threats, particularly those originating in surrounding areas; effects of agriculture, industry, tourism, leisure activities, hunting, fishing, urban development, road building, air traffic, military manoeuvres, etc.; possible need for supplementary protective measures. The existence of appropriate tools to address the new challenges (climatic changes, invasive exotic species, return of large carnivores).
- Zoning.
- 4. Ownership title (effects of possible expropriation).

- 5. Land-use plans, in so far as these affect the area in question.
- 6. Development work launched, under way, or to be launched.
- 7. The management plan for the area.
- 8. Awareness/information/education
- 9. The manner of public access and reception facilities and infrastructures, if any, especially for disabled people.
- 10. Waste management.
- 11. Use of renewable energy systems.
- 12. Any scientific studies needed and activities of research bodies.
- 13. Ecological connectivity with other areas.
- 14. Co-ordination with the other forms of recognition awarded to the area or certification of protected areas.
- 15. Possible membership of other international networks.
- 16. Relationship between the body responsible for the area, local elected representatives, officials in the socio-economic sphere and associations.
- 17. Partnership with public and private parties.