

# **„To Watch the Tisa”**

Natural and Cultural Values of the Tisa River

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**Publishing editor:**

Josip Ivanović

**Edited by:**

Judit Raffai

**Authors:**

Géza Czékus and Judit Raffai

**The photos were taken by**

Attila Ágoston, Géza Czékus and Judit Raffai.

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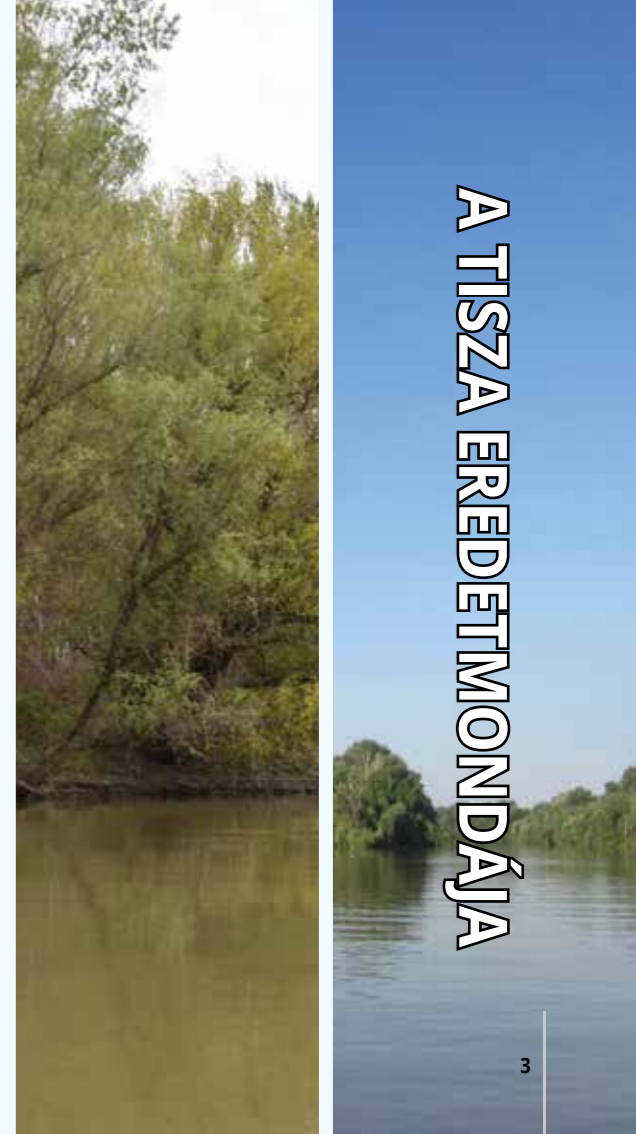
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## **Why is the Tisa river winding and how the vortex appeared?**

According to a 19th century legend from Kaniza, the Tisa river was created by St. Peter. The legend says that Peter caught a donkey in his plow and the river followed the path of the donkey. Because the donkey was hungry, he was distracted by every thistle on the path, plowing a curved groove. That is why the Tisa river became so winding.

According to the legend from Kaniza, St. Peter is responsible for the formation of the Tisa vortex, too. This legend says that Saint Peter and our Lord Christ travel-

led on the Tisa river and Peter started fishing. While fishing, he asked Christ to help him and make one side of the river flow upward and the other downward. However, the fishermen did not appreciate this and they kept swearing while fishing. Peter had enough of them and asked Christ to restore the original flow. The Creator had done so, but at some places the two flows were still clashing, and this is what we call water vortex, while locals say that the vortex is St. Peter's water.



# THE TISA



The spring of the Tisa is considered to be the spring of the Black-Tisa. The Black-Tisa meets the White-Tisa (both rivers are in the Ukraine), and these two rivers make the Tisa. Its influx is in Serbia, Titel/Slankamen. The river touches upon five countries. Its lower section is in Serbia (Lower-Tisa). The river enters the country at Đala. It does not cross the Hungarian-Serbian border vertically; the length of the borderline it touches upon is more than 4 kilometres. It is the second longest and largest river in Serbia.

Originally it was 1419 kilometres long. As a slow, flatland river, the Tisa made a lot of curves. It flooded quite often. Its regulation began in 1846. The length of the Tisa is 962 km today, of which a 780 km long section is navigable. Its length in Serbia is 165 km. The falling of water got almost doubled, the flow of the river has got faster, thus there was less mud in the riverbed. Even with the regulation, there were three great floods on the Tisa in the past 150 years (in 1879, 1970 and

2006). In Serbia it was the one in 1970 which was a real disaster. Following this flood dams have been built. The Tisa „feeds“ more channels, which can take in large amounts of water in case of high water level.

The largest feeder of the Tisa is the Bega, but the almost 100 km long Čiker is running into the Tisa, as well. The Körös is a tributary of the Tisa. It was in 1994 that the Tisa-Palić channel was built.

The rewatering of the river poses a great ecological challenge. The Đerdap watercraft pushed up the water all way long to Novi Sad, while the barrage at Novi Bečej built in 1977 pushed it up to the Hungarian border. As a result, the waterflow has become slower, and the wash of the river stuck in the riverbed. The quality of the water has been constantly deteriorating; there is less and less oxygen in it.

The flora nad fauna of the Tisa is made up of floating organisms, mud-dwellers and other living creatures that float or swim in the water.



# WOODS IN FLOODPLAINS NEAR MARTONOŠ



In flooded areas there are willows in the water with fishes drinking at their „beards“. Thanks to the construction of the dams, water comes over the rampart very rarely.

The floodplains are 70-80 meters wide and have a rich flora and fauna. The typical landscape along the river is characterized by white willows, but other species of willows are also present along the riverbank. There are autochthonous poplar trees, as well, both white and black poplars. There is a trembling poplar in the woods along the rampart. Since the second half of the last century, there is a wide stripe of Canadian poplar, which is a fast growing sort, a good raw material for paperboard.

Ashleaf maple appears at various places. There are a lot of dry-rotten punks, often floating down the Tisa.

The most common bushes in floodland woods are acacia and blackberry, which make thick scrogs, this way floodplains are tight. There are also many twining plants: wild grapes, echinocystis, hedge bindweed are among the most common ones. Bushes are covered with riverbank grapes, making a green curtain along the bank. Underwood is made up of typical bushes and

herbs that need much water (arrowhead, flowering rush, bayonet grass, common horsetail, various species of sedge) and lots of weeds: cleavers, knotweeds, brome grasses, spurge, dead-nettles, daisy fleabane, etc.

Somewhat further away from the woods are golden-rod, swallowwort, mugwort, stinging-nettle at some places. On wet soil or tree barks there are numberless species of mushrooms, lichen and mosses.

The fauna of the floodplain is also rich: worms, many species of insects and snails at drier places. Under fallen trees there is good shelter and food for the insects. The larvae of butterflies (caterpillar) feed on the plants of the woods. „Memorable“ insects are mosquitos and ticks.

Among vertebrates there are various species of frogs, lizards and grass snakes characteristic for this habitat. This area is a nesting and hunting place for numerous species of birds: common buzzard, various species of tits, common chaffinch, European goldfinch, European greenfinch, magpie and colonies of crows (hooded crows). Among mammals there are small rodents, shrew-mouse, mole, European hare, deer and fox.



# INVASIVE SPECIES - MARTONOŠ



Human activity causes lots of problems though: namely, people accidentally (or on purpose) populate some species of animals and plants. These are adventive species. Invasive plants (agressive species) are those which „invade“ a certain territory in a very short period of time.

Although there are only about 100 plants that are considered to be invasive species, they may cause great economic harm. In floodplains these are acacia and ash-leaved maple, for example. Pastures and grasses of foreshores resting for one or two years may be flood by acacia very easily. In floodplain woods ash-leaved maple has become the ruling species, even more frequent than willow!

Foreshores are among the most endangered habitats because shipping and the river spread seeds very fast.

More frequent floodplain invasive plants are the following: riverbank grape which may swarm up even 20 meters high, wild cucumber, which can sprawl up to 7-8 meters with the help of its fringes, and it has become an invasive sort out of a decorative one. High perennials: species of aster, Fallopia, which came into Europe as a decorative plant and it may reach a 1,5–4,5 meter height. This kind of plant may get far away from its original place, as it can reproduce with its broken parts of sticks and roots. Yellow flowers of the golden rod are vivid spots of the floodplain, they can make very thick bushy areas. Giant hogweed marks out from its surroundings with its huge size. Among perennial grasses and sedges there are no invasive species. There are some of the widespread weeds at some places (ragweed, mugwort, etc.).



# THE FLOWERING OF THE TISA (KANJIŽA)



In the beginning and the middle of June the Tisa and its bank is getting alive. On the riverbank and „Tisa-flower“ (Mayfly) walkway there are a lot of locals and tourists who are waiting for the sunset. Some of them go on boats in order to watch the Tisa flowering from the closest places possible. All this time there is an ongoing fight for life in the water and over it, which ends each time with the victory of life.

There are narrow tunnels in the clayey soil of the bank, where the mayfly larvae develop for three years, feeding on algae and bacteria. They throw their skin 5-6 times per year, then they leave the mud all together in huge numbers at the same time and they fly over the water. First the males appear after the last shedding (throwing away their shirts), as they become mature for reproduction. Somewhat later the females appear, they fly up in the air and get impregnated. Then thousands of males fall back on the water surface and surround the females. The whole process looks like a huge yellow rose opening its blossoms (hence the name „Tisa-flower“ ). Females leave their larvae on the waves then they pass away into the waves themselves, too. They make a rich feast for the fish, birds and frogs.

This insect is a sort of may-fly (*Palingenia longicauda*), its body length, together with the pair of tentacles on its head and the tail may be even 12 cm, while its wingspan is 6-7 cm. The grown may-fly lives only for a couple of hours, which is enough for reproduction. They do not eat. Among European may-flies, this species is the largest.

The „flowering of the Tisa“ is the most intensive and beautiful in Kanjiža. It is our important natural heritage. Every form of this animal is strictly protected, it is not allowed to collect them in. The clayey bank of the Tisa has been changed only to a minimal degree near Kanjiža, this is why here the Tisa-flowers are the most numerous and the „flowering“ is the most beautiful.

In order to point this out, nature loving people from Kanjiža have established a Mayfly educative path at the entrance of Kanjiža (from the direction of Martonoš). This natural path of presentation is about one kilometer long and leads through the floodplain woods. Its flora and fauna is various and rich. It is at places closer, at some others further away from the river, but it can be approached from the water, too. There are benches and tables for those who would like to take some rest.



# THE BLACK STORK



The black stork (*Ciconia nigra*) is known less and it is smaller than the white stork. Its body length is 95-100 cm, wingspan 144-155 cm, it weighs about 3000 g (3 kg). Its beak and legs are red. Its back, wings and neck are metallic black. Its voice is a deep croak, not the usual sound we are used to with white storks. Black storks cannot stand human presence, they are wary and shy, unlike their white counterparts. Black storks live near woods in meadows, floodplain woods, river backwaters. They build their nests on older trees in natural woods (e.g. even a hundred year old oaks or poplars). They return to their own nests every year. They are laying eggs by the end of April, beginning of May, and out of 4-5 eggs there will be young birds by June. They are able to fly after two months. Black storks mainly eat fish, amphibious, insects, snails, snakes, small mammals.

Black storks remain at their nesting places during the period starting from the middle of April till September-October. In the winter they migrate to South-Africa. While preparing for their migration, they find their food in the fields and pastures. Their

largest population in Hungary is in the Gemenci woods. In Serbia there are 70 mates at Obedska bara (wetland) and in the woods along the Danube and the Tisa there are another 200 mates.

We know about three black stork nests along the Tisa. These storks live north from Kanjiža, opposite to the Monkey Island, at the 150. km on the Banat side of the river in the woods (from 2015, as they have returned this year, too) and near Ada, close to the bridge.

Black storks have only one enemy, humans. Bothering nests, silviculture, forestry management is the greatest danger for them. Their habitat is constantly narrowing or totally disappears. According to this, there are ever less young species. The protection of black storks is based on untroubled habitats. According to some estimates only the three-fourth of the migrated birds are coming back. Black storks are protected species in Serbia. The authorities pay attention to keep the black storks' habitats unbothered and peaceful.

There is no publication about black storks living along the Tisa.



# THE BEAVER



The original homeland of beavers (*Castor fiber*) is Eurasia. Their meat has been a popular food ever since, but its fur and castoreum have been in commercial use, too. As beavers were hunted excessively in the 19th century, only four isolated habitats have remained in the world, while these populations succeeded in getting back some of their territories. Their presence was recognized near Szeged in 1988. It was in 1990 that they were first resettled into Hungary (north from Szeged into the Backwater of the Tisa near Hódmezővásárhely). The population is continually growing. Their estimated number in Hungary in 2011 was 900. As far as we know, in Serbia there was only one successful resettling of beavers, in Zasavica (near Sr. Mitrovica in 2004).

Beavers appear in the Tisa in Vojvodina, as well. Near Adorjan (Prokop), Padej, Sanad. Near Đala (Gyálarét) 8 beavers were released, 6 of them have stayed at the Monkey Island (Majomsziget). Here they lived till the spring of 2019, but then some of the trees were cut. Then they ran away due to the noise and bothering. However, there are still trees which wear the stamp of

their bites along the Tisa riverside between Kanjiža and Senta.

Beavers like woody riverbanks, covered with thick bushes and trees. They build their fortresses underground, and the entrances are under the river, however, the tunnels remain dry.

Beavers are plant eaters, they love tree barks, sticks and leaves, all kinds of herbs. They collect stick from cut and fallen trees to make their warren for winter. They build islands out of thicker and longer sticks, which slows down the water and ensures that the entrance to the warren remains under the surface. They change their surroundings by building smaller or larger dams, this way they remain invisible to predators. They are night animals, their presence can be noticed thanks to their trails.

The main and most famous characteristic of beavers are their huge, orange teeth and flat tail, which serves as a rudder while swimming.

Baby beavers are born in May (1-5 of them). They see at once, their fur is thick. They leave their warren after they have learnt how to swim. They live in families, usually for about 15 years.





# THE CASTLE PARK IN NOVI KNEŽEVAC



Approaching Novi Kneževac from Kanjiža on the river, one may recognize the castle park, and next to it the tower of the Catholic church. There is a small harbour in front of the park, and a stairway leads up into it. Among the buildings there, the largest one is the Szerviczky-Shulpe castle (1793), built on a hill at the riverside.

On the cadastre map from 1816 the park (French garden) is already labelled. The 10 ha park is from 1975 under the protection of the state, however its once rich flora has in great deal disappeared. It was baron Emil Tallián, a local judge, who did the most of landscaping, and he was in charge for planning the park, too. The promenade along the Tisa he made planted with

linden trees from Italy, for example. There were more than 100 species of trees in the park. It was a real botanical garden, and there was a gardener in charge. There were winter gardens beside the castles, full of exotic plants.

What is our heritage?

Some parts of the park, especially the castle (neglected, needs restoration) reminds us of better times in the past. The park is our great treasure, honourable for its rare, old trees. These are for example the Ginkgo bilobas and a very old, nice sycamore tree as well as five yews which are also species under protection. There are four oaks, all of them more than 200 years old, also reminding us of the past.

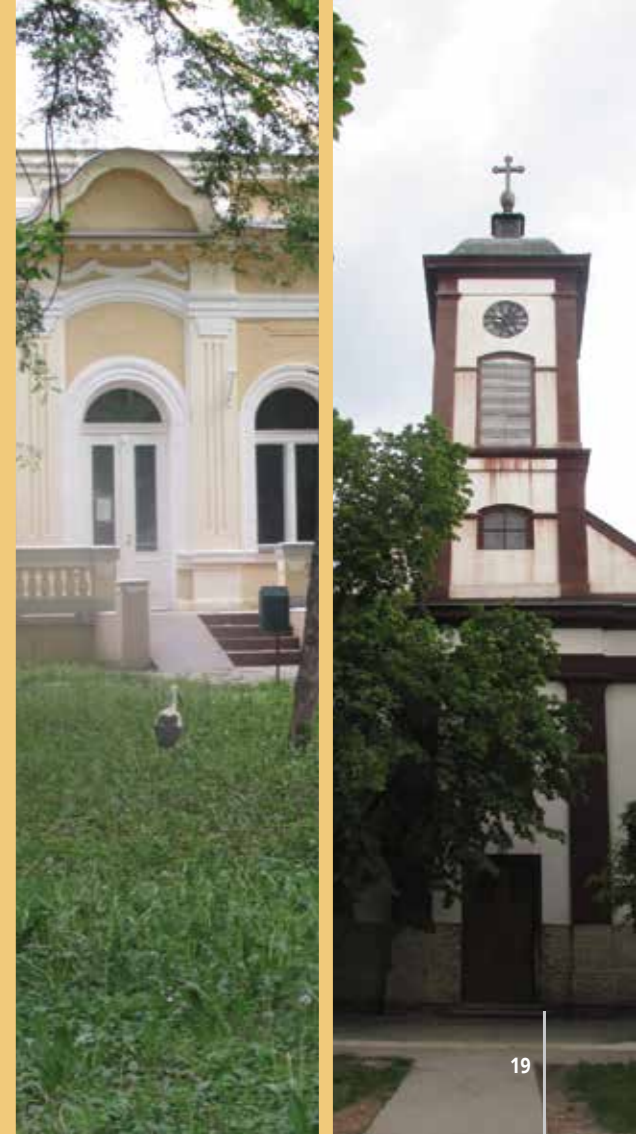


# THE CASTLE IN NOVI KNEŽEVAC



There are some monuments in the castle park of Novi Kneževac, too: the Szerviczky-Schuple castle (1793–1804); the county judiciary (1903) (today municipality office); the castle of the Count Maldeghem brothers (1910), (to-

day the library); the Saint George the Martyr Catholic church (1858) and altar paintings in it, among them the altar painting of Saint George, the work of Bertalan Székely (1858).



# NATURAL VALUES OF ADORJAN



Adorjan is an interesting settlement from the aspect of ecology, too, while different types of human activity may be observed. Lands of excellent fertility are crossed over by rivers and lakes. Among these the most significant ones are the floodland woods, the Körös and its influx, the beginning of the Tisa-Palić channel, the Yellow channel, the Prokop (backwater of the Tisa- the Lake of Adorjan) and beavers.

The Körös, a water distracting channel, springs in Hungary, its length there is 37 km, and it is a borderline river with Serbia for 15 km. In Serbia it is about 29 km long. The Körös is a little, slow, flatland stream (it does not get dry usually). It flows into the Tisa at Adorjan.

In 1994 the Tisa-Palić channel was built, its aim is to refresh the water of the lake, and it serves for watering the lands, as well. As the level of the Tisa is lower than the Lake Palić, water is raised with the help of pumps, then it flows further till it reaches the lake.

The fields around Adorjan are rich in oil. Till 2000, it was here that oil was poured into ships and cargo ships from huge oil containers. Oil pollution often ended in ecological catastrophe. Since the war there is no activity of this kind, but pipes and lamp holding pillars as well as reflectors are still there in the floodland woods. However, oil pollution is no longer visible.



# FOLK CUSTOMS OF THE TISA REGION



The water of the river also plays a role in the development of the folk customs along the Tisa region. The Serbs from Banat used to hold an Epiphany procession on the 19th of January, together with their religious leaders. They used to go down the river and sanctify the water, which was later brought to the church and to their homes. During the upcoming year this holy water was used in different rituals, mostly for keeping away the bad spirits. Ice bathing in the river was common during the Epiphany in many places, including Sanad (Banat region). When the procession reached the Tisa, the pope (priest) threw a cross into the water, after which

the believers dipped into the icy water and swam after the cross, and tried to bring it back. The winner was rewarded (Босић, 1985: 176). This tradition was renewed in Sanad in 2012, seventy years after. The place of the ritual bathing is marked by a big cross on the Tisa bank.

The Hungarians along the Tisa, on the other hand, swam in the river at dawn, on Easter Friday. This immersion was also ritualistic, and it was believed that anyone who washed themselves in the river on Good Friday morning would be healthy throughout the year. In Senta only the young men took part in the first bathing of the year (Nagy Abonyi, 2000: 13).



# WHAT'S ON THE BOTTOM OF THE TISA RIVER?



According to the people living along the Tisa river, the river bed, except for its flora and fauna, hides many other interesting things, as well. Some of the ideas about these remain only myths, while many facts have been proven by archaeological research.

Bone finds from the Ice Age have also been found in the Tisa river bed. From the archaeological report of László Szekeres we found out that at the bottom of the river we can find the remains of the most characteristic representatives of the cold climate, including the two leading species of the last glaciation, the mammoth and the reindeer. Most of the fossils in the Museum of Senta, belonging to this category, come from the Tisa river and two bone sites. One is in the Tisa river bed above Kaniža and the other one is near Adorjan. In these places, the Tisza has washed off a layer that contains more remains. The washed out bones were eventually pulled out by fishermen who were still actively fishing with their bottom nets "(Szekeres, 2000: 150).

According to some historical legends, the golden coffin of Attila is also hidden in the Tisa river. The Prince of Huns was buried underground and under water. According to a saying from the village of Mol, „they separated the water of the river, then buried him there,

and then let the water flow back. To this day, they haven't found where Attila was buried" (Boja Patyi, 2018: 56). "Based on our archaeological material - says László Szekeres - we cannot identify a site that definitely uncovers the remains of the Huns. It should be mentioned that there are many who are still hoping for Attila's non-existing triple or coffin to be found in the river bed of the Tisa. However, they are all victims of vain daydreaming" (Szekeres, 1975: 778).

The archaeological site of the Zenta-Bridgehead also contained medieval findings. The medieval Senta's garbage dump was on the bank of the backwater of the Tisa (however, it is still questionable whether the deep watercourse where now the City Park is laying, was also an active waterflow of the Tisa river at that time), where, among other things, numerous objects of great scientific and art historical significance were found. Several clay pots, three intact Gothic-style stove tiles, and similar fragments were brought to the city museum. Fortunately. One of the tiles made of red-clay without glaze (probably from a workshop in Buda) represents a scene of Adam and Eve's temptation in Paradise, while the other features a stumbling man's figure with a woman on his back; satirical, medieval caricatures of marriage" (Szekeres, 1975: 778).



# BATTLE OF SENTA



The Battle of Senta, ending with the victory of the Christian army, played a huge role in the defeat of the 150-year-old Turkish rule. The Battle happened on September 11, 1697 between the Imperial forces of Prince Jenő Savoyai (1663-1736) and Mustafa (1664-1703), the leader of the Army of the Turkish Sultan. The Tisa river played an important role in the battle strategy of the Christian army. The overpowering Turkish army, preparing to attack Transylvania, marched towards north along the Tisa river. They built an army bridge on the river and tried to cross to reach the left bank of the river. On September 10, the Imperial forces reached the Turkish forces. Taking advantage of the split of the Turkish army resulted by the crossing – one part of II. Mustafa's 100,000- 50,000 army was already at the other side of the river - Jenő Savoyai's troops successfully fought with those left on the right bank of the Tisa. As a result, Turkish troops were disrupted and the Imperial army with stronger fighting capacity but fewer troops succeeded in defeating the Turkish units. "According to the tradition - says Attila Pejín, a city historian, " the Eugen Island on the Tisa river is made

of a large number of Turkish corps. (...) Several commemorative medals were made to celebrate the triumph; one of them represents the god of the Tisa river"(Pejín, 2000: 4). The memory of the battle that ended the Turkish rule has a strong role in the narratives of the people in Senta. In their folk poetry, many Turkish stories refer to the important battle, as well. Today, the official day of the town also refers to the date of the battle, and several memorials and geographical names proclaim the victorious battle in the city. On the promenade along the right bank of the Tisa river, a memorial plaque and a bell tower is reminding us to this historic event. In the city museum there is a permanent exhibition about the Battle of Senta, where different original objects and documents are exhibited. In the tower of the town hall, built in Art Nouveau style, there is a memorial belvedere dedicated to the Battle of Senta, where visitors can get to know the historical documents, battle heroes, costumes from that period, and a scale-model with 2000 figures that makes the battle scenes alive.



# THE ROW OF HORSE CHESTNUT TREES ALONG THE TISA IN SENTA



Zenta is rich in various trees. There were a lot of white and black mulberry trees in the beginning of the 19th century, planted for the purpose of silkworm rearing, but also white acacia and poplar trees. Later these trees were substituted with other sorts.

In 1905 a row of white and rose-coloured horse-chestnut trees were planted (*Aesculus hippocastanum* and *Ae.x carnea*). Many of these struggle for life now. Old trees are being substituted with new ones. When flood control areas along the river got reconstructed, every citizen of Zenta were aware of the value of these chestnut trees, which were more than just simple trees. They were the settlement themselves! The symbols of the town. Words of the current city mayor, Rudolf Czeglédi are confirming this fact (in Hajnal, 2019): We do not hide the fact that we are proud to be citizens of Zenta, ..., and our pride gets to its highest peaks when we stroll down our beautiful walkway with horse-chestnut trees along the Tisa.

The popular promenade with horse-chestnut trees was built in 1984, as the earlier quay from the end of the 19th century was rebuilt and “simplified.”

Locals do relate to these trees, which can be proved by the fact that since 2014 every year they have planted horse-chestnut trees in the local park called Népkert for every baby born in the town.

White horse-chestnut trees got into Central Europe in the 16th century from the Balkans and Asia Minor. This type of tree likes rich, watery soil and lots of light. The polluted air of cities and salty ground do not fit this type of tree. These unfavourable circumstances and the pests cause that leaves turn yellow earlier, and a second blossoming may happen. Rose-coloured horse-chestnut is a hybrid sort. It is more persistent to air and soil pollution as well as pests and leaf-diseases.

There are 109 white and 24 rose-coloured horse-chestnut trees on the Mayfly walkway.



# OAK TREES ALONG THE TISA



Down the riverside 2,5 meters from the Senta-Čoka bridge at the curve close to Adorjan, and next to the right side of the dam, in the neighbourhood of Kereszter, and just beside the house of the dam guard at Becke, there are to huge meadow oaks (*Quercus robur*). True, they cannot be approached from the river, so they are not significant in terms of water tourism, but Senta is worth of taking a walking or cycling tour. It pays off for sure! Teacher Guelmino

told in 2000 that these oaks were 170 by then, so today they are almost 200 years old. The northern one is taller. Its trunk is at one and a half meter height so wide that only four adults can close a circle around it with arms wide open. Its circle is 690 cm. Its diameter is 220 cm. The diameter of the loft is about 44 m. Human beings seem tiny next to this huge tree.

The other one is somewhat „thinner“. Its loft is about 30 meters wide.





# CHARACTERISTICS OF FOLK NUTRITION IN THE TISA REGION

The uniform folk gastronomy of the Tisa region is still present today. This can be seen, for example, in the milk industry. For instance, a typical dish of the Tisa region is made from clotted cream and butter, salted and floured to give a preserved dairy product which can be consumed with bread. The typical food of villages in Banat (Čoka, Ostojićevo, Sajan) along the Tisa river was the sheep farm cheese.

"The sheep used to play an important role in meeting the everyday needs of the local population. Its milk and flesh were used for food, while its wool and skin were significant in clothing. The dish called „tarhó” in this area is made exclusively from sheep’s milk. Hungarians in Vojvodina distinguish several similar sheep cheese, although they are almost identical. Four to five kilogram cheeses were also made along the Tisa” (Beszédes, 2008: 21).

Thanks to the sheep breeding traditions of the Tisa region, one of the typical dishes of the area is sheep stew. "Sheep stew is a popular, traditional main dish on weddings and community celebrations at the Temesköz region. It is unique for the following reasons: (1) all the appropriate parts of the sheep are used for its production: besides the thighs, neck and side, the head (from which the eyes are removed), the liver, heart, lungs and throat are also being used (2) the order in which meat is placed in the cauldron is important; (3) made with lots of onions and crushed garlic; (4) goose fat is used as fat; (5) spiced with cumin, pepper, sweet and hot paprika. The dish had been named birkapörkölt (sheep stew) only in the last decades, before it used to be called sheep goulash, and even before that sheep meat with paprika." (Kónya).



# THE FISH FROM THE TISA RIVER



"In 1870 and 71 there was wonderful great water (in Tisa) (...). Later this deep water became a Paradise for the fish. They used to say that Tisa had more fish than water by then. If someone wanted to drink water, one could have choked as fish got stuck in their throat while drinking - wrote János Bitó in 1930 in his memoirs. He was a fisherman and fish farmer from Szeged, who knew very well the water of Tisa from Csongrád to Titel (Bitó, 1993: 39). In the last quarter of the 19th century, the intense flood protection and river management of the Tisa river put an end to the natural river we used to know and destroyed the huge fish stocks. Industrialization and water pollution that started in the middle of the 20th century, and the construction of barrages, did not favor the Tisa river wildlife, including the fish. Fishing, fish processing and trade, as well as its role in the gastronomy of the area, had been gradually neglected. Numerous dishes, such as salted-smoked fish, jelly and fried mussel fish, had been excluded from the gastronomy. Among the dishes prepared by the fishermen that the „civilian kitchen” took over

were the fish soup and the fish stew. The fish gastronomy of the Tisa had been clearly distinguished from the Danube fish gastronomy already in the 19th century. There are differences, the fish soup is made according to a unique recipe in almost every settlement by the Tisa, as a typical dish of riverside restaurants and taverns. „Real fish soup can only be cooked in a cauldron (...),” writes Tömörkény. It is against the rules to mix it while cooking. The cauldron is hanging on a string or a chain and it is only allowed to shake it left and right while holding its handle. Every piece of fish must stay whole until it is cooked. First you must place the heads, then the body parts, fish wings, and tails in the cauldron, everything salted in advance. Then you put inside the paprika and chopped onions, always when its needed and that is always obvious... (...) They say that after the first spoon of the fish soup you can tell the difference if the fish was from a lake, from the Danube or from the Tisa river. Old fishermen even say that the fish should be cooked in river water, otherwise the soup is not good. „



# THE TISA AS A CULTURAL CORRIDOR, THE MEDIATING AND CONNECTING ROLE OF THE RIVER



Throughout the centuries, the Tisa served not only as an ecological, but also as a cultural and economic corridor, playing an excellent mediating and connecting role, helping to transfer and accept cultural goods and economic tools and models. It serves as a corridor through which people, information, commercial articles, traditions flowed across borders. It is partly due to the numerous phenomena transmitted by the Tisa river, that the ethnographic literature considers the Tisa region (from the border to Titel) as an independent ethnographic group characterized by a more or less unique folk culture. "The huge fertile lands near the Tisa villages and the privileges of the district favored the development of agricultural towns. From the second half of the last century, the area was characterized by farming, animal husbandry, wheat and maize production, and by the almost complete lack of industry" (Kósa, 1982: 297). Many elements of folk culture are present predominantly in the area. This includes, for example, the wooden sunbeam pediments characteristic for the Tisa area. The Tisa river can be associated with some typical economic activities that are known in other areas but in many different ways, such as fishing,

basket weaving, sheep breeding, pepper growing and processing. We should mention here the folklore and ethnography preserved by the famous sheep breeding dynasties of the villages along the Tisa, some aspects of folk dishes, and the characteristic epic folklore as well as its specific presentation. All these phenomena can be connected with the settlements after the Turkish conquest, the Szeged origin of the Hungarian population of some villages (Martonoš, Adorjan, Čoka, Padej) and the cultural elements brought from there.

The commercial strength of the cities along the Tisa has increased the region's cohesive power. Before the railway has been constructed all around the region, the river and its crossings were important locations for trade routes. For example, „huge herds of animals were occasionally brought and exchanged at the fairs in Senta. The "national" character was indicated by the potters from Gemer, the Transylvanian barrel makers and fork sellers, and the livestock merchants from Serbia and Bosnia. Hundreds of rafts went down the Tisa loaded with boards, iron or grain" (Kósa, 1972: 145). The settlements along the Tisa river are still hosting significant fairs.



# LIFE ON THE TISA RIVER



“Although the whimsical floods of the river worried the locals – according to Sándor Bálint - the river gave them reeds, wood, hay, fish, birds, eggs, this way providing self-sufficiency for a primitive community. The river often defended them from hostile attacks.” (Bálint, 1974/75: 339) Until the middle of the 20th century inhabitants used the river for many economic activities. It was used a lot for washing, hemp washing, grinding of grain in water mills, and transporting goods by rafts and ships. Besides rafting, “Ships have gradually taken over the role of rafts; first for the transport of goods and then for the transport of passengers (with barges or steamboats).

Starting from the turn of the 18-19th century, more and more cargo ships have appeared on the Tisa due to the grain boom due to the Napoleonic Wars. Demand for other agricultural products had also increased. While the transport of live cattle continued to be carried on land, the transport of cereals and later

of flour continued to be carried on water. Even in the second half of the 19th century, after the establishment of the rail network, transportation by boats continued, since it has been cheaper than transport by train. Until the second half of the century, the road network in Bács-Bodrog County had not yet been sufficiently developed, so that could not seriously jeopardize the priority of river transport either”(Pejin, 2000: 6).

Water transport has made it possible to access various goods, for example, we know that salt transportation happened on the Tisa, as well; the salt was transported from the Transylvanian salt mines by boats or rafts.

At the end of the 18th century, the two banks of Tisa became connected by ferry, which was an important means of transportation until the beginning of the 21st century. We are witnessing the disappearance of the ferry, nowadays it is used only near Bačko Petrovo Selo (Péterréve).



# SUNBEAM PEDIMENTS



Sunbeam pediments are typical for folk architecture in the Tisa region - the Southern-Alföld region in Hungary and the region that spreads on east and west sides of the Tisa river in Vojvodina. There are still many existing examples along the Tisa, especially around Senta and Bečej.

The basic motif of wooden pediments is the sun and the ray of light. This symbol can be seen in various forms, with various aesthetic arrangements of strips and cassettes. The pediments probably came to this region through Szeged (Hungary). Based on the research of Valéria Beszédes, we know that the sunbeam pediments in Vojvodina were built in the 1970s by

local carpenters. The pediments from Szeged certainly served as a model, but the local carpenters further varied the shapes of cassettes (Beszédes, 1989). Their appearance may be associated with the spread of sawn boards and saw mills that became popular in the second half of the 19th century. "The adjustment of the opportunities and workmanship was also crucial for the development of the typical Senta sunbeams" - writes Zoltán Valkay. „Without the steam saw set in 1884, the cheap floated Transylvanian wood, the post-flood constructions in Szeged (1879), it would've been hardly possible. Senta's craftsmen are praised for their beautiful and creative application of material and style" (Valkay, 1997:).



## FLOOD GATE NAMED AFTER ISTVÁN TÜRRE IN BEČEJ AND THE BARRAGE IN NOVI BEČEJ



With the regulation of the Tisa, the territories flood by water have decreased, while cultivated lands increased and water shipping and transport became possible on the river. This was a necessary condition for economic growth. However, there was a need for the development of river navigation. For this reason the István Türr flood-gate was built, and it is still in function.

The Danube-Tisa-Danube Canal (Ferenc-csatorna) was built between 1793–1802, and it connects the Danube (from Bezdán) with the Tisa. Thanks to the Canal, the water transfer of grain got simpler and faster. The István Türr flood-gate stands at the end of the DTD Canal influx into the Tisa next to Bečej.

Construction plans were made by Hainz Albert and István Türr, but Gustave Eiffel himself took part in their drawing, as well. There is a watercraft next to the flood-gate, producing electricity for the engine which moves the sections of the gate. This was an innovation which was unique all around the world at that time.

There were many of those who were critical about the regulation of the Tisa, as the regulated river often flood(ed).

In the '50s another standpoint came into the front: reservoirs and barrages should be built on the river! In 1977 the first and only barrage was built on the Yugoslav stage of the Tisa in Novi Bečej as well as a channel for taking in the upset water. The barrage caused a row of ecological disasters: the flow of water got slower and the Tisa almost stopped (the slowing down can be felt in Southern-Hungary, too), resulting in the accumulation of alluvion – due to which the riverbed got muddy, new sorts of waterplants appeared in still waters close to the riverside, or some species pullulated, some species of fish disappeared, while others appeared. As the riverflow has slowed down, polluted materials that get into the water flow down slower, so their destroying effects are stronger and last longer. The most visible sign of this is the frequent habitat loss and destruction of some fish species.



## NOVI BEČEJ –



A 15. századig Óbecse és Törökbecse története elválaszthatatlan volt egymástól, így a középkori Becse várának a maradványai Törökbecse területén találhatóak, „... egy tiszai szigeten volt a régi becsei vár, melynek létezése már 1342. év óta okmányilag bizonyítható és a melyet az 1699. évi karloviczi béke értelmében le kellett rombolni. Alacsony vízálláskor romjai még most is láthatók” – írja róla Iványi István 1909-ben. A vár csekély a folyómedri maradványai a Tisza bal partján, Törökbecse területén találhatóak a gáton túli részen.

Törökbecse a török hódoltság alatt nem pusztult el. A történelem során a településnek számos birtokosa volt, közülük kiemelkedik Rohonczy Gedeon (Pest, 1952 – Budapest, 1929) országgyűlési képviselő, író, jégtáncos és kiváló zöldség- és gyümölcsstermelő, aki anyai ágról az 1782 óta a települést birtokló Szissányi család leszármazott tagja volt és idővel megörökölte a törökbecsei uradalom egy részét.

Rohonczy Gedeon 1878-tól Gyöngyszigeten létrehozta hatalmas kertészetét és felépített családi kúriáját. „Ottani kertészete termékei Európa-szerte híresek” – írta róla a korabeli életrajzíró

(Szinyeyi, ). A Tiszagyöngye dinnyefajta nemesítő munkájának az eredmény, amelyet Pesten, Bécsben, Berlinben és Párizsban értékesített (Kalapis, 2003. 79.). Rohonczy gazdasága kiemelkedett különleges szőlészete tekintetében is. „Birtoka 650 kat. holdra terjedt ki, ahol 100 kat. holdon termesztett 120 különböző fajtájú szőlőt.” (Mód, 2012: 8) 1890 körül Észak-Afrikából telepített szőlőfajtát, a krokánt, amelyet egyedi mikroklímája miatt csak a Gyöngyszigeten sikerült meghonosítani. Kertészete a marketing szempontjából is egyedülálló volt, különlegesen csomagolt zöldségeit és gyümölcseit Törökbecséről és Budapestről rendelések után egész Ausztriáig és Németországig eljuttatta. Termékeivel számos világhiállításon részt vett. (André, 2012)

A Gyöngysziget természetvédelmi szempontból is jelentős. Délnyugati részén húzódik Ó-Tisza-meder, amely a Tisza 19. század végi szabályozása során jött létre. 2018-ban ezt a területet a Gyöngyszigettel együtt védetté nyilvánították, így létre jött a Holt-Tisza – Gyöngysziget Természeti Park. A terület számos védett növény- és állatfaj élőhelye.

Raffai Judit







# CIP