



¹. Márton TAKÁCS, ². Zoltán MRAVCSIK, ³. Ákos MALATINSZKY

LEGENDARY LIME TREES OF THE CARPATHIAN BASIN

¹⁻³. Szent István University, Faculty of Agricultural and Environmental Sciences,
Department of Nature Conservation and Landscape Ecology, H-2100 Pater K. 1. Gödöllő, HUNGARY

Abstract: There are a lot of interesting, momentous trees in the Carpathian Basin: ornamental trees imported from all over the World, old and great ones, rare or beautiful ones. Among these, probably the most interesting ones are those which preserve memories, traditions and folk legends. These trees, besides preserving legends, deserve recognition due to their size and age as well. Legends and folk customs are nowadays preserved only by old trees in many places. They are the last witnesses of our historical tree cult. The old and great trees are valuable and irreplaceable elements of natural heritage, their listing, studying and protection are essential tasks of nature conservation. The trees which have been presented are good examples of trees surrounded by a great attention. The measurement and documentation (listing) of the unique landscape values is also becoming more popular and even compulsory in some countries. It helps in the process of preservation and publicity. The legends, memories and stories have to be preserved and collected, as if the great trees are gone, these will be the last remains (together with the photos and statistic data).

Keywords: Carpathian Basin, trees, natural heritage, nature conservation

1. INTRODUCTION

How long have the trees been held with high regard? Although we don't know it exactly, it started during the prehistoric times. There are a lot of interesting, momentous trees in the Carpathian Basin: ornamental trees imported from all over the World, old and great ones, rare or beautiful ones. Among these, probably the most interesting ones are those which preserve memories, traditions and folk legends. These trees, besides preserving legends, deserve recognition due to their size and age as well. Legends and folk customs are nowadays preserved only by old trees in many places. They are the last witnesses of our historical tree cult. The old and great trees are valuable and irreplaceable elements of natural heritage, their listing, studying and protection are essential tasks of nature conservation.

2. MATERIALS AND METHODS

References of different disciplines were processed in favour of examining the lime tree (*Tilia* spp.) cult.

The database of PÓSFAI (2005) helped us to start our examination on the greatest lime trees in Hungary. The following specimens were selected based on their size and the legends or memories of local people that make these trees to be momentous: Ötvöskőnyi (S-Hungary), Szőkedencs (S-Hungary), Szabolcsbáka (NE-Hungary), Sopronharpács (NW-Hungary), Márianosztra (N-Hungary), Süttő (N-Hungary) and the alle of Nagycenk (NW-Hungary). We used European sites of Tree of the Year competitions and databases for other legendary lime trees from the Carpathian Basin. During the data gathering we listed the legends of the trees, the noted people and local stories which belong to them, their past and present state, the problems of their conditions and treatments.

We examined trunk perimeter (measuring tape), trunk diameter (according to Forestry Caliper Waldmeister), crown diameter, and height (Clinometer Haglöf) of the trees. The diameter of the trunk was measured at breast height (1,3 m above the ground). After measuring the trunk diameter (two times, d1, d2) and crown radius (four times, r1, r2, r3, r4), we used a simple formula to count the crown diameter:

$$\text{Crown diameter} = \left(\frac{r1 + r2 + r3 + r4}{4} \times 2 \right) + \frac{d1 + d2}{2}$$

The great trunk perimeter often means also great height, and due to this, the instrumental measuring of height is often difficult (e.g. in closed forest, or shrubby areas).

We were looking for our informants personally, they were Dr. Dénes Bartha (Sopron, W-Hungary), József Komári (Szőkedencs), János Czermann (Süttő), Ottó Ivánkóvics (Nagycenk) and Dr. Lajos Kováts (Ötvöskőnyi).

Table 1: Main parameters of the most famous lime trees in the Carpathian Basin (Takács 2014)

Settlement	Perimeter (cm)	Diameter (m)	Diameter of crown (m)	Height (m)	Accessibility	State of health	Legends, curiosity
Szőkedencs ^x , Hungary	1148	4	25	18	4	2	cemetery, mass grave
Bojnice, Slovakia	1090	4	10	11	4	2	King Mathias Corvinus
Ötvöskónyi, Hungary	1057	4	20	18	2	2	King Bela the 4th
Süttő, Hungary	739	2	30	16	4	3	Prince Rákóczi, general János Bottyán
Szabolcsbáka, Hungary	710	2	10	5	2	2	bound for centuries
Sopronhorpács, Hungary	602	2,5	30	20	2	5	Széchenyi family
Márianosztra, Hungary	517	2,5	20	25	3	3	calvary, pilgrimage
Leliceni, Romania	370	1,5	25	15	3	4	place of meetings and decisions
Nagycenk, Hungary	-	-	-	-	5	2	Széchenyi family

^xlow branching

3. RESULTS AND DISCUSSION

3.1. The lime tree cult

„Once upon a time the trees were the residences of the gods...” (PLINIUS 1987).

Before introducing the black locust (*Robinia pseudo-acacia*) in Central Europe, the lime trees had been the most important plants for the bees. It is likely that the southern Slavics named the June month after the lime tree due to its flowering time (lipa=lime tree, lipanj=June) (KONKOLYNE 1997).

People in the ancient times and Middle Ages believed that there are ghosts in the trees.

The lime tree appears in the heraldry as well: its golden leaves are on the helmet of King and Emperor Sigismund of Luxemburg. There was a lime tree leaf also in the former coat of arms of Kiev City.

Folk legends connected (lime) trees to notable persons in the Hungarian history, so we can say that the lime trees play an important role in the „tree-cult” (RAPAICS 1929). We know the history of the old lime tree in Mad (Slovakia) from BÉL (1735): there was an old lime tree at the border of the settlement, and King Mathias Corvinus often took a rest under its crown. The village cut down the tree because the service of the King and his escort was really expensive. Not seeing his favourite tree on his next visit, the king legislated that the citizens of Mad and their descendants would never receive privileges. One of the trees tied to King Mathias Corvinus is still alive in Bojnice (Slovakia). After him, György I. Rakoczi inherited these trees and the legends began with him. He dated his letter from Zborov (Slovakia) writing „Datum sub centum tiliis”, i. e. „Dated under the hundred lime trees.” (RAPAICS 1940).

We know the royal gardens of The Renaissance from OLÁH’S (1568) records. Two trees are recorded with names in the garden of King Mathias Corvinus in Visegrád (Hungary), namely the lime tree and the willow. At the beginning of The Renaissance, the popular arbours were built up onto the trees. The well-formed crowns of the lime trees were particularly suitable for this (RAPAICS 1940).

The first Hungarian lime alley decorated the garden of King Mathias Corvinus in Visegrád. Later, during the 17th and 18th centuries, several alleys were established, e.g. the one mentioned in Zborov with 100 trees. After that the „alley-planting” became a device to chain the garden and the surrounding landscape. A wonderful alley was registered in Köpcvény (Austria). A 1000 meters long alley was planted in Bontida (Romania) at the end of 1750’s (RAPAICS 1940). Among the alleys still alive, the most famous one in Hungary is in Nagycenk.

3.2. The measured trees

We found the greatest Hungarian lime tree in Szőkedencs (S-Hungary). The small-leaved lime tree (*Tilia cordata*) stands in a cemetery. Before the 18th century the settlement surrounded this cemetery. The tree is about 700 years old and its condition is really bad: hollows in the trunk, broken branches in the crown etc. During its former treatments, the two main branches were tied together (KOMÁRI ex verb.). The tree has a low branching in the ground, the perimeter of the two main branches are 723 and 533 centimeters. The total perimeter is 1148 cm. It is under local protection. Its surrounding environment is clean and well maintained. Based on its shape, age and sizes it is a unique value of the Carpathian Basin. A rare heritage to be found in Bojnice, Slovakia: situated in the park of the wonderful Pálffy Castle, there is large-leaved lime tree (Bojnická lipa, *Tilia platyphyllos*), which is the greatest lime tree in Europe as well as the oldest tree in Slovakia. Once in the past its perimeter exceeded even 12 meters, its crown diameter was 36 m and its height 28 m). According to the legends it is 600 years old and King Mathias Corvinus who loved to stay in Bojnice held great feasts as well as assemblies under this lime tree. The tree was planted by Mate Csak Trencsanszky in the year, when the last king of the Arpad family (András the 3rd) died, i. e. in 1301. Although at the beginning of the 20th century the tree

was in a good condition, nowadays it hardly lives. Its crown is retarded and there is a hollow in the trunk. At the beginning of the 1950's, the workers of the Museum in Bojnice found the tree to deteriorate quickly.

Local people tie legends and memories to a large-leaved lime (*Tilia platyphyllos*) of Ötvöskónyi (S-Hungary), which stands in the local park near Nagyatád. According to these, King Béla the 4th hid beneath the tree during his escaping from the Tatars in 1241 and 1242. Another story says that it is rooted to the Hungarian settlement in the Carpathian Basin. Its scientific age is 300-350 years.

At the border of 19th-20th century its trunk was opened by a thunderbolt, and the tree almost died. Many people can fit in it, and this is underlined by the story that its one-time owner, Mrs. Chernel organized card games in the tree between the two world wars. In the 1950's the tree was the home of a gipsy family, and it caught fire due to a campfire (KOVÁTS ex verb.). Nowadays it is just an empty mantle, but year after year it still sprouts. By an 1057 centimeter perimeter of the trunk (diameter: 4 m, crown diameter: 22 m, height: 18-20 m), it has been the greatest tree in Hungary for a long time. There are no regulations on its treatment, because the tree is not under any kind of nature protection. In spite of all, the park (with 2,6 hectares) and the area of the tree are clean and neat.

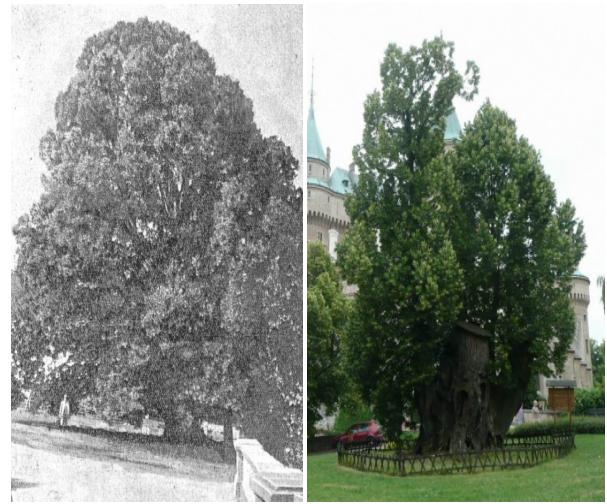


Figure 1-2. Former and authentic condition of lime in Bojnice (Source: Földváry 1934 and http2)



Figure 3-5. The history of the lime tree in Ötvöskónyi (Source: Pósfai 2003 and Takács 2009, 2012)

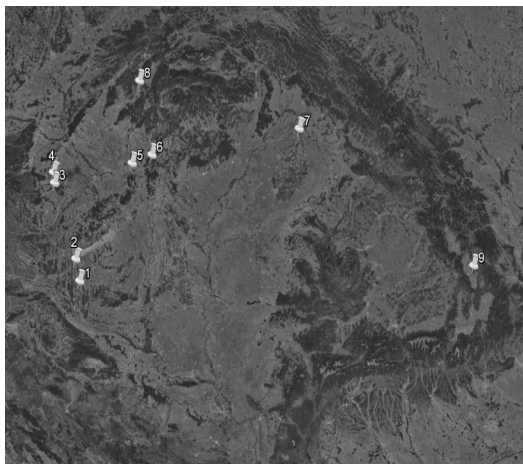


Figure 6. Legendary and old lime trees in the Carpathian Basin: 1. Ötvöskónyi; 2. Szőkedencs; 3. Sopronhórpács; 4. Nagycenk; 5. Süttő; 6. Márianosztra; 7. Szabolcsbáka; 8. Bojnice (Slovakia); 9. Leliceni (Romania)

Legends are also added to the large-leaved lime tree (*Tilia platyphyllos*) of Süttő (N-Hungary). Its nickname is „Tree of Prince Rákóczi”, but according the residents just the kuruc general János Bottyán (also known as Blind Bottyán) was here with his army (CZERMANN ex verb.). It stands in the park next to the main road. Once the famous local stone-cutting was placed also near (and even in the shade of) the tree (photos, postcards support this fact). Its estimated age is 420 years (BARTHA ex verb.). Over the centuries its state got worse, there were holes, hollows, broken branches on the tree, but it received treatment: the holes have been cleaned and closed. Now its lower branches are touching the ground and took root. Height: 15-18 m, trunk diameter 2-2,5 m. Crown diameter: 32 m. Perimeter: 739 cm. It is under local protection.

The small-leaved lime tree (*Tilia cordata*) in Szabolcsbáka is really famous in Hungary, although notable person is not connected to it. It was a bound tree over centuries. Several people state it is the oldest tree in the country. Now it stands on a small hill, on the border of a forest, a vine yard and a plough land. In the recent decades its state has been getting worse, it lost the main branches successively (the freeze of 2012 broke down even the last one). A notable person planted the tree of Sopronhórpács (NW-Hungary). Széchenyi Ferenc offered his library and collections to the Hungarian nation in 1802, and in memory of this offer he planted a small-leaved lime tree (*Tilia cordata*) in the park of his castle. Its branches touch the ground. Its height is 20 m, the diameter of the trunk is 2.5 m. The crown is irregular, its diameter is 28 m. The perimeter of the trunk is 602 cm. Since 1954 this area stands under national protection.

Márianosztra (Börzsöny Mountains, N-Hungary) is a famous place of pilgrimage. The road up to the calvary hill is shown by a dual alley. According to the legends the chapel (which was built in 1777) and the lime tree alley are at the same age. The oldest large-

leaved lime tree (*Tilia platyphyllos*) is perfectly similar to the lime tree of Ötvöskőny: its trunk is opened and hollowed. We found seats under it.

The small-leaved lime tree (*Tilia cordata*) in Leliceni (Romania) is surrounded by great respect. Although it does not belong to the giants, thanks to the care it was the European Tree of the year in 2011. According to the local legends, important meetings were held under the tree. It may be 500 years old: the tree was planted in the garden of the former presbytery in 1502. It has been considered as a lonely tree for a long time, as there were no constant woodlands in the vicinity. It has survived several natural disasters: storm, hail, drought. It was declared a natural rarity and tone of the symbol of Hargita County in 1992. A church stands next to the tree.

Probably the most beautiful alley of the Carpathian Basin can be found in Nagycenk. According to the fashion of that age, Antal Széchenyi started to create a French-style garden in the 1750's. The distant areas of the castle were not swampy for this time, so it was possible to plant trees. The lime tree alley was planted at this time by Széchenyi and his wife, Zsuzsanna Barkóczy (IvÁNKOVICS ex verb.). The alley is about 2600 meters long, 20 meters wide, the distance between the trees is 7 meters. Less than 400 trees have survived until today from the original 600 specimens, including those that have been planted later. According to the measurement of the original stands, we conclude that the trunk diameter, the crown diameter, and the trunk perimeter change between 1.5-2.5 m, 8-17 m, and 310-380 cm. The alley is totally straight, anywhere we stand, we can see the castle clearly. Since 2003 the alley is part of the World Heritage (UNESCO).

4. CONCLUSIONS

The trees which have been presented are good examples of trees surrounded by a great attention. The lack of protection and / or treatment often lead to irreversible consequences. The storms of 2014 destroyed some of the giant lime trees of the Carpathian Basin, e. g. the lime tree in Velence (C-Hungary). More and more call for proposals focus on old trees, including innovation, heritage protection and rural development projects, so according to DARIO TOSO (2013) there are new prospects that encourage people to rethink the system in a sustainable manner. The national and international Tree of the Year competitions, organised by the Hungarian Environmental Partnership Foundation (Ökotárs), often give significant help for a settlement in the protection of its favourite tree, e. g. in the case of the lime trees in Ötvöskőny (S-Hungary), Felsőmocsolád (S-Hungary) and Leliceni (Romania). The measurement and documentation (listing) of the unique landscape values is also becoming more popular and even compulsory in some countries. It helps in the process of preservation and publicity. The legends, memories and stories have to be preserved and collected, as if the great trees are gone, these will be the last remains (together with the photos and statistic data).

REFERENCES

- [1.] [http1: http://www.treeoftheyear.org/](http://www.treeoftheyear.org/)
- [2.] [http2: http://www.monumentaltrees.com](http://www.monumentaltrees.com)
- [3.] Bél M. (1735): Az új Magyarország történeti-földrajzi ismertetése (Reprint, 1985)
- [4.] Földvári M. (1934): A nagycenki rezerváció és hársfasor. In.: Természettudományi Közlöny, 1934. 66. kötet, 289-291. p.
- [5.] Konkolyné Dr. Gyúró É. (1997): Évezredes hárskultusz. In.: Élet és tudomány, 1997 33. sz., 1032-1035. p
- [6.] Oláh M. (1568): Hungária – Athila. Modern kiadás, 2000 (Szerkesztette Kulcsár P.). Osiris Kiadó, Budapest.
- [7.] Plinius S: Historia Naturalis. Natura, Budapest (Reprint, 1987)
- [8.] Pósfai GY. (2005): Magyarország legnagyobb fái. Alexandra Kiadó, Budapest., 13-20. p.
- [9.] Rapaics R. (1940): Magyar kertek – A kertművészet Magyarországon. Természettudományi Kiadó, Budapest., 293 p.
- [10.] Toso D (2013): A dynamic database for the environmental assessment of human activities. Annals of Faculty Engineering Hunedoara – International Journal of Engineering 9(1): 87-90

ANNALS of Faculty Engineering Hunedoara – International Journal of Engineering



copyright © UNIVERSITY POLITEHNICA TIMISOARA, FACULTY OF ENGINEERING HUNEDOARA,
5, REVOLUTIEI, 331128, HUNEDOARA, ROMANIA
<http://annals.fih.upt.ro>