

# NEGATIVE ANTROPIC EFFECTS THREATENING THE BIODIVERSITY OF THE PROTECTED DENDROLOGICAL PARK OF SACUENI-BIHOR

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**Abstract:** Once again, it is Engelshoffer Sigismund, also known as Ponz the one who sets the foundations of the actual castle park, between 1750-1760. Later on, the territory is inherited by the Stubenbergs, and they enrich the flora with an orangery. The best gardeners and caretakers of the domain are brought from Germany, Silesia and Upper Moravia.

After the Second World War the owner flees, the castle is being sacked, and for a long time languishes emptily. It is in this period, that the state of the park starts to deteriorate gradually. The territory once overgrown by trees diminishes, especially after 1948. It is beginning with this period, that the castle is used for educational purposes, and as a consequence, a part of the eastern territory of the park is being ripped off and transformed into 3 sports-grounds. Also, a restaurant is being established on the Western parts of the park, taking away yet another 0.6 Hektars (approx. 1.5 acres) from the flora.

There has never been a complex guarding system to safe-keep the precious park, and the situation became even worse after the school ceased to function there.

I did my first appraising in 2004, but, sadly, we have no other detailed description of the park from before that. I mannaged to identify 76 kinds of trees and scrubs. Since then, several big, precious and rare trees, like the Fagus silvatica ssp. atropurpurea, the Fraxinus excelsior var. pendula and the Gleditsia triacanthos have dissapeared, being stolen. The only Cercis siliquastrum is dying.

The Dendrological Park has been declared conservation area, but because of a topographic missregistration, officially, the territory is still not being taken in custody by anybody.

Keywords: foundation, decrease of territory, wood stoling, guarding, conservation area

#### **INTRODUCTION**

Considering the territorial settings of the castlepark at Sacueni, it is situated on the left terrace of the ler river.

The laying of the park:

Today, the territory of the park is being divided in two parts :

-one is the actual castle court, which is situated east from the castle

-the other one is the Summer Garden Restaurant, a greenbelt which is under private administration and is situated on the western part of the castle (Fig.1.).

The park is 100-130 metres above the sea level, with a total territory of almost 7 acres.

The western part of the park lies 2.5-3.5 metres above Route 19, and its margins are held by a brick-wall.

The south-western part of the park is margined by the ruined granary, near the building of the Fishing and Hunting Association. Then comes the above mentioned brickwall, and after it, the court of the roman catholic church. part, the brick fence runs along, but is missing on the eastern part of the park. The northern part is once again held by a brick wall. The new wing of the castle is worth mentioning with its pillared ledge, which is practically a terrace, and which, thanks to the level-difference, allows a breathtaking sight over the Ier Valley.

Two pools lie on the territory of the park : a bigger one in the middle of the western side, and a smaller one on the northern terrace. The water of this one was supplied from a griff-shaped fountain.

Characteristics of the habitat

About the typical climate of the area :

-lowest measured temperature: -29.0 °C,

- highest measured temperature : +38.8 °C,

-number of days with the average temperature above  $0 \,^{\circ}\text{C}$  : 333.8,

-number of days with the average temperature above 10  $^{\circ}$ C : 185,

- earliest frost period : October 11-20,

- latest frost period : 11-20,

-average snow thickness/year :70.8 mm

- average rain quantity/year : 635 mm

-average humidity loss due to soil vaporization: 689mm,

After passing the main entrance on the southeastern

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- yearly average temperature : 9.5 °C

A brief history of the park and the castle:

Once again, it is Engelshoffer Sigismund, also known as Ponz the one who sets the foundations of the actual castle park, between 1750-1760.

The image of the landscape is definitely dominated by the high tower of the temple and the earl's castle, which are built on the hillside. Also, the windows of the castle allow a picturesque view over the park and the siksag. The beauty of the landscape is also mentioned in Bunyitai Vince's work about the story of the Egyedi Abbey. He wrote, that one of the Earl's guests once gazed through the window,looking upon the Er's valley and shouted in excitement : 'such a beautiful, majestic view !

Later on, the territory is inherited by the Stubenbergs, and they enrich the flora with an orangery. The best gardeners and caretakers of the domain are brought from Germany, Silesia and Upper Moravia.

After the Second World War the owner flees, the castle is being sacked, and for a long time languishes emptily. It is in this period, that the state of the park along with the castle starts to deteriorate gradually. After 1948 the castle is used for educational purposes, making even more dammage to the park. A part of the eastern territory of the park is being ripped off and transformed into 3 sports-grounds. Also,a restaurant is being established on the Western parts of the park, taking away some other important territories from the flora, letting unknown botanical values parrish into time.

In 2008, the school moves out from the building and this way the castle and the park loses that little attention it had so far.

#### Materials and methods:

The defining of the trees was made on scene, by analizing the buds, leaves, fruits, eventualy flowers, several times, during the different seasons. I took samples of the species which raised questions and analized them thoroughly at home.

I was unable to define several variations of pear, apple and plum, due to the lack of literature.

## **Results:**

Unfortunately, we do not have a contemporary description of the park to rely on, thus i can only present you with the actual facts.

After analizing and concluding all the data, i mannaged to put together a list of 76 species of trees and bushes: Abies alba. Acer campestre, Acer platanoides, Acer pseudoplatanus, Acer tataricum, Aesculus hippocastanum, Ailanthus altissima, Berberis vulgaris, Betula pendula,), Biota orientalis, Broussonetia papyrifera, Buxus sempervirens variegatum, Buxus sempervirens, Campsis radicans, Carpinus betulus, Castanea sativa, Catalpa bignonioides, Celtis occidentalis, Cerasus avium, Cercis siliquastrum, Chamaecyparis lawsoniana, Clematis vitalba, Cotynus coggygria, Crataegus monogyna, Elaeagnus angustifolia, Euonymus europaeus, Fagus sylvatica var. atropurpurea, Ficus carica), Forsithia suspensa, Fraxinus angustifolia ssp. pannonica, Fraxinus excelsior var. pendula, Fraxinus excelsior, Fraxinus ornus, Gleditsia triacanthos, Gymnocladus dioicus, Hedera helix, Juglans nigra, Juglans regia, Juniperus virginiana, Koelreuteria paniculata, Laburnum anagyroides, Ligustrum vulgare, Liliodendron tulipifera, Lycium barbarum, Magnolia kobus, Malus sp. Morus alba, Partenocissus quinquefolia, Physocarpus opulifolius, Pinus nigra, Pinus ponderosa, Pinus sylvestris, Populus alba, Prunus cerasifera, Prunus cerasus,

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Prunus sp. Pyrus sp., Quercus robur, Quercus rubra, Rhamnus catharcticus, Ribes uva-crispa, Robinia pseudacacia, Salix fragilis, Sambucus nigra var. laciniata, Sambucus nigra, Sophora japonica, Spiraea x vanhoutei, Staphyllea pinnata, Syringa vulgaris, Taxus baccata, Tilia cordata. Tilia tomentosa, Ulmus laevis, Ulmus minor.

(Acer campestre - killed or injured exemplares, Gleditsia triacanthos - disappeared species)

Some of the species found here worth further mentioning, due to their aestetic value, size or dendrological importance:

Magnolia kobus: lies on the edge of the old and the new wing of the castle, in the wind-sheltered north –western corner. During springtime, if there is no late freezeing, the beautiful flowers may decorate the nearly 6 metre diametered crown, cheering up the schoolyard.

Sambucus nigra var.laciniata: is situated near the small pool, not far from the water fountain. It is a real botanic rarity, which enriches this hidden corner of the park with its beautiful flowers during Springtime, and the special leaves during the Summer.

Liriodendron tulipifera: it is sited near the fence of the Fishing-Hunting Association, and brings a colorful spot to the park thanks to its size and unusual leaves and flowers.

Buxus sempervirens variegatus: is sited at the entrance of the summer garden, and it is special thanks to the yellow line on the edge of the leaves.

Laburnum anagyroides: during springtime is an ornament of the roman catholic church's court due to its dus yellow flowers.

Campsis radicans: it catches the eye of the visitors with its interesting shape and the red flowers. It is situated in front of the main entrance of the castle, and is being trellised over the entrance of the new wing.

Due to their size, the Taxus baccata, several Quercus robur, Quercus rubra, and a Sophora japonica have special importance in the botanical structure of the park.

Juglans nigra and Quercus rubra are considered

dendrological curiosities, because the lordship of Sacueni was among the first in Transylvania to deploy this species over such big territories. Botanical curiosities are considered also Ficus carica and Broussonetia papyrifera.

### CONCLUSIONS

Today, there can only be found traces of the once so beautiful park, due to territorial mutilation and some other reasons that we mentioned earlier. Besides the sportsground and the summer garden, some dwelling houses were also built on the territory.

There's nobody to take care of the park, or to guard it, for that matter. After the school was moved out from the building, some families with difficult social situation have been moved in, to 'safeguard' the park.

The once so beautiful boxwood hedge alley has overgrown (during the 70's it was used as drilling terrain by the teachers). Some careless hands cut a gate on the southeastern wall, to enable the access of the vehicles which were transporting the firewood for the schhool. This way, they also cut and mutilated the english park which lied all along the wall. Besides these, a playground for children was installed, without paying attention to the damage done to the park.

There is a Yew alley, which stretches from the north-western part of the castle up to the wall. This majestic alley compelles with its size, but unfortunately the smoke coming from the chimney of the restaurant is constantly poisining it. To make more damage to the landscape, during the wintertime, and especially Christmas, greedy and unknowing hands are ripping off the evergreen limbs of the Yew and the Virginian Juniper Not to mention the considerable damages done by the constant ripping of the flowers from the bushes and trees and the picking of the fruits of the fruit-trees.

Since then, several big, precious and rare trees, like the Blood Beech, which after being torn suffered by fungus disease, and the last stub that remained of it was taken away as firewood. The Fraxinus excelsior var. pendula and the Gleditsia triacanthos suffered of the same negligence, and probably so did the Catalpa bignonioides, Tilia cordata, Carpinus betulus,, Cerasus avium and Aesculus hippocastanum. The only Cercis siliquastrum of the area is dying, and burned traces can be found on its log. There is also the problem of the rapid and aggresive overgrowing of the erdei iszalag and the tapadó vadszőlő combined with the natural ageing and dying of the trees.

The ownership over the castle and the park is still to be cleared. The request of the Stubenberg family considering compensation has been rejected, consequently, the case has been taken to the European Court of Human Rights.

The safeguarding problems of the park are still not solved. The Botanic Park has been declared as 'Area protected by Bihor county, declared on national level', but because of a topographic missregistration, officially, the territory is still not being taken in custody by anybody.

Unfortunately, during the years, several species dissapeared without a trace, due to vandalizing or the lack of safeguarding (Fig.2.). The situation is getting worse with each day that passes, and in case the destruction continues at such scale, in a few years there will be no upstanding wittness of the various flora of the park.

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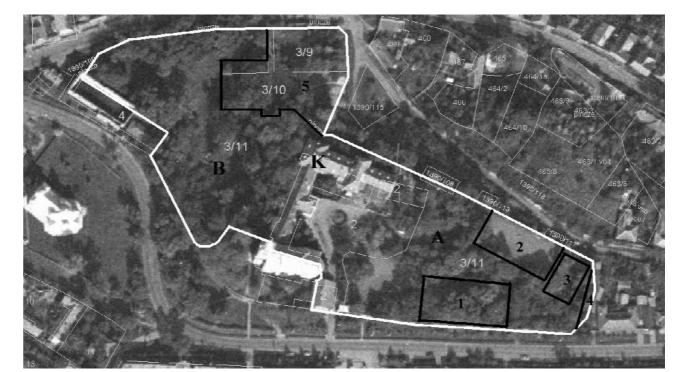


Figure 1. Ortophoto of the dendrological park: K – the castle, A – eastern part of the park, B – western part of the park Districts with changed destination after 1945: 1.,2. handball playing field, 3. basketball playing field, 4. private courtyard, 5. restaurant

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Figure 2. Some dead or killed trees: 1. Tilia cordata, 2. Carpinus betulus, 3. Gleditsia triacanthos, 4. Acer platanoides, 5. Cerasus avium