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STEERING COMMITTEE FOR THE CONSERVATION AND MANAGEMENT  
OF THE ENVIRONMENT AND NATURAL HABITATS

Group of Specialists - "Protected areas"  
(PE-S-ZP)

23 - 25 March 1994

Szénás Hills  
(Buda Protected Landscape Area)

*Application for the European Diploma*

presented by:

the Hungarian Government

OTVH Budapesti  
Természetvédelmi Igazgatósága  
National Authority for  
Nature Conservation  
Directory of District  
BUDAPEST

## EUROPEAN DIPLOMA

### Application

Country: Hungary /Pest county/

Name of the area: Szénás hills /Buda Protected Landscape Area  
Body responsible for its management: OTVH Budapesti  
Természetvédelmi Igazgatósága /National Authority for Nature  
Conservation, Directory of District Budapest/

Address: H-1121 BUDAPEST Költő u. 21.

#### 1. Type of area:

1182 hectares strictly protected forest and grassland communities /proposed core area cca. 250 ha/ and 163 hectares protected forest and grassland as buffer zone; total: 1345 ha.

#### 2. Description of geographical location /outline on a map is enclosed/:

The szénás hills /Kis-and Nagyszénás ridges/ are situated in the northwestern part of the Buda mountains belonging to the central chain of mountains in Transdanubia /on the territory of settlements Nagykovács, Solymár, Pilisszentiván, Piliscsaba, Perbál/. the concerned area lies predominantly on Triassic dolomite and in a smaller extent on Dachstein limestone ground, bordered everywhere by tertiary sediments. These sediments occupy also the surrounding basins, and mostly they are covered by quaternary loess and sand layers, or even by recent sand. The original Triassic mountain to be divided into two parts by the main rifts. The border of them is the watershed connecting the Nagyszénás-Kisszénás hills.

Geographical coordinates: northern latitude 47° 36', eastern longitude 18° 52'.

Altitude: at 220-558 m above the sea level.

Mean annual temperature: about 11 C

Mean annual precipitation: 600-700 mm.

#### 3. Characteristics and values justifying conservation:

Everywhere in the world the dolomite mountains contain the highest species density in a given climatic zone, i.e. they are the most important natural genetic resources. In addition, they are

extremely rich in unique endemic and relict species endangered by the natural extinction.

On the basis of the mentioned viewpoints the Szénás hills is one of the most valuable protected areas of Hungary.

The floral richness of the area can be explained by the presence of the most important floral boundary of the Matricum floral district which lies just here. Another cause of the richness is the so called dolomite effect. Related to the specific geomorphology of the dolomite stone. The specific breaking and erosion of this stone forms a very divided surface with steep valleys and ridges of different microclimate. Therefore both the thermophilous and cold-tolerant species can coexist here, and having taken the northern and southern slopes, they could survive in the glacial and interglacial periods by a little removal /within the spreading distance of propagula/ of their populations. These areas are very suitable to preserve many relict and endemic species and communities. In addition, the original absence of forest on the steep dolomite slopes and ridges can help the survival of relicts. The isolated representatives of ancient paleoclimatic ages survive in these barren grasslands, and some of them can be transformed into new species, dolomite endemics. Such a local endemic is the dolomite flax /*Linum dolomiticum*/, which occurs exclusively in the Szénás hills.

The Szénás hills area contain all types and the richest variants of the dolomite vegetation of the Buda mountains, joining them into a specific habitat complex with beech-hornbeam-oak, karst oak forests, grasslands and rock vegetation.

In addition on holocene sand of the foothills at Pilisszentiván, the plain vegetation is in contact with the mountain one.

There has been established a particular biological equilibrium here on the basis of the flora and fauna, that is since the tertiary age, advanced by the fact that the civilisation has left intact the area because of the disadvantageous character of its terrain. Human influences /deforestation, grazing, devastation, plantation of black pine/ have damaged this equilibrium state so much that even reconstruction of it is possible only by human intervention.

#### 4. European interest justifying the application:

The proposed area seems to be unique and specific even at European level both from scientific and educational viewpoints. Importance of the area is proved by its extreme species richness. Number of the higher plants is over 500, including more than 50 protected ones /*Linum dolomiticum*, *Vincetoxicum pannonicum*, *Knautia kitaibelii* ssp. *tomentella*/ . More than 800 species of the Macrolepidoptera are registered in the area and 8 of them are under effect of the Bern Convention. Although the lower flora and fauna is unevenly explored, there has been found 6 extremely rare spiders, one of them is a new species, another one is new for Hungary, and a third one represents the first occurrence of a typical plain species in mountain region.

Coexistence of such different ecological and biogeographical character /boreal.alpine,mediterranean,east-european, continental,steppic/ in such a small territory refers to rare ecological conditions in Central Europe.

#### 5. Ownership title:

Owner of the 1182 hectares of strictly protected area is Hungarian Republic. The area is managed by the Pilis State Park Forest Management. The 163 hectares of protected area is property of the Rozmaring Agricultural Cooperative /under privatization./

#### 6. Protection scheme:

The Szénás hills area is protected since 19th December 1978 as part of the Buda Protected Landscape area by departmental order of the President of the National Authority for Environment and Nature Conservation /number of order:9/1978 OKTH, published in:Tanácsok Közlönye 27. Nr 55./

Conservation management is carried out by the directory of District Budapest /National Authority for Nature Protection/ on the basis of the law decree upon the nature protection Nr. 4/1982.(See Appendix I)

#### 7. Planning and management plan:

Plans for managing of each communities are incorporated into the forestry managing plan. Unfortunately, borders of the forestry plan units often differ from those of the vegetation type units. Therefore it would be important to accomplish the vegetation map of the area and on the basis of it to correct the forestry plan unit borders.

According to plan, cutting and/or thinning of the black pine plantations in the dolomite rock and grass-herb communities is going on since the year 1980.

Planning and carrying out the reconstruction of habitats is in progress with support of the PHARE aid programme.

#### 8. References to published descriptions:

Full bibliography or detailed monography upon the area these is not available yet. The most important references /each in Hungarian/ are as follows:

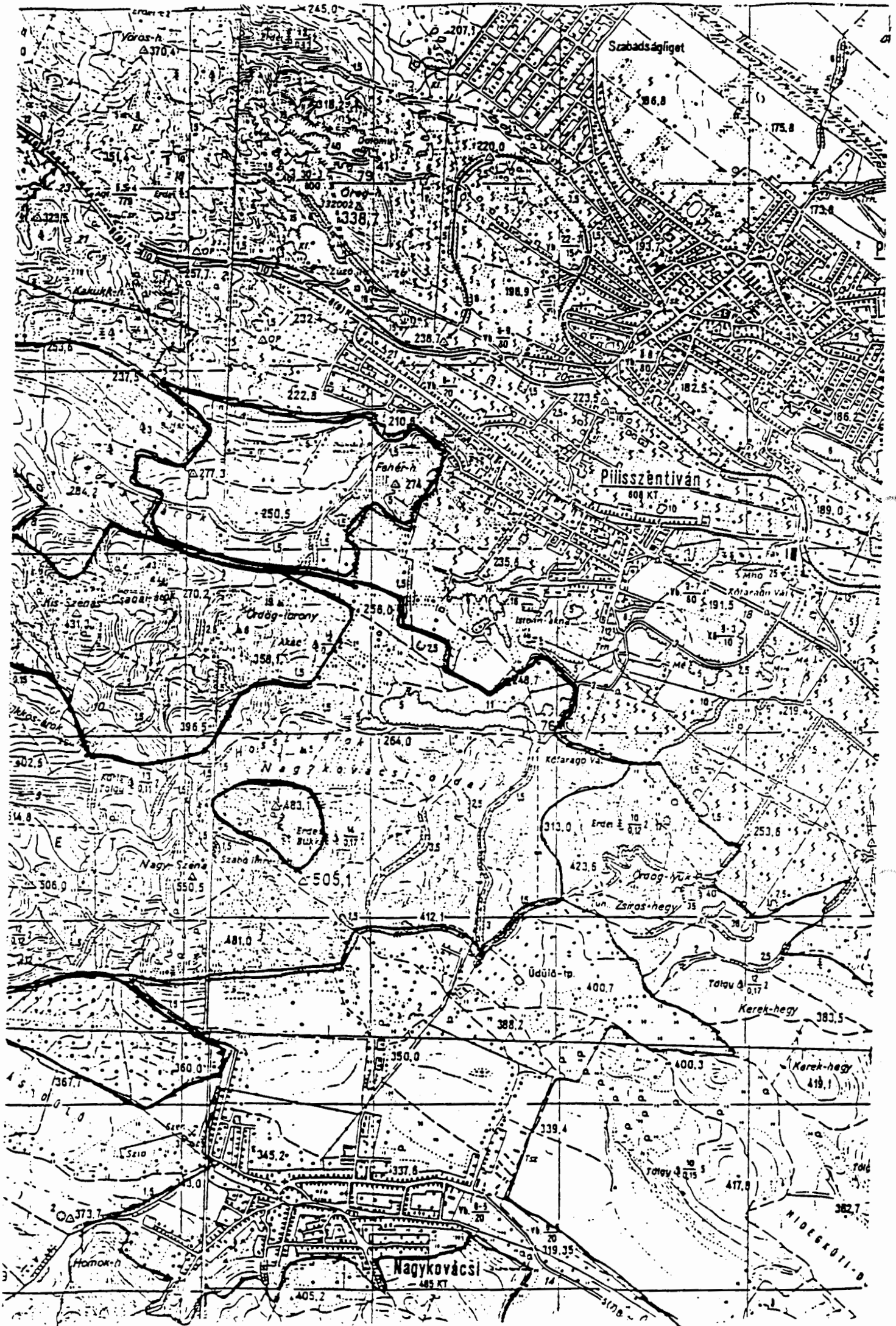
- Borbás V. /1879/:-Budapestnek és környékének növényzete /Flora and Vegetation of Budapest and Its Surrounding./-Egyetemi Nyomda. Budapest.

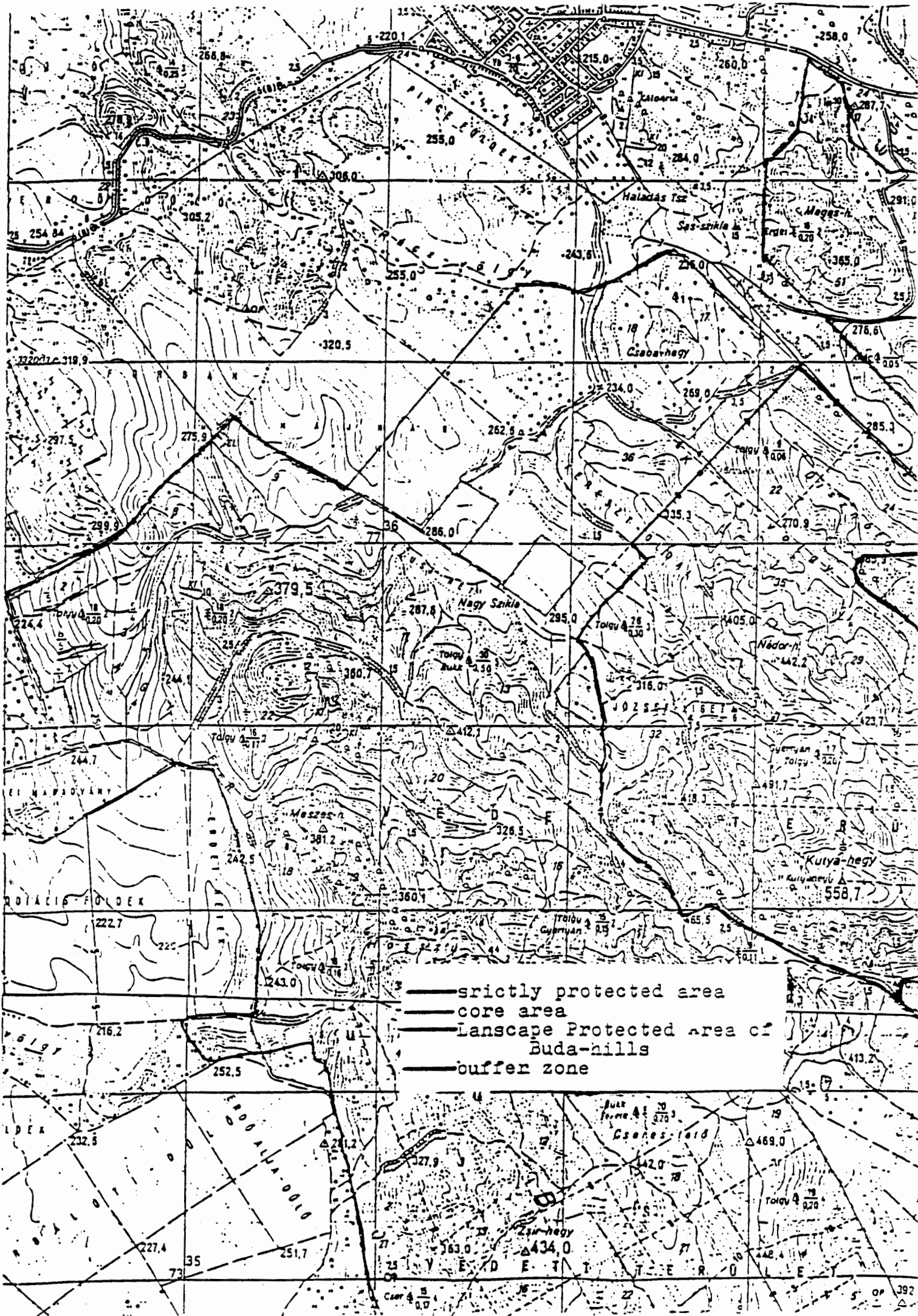
- Cseleji J. /1959/: Mi okozta a Pilis-hegység egyes részeinek elkopárosodását? /What Is the Cause of Barrening of Some Areas in the Pilis Mountains?/-Erdőgazdaság és Faipar 13.2.
- Draskovits R. /1967/: A *Linum dolomiticum* Borb./-Botanikai Közlemények 54.3.
- Pécsi M. ed. /1958/: Budapest természeti képe /Nature History of Budapest/.-Akadémiai Kiadó, Budapest.
- Péntes A. /1942/: Budapest élővilága /Living world of Budapest/.-Magyar Természettudományi Társulat, Budapest.
- Semptey F. /1943/: A Nagykovácsi és Pilisszentiván közt kiemelkedő Szénás-csoport földtani viszonyai /Geomorphology and Geology of the Szénás-group emerging between Nagykovácsi and Pilisszentiván/.-Magyar Állami Földtani Intézet, Budapest.
- Zólyomi B. /1942/: A közép-dunai flóraválasztó és a dolomitjelenség /The Middle-Danubian Floral Boundary and the Dolomite Effect/.-Botanikai Közlemények 39.5.

9. Photographs illustrating typical aspects of the area:

1. View of the mount Nagyszénás from the village Nagykovácsi
2. Black pine plantation on the Zsiros hill
3. Mosaic of karst oak forest and *Stipa*-grass communities related to the climatic and soil conditions on the Kiszénás hill
4. Steep dolomite peaks as refugial habitats of the rare endemic and relict species and communities
5. Dolomite flax /*Linum dolomiticum*/, the exclusive local endemic plant of the area
6. Several years after the elimination of black pine on the experimental plots the elements of the original plant community are re-colonized /*Seseli leucospermum*/

(Photos are available from the Secretariat)





APPENDIX I

R e s o l u t i o n

No. 9/1978. OKTH  
of the President of National Agency for Environment  
Protection and Nature Conservation

on establishing the  
Buda Landscape Conservation Zone

In my power based on Law-decree No.18 of 1961 on nature conservation and Government Decree No. 12/1971. (IV.1.)Korm. on its enforcement I made the following

R e s o l u t i o n

1. Hereby I declare to be protected and assign to be a landscape conservation zone the areas of Buda Mountains lying in the Buda Circle of Pest County as well as in three Districts of Budapest Municipality (*Annex No.1*).

2. The name of the area declared protected is: Buda Landscape Conservation Zone (hereinafter: TK).

3. For the application of Law-decree No.18 of 1961 on nature conservation and Government Decree No. 12/1971. (IV.1.)Korm. on its enforcement the TK is a value of national importance.

4. The TK lies in the Buda Circle of Pest County on the administrative territory of municipalities Budajenő, Budakeszi, Budaörs, Nagykovácsi, Páty, Perbál, Piliscsaba, Pilisszentiván, Solymár, Telki as well as of Districts II, III and XII of Budapest Municipality. The summary of topographical lot numbers and land register data are contained in *Annex No.2*.

5. The TK occupies 10.234,0 hectares.

6. Registration number of TK is 163/TK/78.

7. The functions of the TK are:

a) to protect the characteristic image of the region, its favourable natural features and to preserve its natural values:

- the varying surface forms, rock formations, rock walls, ravine valleys and caves;



- springs and watercourses:
  - rock greens, karstic scrub forests, rock forests, the natural forest and stock types;
  - the natural flora and fauna.
- b) To preserve the culture historical values of the region.
- c) To ensure the undisturbed natural conditions required for scientific research.
- d) Through conserving the natural environment facilitate recreation and experience gathering in the open.
- e) To serve the tourism and scientific education aimed at becoming familiar with the natural and culture historical values.

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9. Basic rules of protection:
- a) Upkeep, management, development and scientific research of the TK should be carried out in a harmonized and planned form.
- b) On the territory of TK no installations should be established or operated, which would disturb or imperil the character of the landscape, the protected vegetation and wildlife as well as the proper functioning of TK.
- c) The geological formations, caves, natural flora and fauna of TK should be preserved.
- d) On the territory of TK economic activities (land-, meadows-, reed- cultivation, forestry, wild keeping, fishery, water management, etc.) and any other activities should be carried out taking into consideration the interests of nature and landscape conservation and without prejudicing those interests.
- e) h) The detailed rules of protection, management and development of TK will be determined by National

Agency for Environment Protection and Nature Conservation (hereinafter: OKTH) in the Regulations of Management (hereinafter: the Regulations) - prepared according to guidelines and detailed rules set out in *Annex No.3*. Until the publication of said Regulations in issues of protection and management the rules set out in the guidelines (*Annex No.3*) are to be applied.

10. Nature conservation management of the TK will be handled by the National Agency for Environment Protection and Nature Conservation. Costs of upkeep and nature conservation management are to be envisaged and allocated in the budget of OTvH.

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The diverse surface forms of the Buda Mountains, the dolomite ridges, ravines, rock formations the flora and fauna rich in rare species represent significant natural values.

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Dr. György Gonda  
president.  
National Agency for Environment Protection  
and Nature Conservation