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# MOLIN – THE VILLAGE THAT DISAPPEARED FROM THE CENTRAL BANAT

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SUMMARY: In the area of central Banat, the municipality of Nova Crnja, village of Molin existed until the mid-20th century. Specifically, the village existed until 1957, when it was forced to displace. The village and municipality Molidorf (Molin) was founded by Count Ferraris with his wife in 1833, settling exclusively German immigrants. Molin is one of the few villages in the Banat which disappeared after World War II. The cause of this forced displacement is high groundwater, which is in some parts of village area only 1.1 m below the surface. The most critical were the lowest points of the village where groundwater was only 0.5 m below the surface. Due to the extremely high rainfall in 1955, and long-term retention of snow cover at the beginning of 1956 and high rainfall in June of the same year, floods in that year were great. According to the latest census in 1953, the village of Molin had 1,121 inhabitants.

Keywords: Molin, Central Banat, groundwater, flood

#### INTRODUCTION

The aim of this paper is to point to the seemingly monotonous and somewhat boring plain in the region of Banat, which at first glance we see, can be deceiving. The plain, which is seen in this area, without significant watercourses, gives us some kind of false security that the settlements in this area are safe from any natural disasters. However, the case of Molin proves the opposite. In Vojvodina, there are many examples of settlements that once existed. Thus, by the 18th century there were the following villages: Božitovo, Vrela, Zeldoš (near to Ilindža), Jenovac (near to Jabuka). In the 19th century the following settlements disappeared: Akač, Marino Selo, Novo Selo, Albrehtsdorf, Kenigsdorf, Gizelhajm. In the 20th century, besides Molin, which was displaced, several villages have been merged with the surrounding larger settlements and because of that those villages lost their status of administrative settlement. In this way disappeared Bikač near Bašaid, Vojlovica near Pancevo, Vilmater near Sajan (Ćurčić, 2004).

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By observing the cases of all these settlements and a large number of examples in the world we see that major natural disasters such as floods, landslides, earthquakes, volcanic eruptions, hurricanes and also wars, depopulation and economic crisis, political situation can lead to a complete emigration of settlement. Some of the examples in the world are, Craco, a small town in southern Italy, which was abandoned after a landslide in 1963, the city of Pripyat with the surrounding villages in the north of Ukraine, was entirely displaced after the explosion at Chernobyl in 1986, Oradour sur-Glane, a village in France, abandoned after the attack of the German army in 1944. The village of Kolmaskop (Namibia) and the island of Hashima (Japan) was displaced after the fall of the sale of diamonds, i.e. after the closure of coal mines. While cities like Famagusta (Cyprus) and Agdam (Azerbaijan) were displaced because of war (http://10mosttoday. com/10-most-amazing-ghost-towns).

The methods used are in the first place research, analytical data processing, cartographic, statistical, comparative and descriptive methods.

#### GEOGRAPHICAL POSITION

During its relatively short history, Molin was part of several administrative-territorial units. At the time of displacement it belonged to the municipality of Nova Crnja. It was surrounded by eight settlements. It was located southwest from Nova Crnja (4 km) and Toba (4 km), westward from Aleksandrovo (4 km) northwest from Banatsko Karadjordjevo (6 km) northward from Čestereg (8 km) northeast from Torda (6.5 km) eastward from Bašaid (8 km), and southeast from Banatska Topola (5 km). From the nearest urban settlement, Kikinda, was located 20 km southward.

Position of Molin was not favorable. Due to the undeveloped road network, traffic with surrounding settlements flowed slowly and with difficulties. Molin was located in the large and shallow depression. Phreatic groundwater in this region is at a shallow depth and therefore it has high groundwater that threatens fields and settlements (Bugarski, 1985).

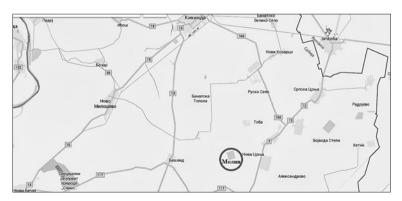


Figure 1. Position of Molin in relation to the surrounding settlements Source: https://www.google.rs/maps/

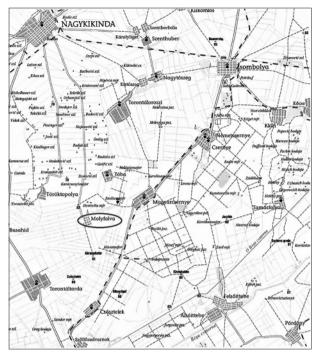


Figure 2. Position of Molin in Torontal County Source: http://www.molidorf.com/Maps.htm

Today, site of Molin and the wider area are covered with forest, which is known as "Molin forest".

## Factors that affected the disappearance of the village

The factors that were crucial for resettlement of the village are purely natural, soil characteristics, high level of groundwater and heavy rains.

# Pedological and hydrographic characteristics

Much of field is under the carbonate-free hydromorphic black soil, and in the northern and eastern parts there are two smaller areas under the carbonate black soil. Thickness of humus horizon is on the average 45 to 55 cm. During the drought in these soils appear deep cracks. Because of its composition includes clay, at a stronger wetting, hydromorphic black soil transforms into muddy sticky mass, which greatly affects that it becomes impermeable to water and air. It is well supplied with nutrients. Hydromorphic smonitsa is represented in one more shallow and narrow depression in northern part of field. By physical properties it is similar to hydromorphic black soil. Thickness of humus layer is 40-50 cm. The humus horizon is black in color, and when moderately moist it has small-polyhedral and lumpy structure. Smonitza is Heavy clay soil with poor physical properties. It is easily saturated with water, it becomes sticky and impermeable to water, and after heavy

rains the water remains on the surface of land which complicates processing, and damages crops. Because of the proximity of groundwater hydromorphic black soil and smonitza are wetter, more compact and clavish land, so they are difficult to process (Bugarski, 1985).

Phreatic groundwater is close to topographic surface. The area of cadastral municipality of Molin and surrounding area has phreatic groundwater at an altitude of 75 m. As the lowest part of the cadastral municipality is at an altitude of 75.5 m and average altitude of field is 76.6 m, while the village is at an altitude of 76.4 m, this means that the groundwater at these sites is at only 0.5 to 1.1 m below the topographic surface. The proximity of the underground water and the existence of a shallow depression caused the frequent threat to villages from high groundwater. Particularly huge floods caused by inland waters were recorded in 1871 and 1942 and the disastrous ones in 1956. The last flood occurred after extremely high amounts of rainfall in 1955, and long-term retention of snow cover in early 1956, and high rainfall in June 1956.

The average annual amount of precipitation in this area is 565.6 mm. In the period from 1949 to 1963, the largest amount of precipitation was 759.0 mm, and was recorded in 1955. The lowest precipitation was in 1961 (420.0 mm). The average annual number of snowy days is 24.3. The highest frequency of snowy days was in disastrous 1956, a total of 46 days.

Then in Molin depression, in addition to an outbreak of inland water, surface water inflow happened from the northeast direction, from Romania. On this occasion, the entire region of Molin was under water. This flood has caused population displacement and disappearance of the village.

After that, in May 1970, groundwater resurfaced. Later, digging a canal network, groundwater level was lowered. Beside channel there are no other surface waters (Bu-



Figure 3. Wetland in the area of Molin Photo: Janković, M, 2014

garski, 1985). In the area where it used to be a village even today it can be found smaller ponds that are formed in an extremely low ground, and during high groundwater. Often these ponds can be seen in the spring.

#### THE VILLAGE HISTORY

Determining the borders of the territory of Vojvodina was done by the Habsburgs, in order to protect people from the dangers that were coming from the east. On its southeast side it was made military border, and with it the first guard of the country included soldier and farmer. Between Moriš and Tisa, there was a lake with banks covered by reeds. The border guards had the task to cultivate this area. The Tisa-Moriš border has been moved forward to the Danube and became the Banat boundary. In order drain the Banat it was built the Bega canal from Timisoara to Klek, 70 km long. The canal was built from 1728 to 1733. The border protected the Empire against of epidemic from the Orient, especially the plague and cholera.

During the reign of Maria Theresa colonization was carried out in two periods. The first period was from 1763 to 1770, and the second from 1771 to 1780. The third invasion of the Turks and the plague ravaged the southern parts of Hungary, so it was necessary to think about the settling of these areas. In order to enable comprehensive settlement, agitators went to Bayaria, Wurttemberg and Rajnfals to collect colonists for southern Hungary. Gathering points of colonists were Regensburg, Ulm and Neuburg an der Donau. From there, ships took them to Vienna and continue along the Danube to Apatin, Petrovaradin, Pančevo (Remsing, 1988).

#### Colonization of Molin

After planned colonization completed, the remaining and uninhabited parts of southern Hungary were sold or lease in the form of deserted areas. The first auction of wastelands in Banat was done in 1781. Owners of the wastelands in southern Hungary were later inhabited these areas by colonists, immigrants, who mostly came from earlier urban areas, they became leaseholders (Remsing, 1988). In this way Molin was inhabited.

A large part of the crown land in Banat was sold to investors, along with settlements sponsored by the government. These landowners willingly colonized their large estates. In 1795, Count Jozef Johan de Ferraris appropriated vast area that included St. Hubert, Charleville, Soltur, Mastort and Heidfeld (settlements were established in 1770-71) and uninhabited area of Toba. Large amounts of land are the result of drained swamps in Banat. In 1814, Count Ferraris died, and his daughter Maria Wilhelmina Ferraris (called Molly) was the only heir, and her husband, Count Ferenc Zichy became the new landowner. In the period from 1830 to 1833, four large farms were established, Karolinenhof and Melaninehof with the German population and Hernietenhof and Emilienhof with Hungarian majority population. In the area of Emilienhof it was built a church (chapel). For economical tillage, Count Zichy-Ferraris planned further colonization. On his

estate and neighboring areas there were already a lot of German immigrants with their families looking for land and the landowner offered a new land and homes for rent. Then it started the huge influx of migrants. About 2 km southward from Herniethof, future inhabitants determined the base of the new village, i.e. Molin (Molidorf, Molifalva).

Most likely, it was named after the landowner, Countess Maria (Molly) Ferraris (http://www.dupont-banat.org/europe/intro/banat/villages/molidorf/index.html)

Molin was finally established in 1833. After that, the estate changed owners many times, from the Count over his nephew to the Duke Henry of Chambord (Baron Johannes Kiril Bilot was the administrator of the estate), followed by the Duke of Parma, who sold the estate to Timisoara Land Bank (http://www.molidorf.com/History.htm).

They were looking for people from surrounding area who during the time of Maria Theresa, or their ancestors came as colonists. Molin was inhabited mostly by German immigrants, most immigrants came from the national territory, and from the nearby villages of St. Hubert, Soltur, Charleville, Mastort, Heidfeld, Hatcfeld, Bikač and Novo selo. These settlements were full, and new generation was eager to find their farms and homes elsewhere. The first settlers of Molin were poor people, agreements with landowners were varied, from renting to conventional serfdom. They signed a contract with landowner, which gave detailed description what would they get each year in exchange for work on the planting and harvesting of certain pitches. Thus the village was secondary dwelling as Sigmundfeld (today Lukićevo) and Katrajnfeld (today Ravni Topolovac), opposite the primary dwellings of Torontal County (http://www.dupont-banat.org/europe/intro/banat/villages/molidorf/index.html).

Molin (Molidorf, Molifalva) at the time of emergence belonged to Jimbolia County. At that time, Molin was a small municipality, with approximately 221 households and 1063 inhabitants.

In 1868, imperial decision provided the establishment of seven villages in the Banat regions of the Tisa and Danube rivers, specifically on the sector between Zrenjanin and Kovin. One of these settlements was Gizelahajm in the alluvial plain near Glogonj. It was inhabited by 175 families from Molin, Čestereg (Tschsterleg), Nova Crnja (Neu-Tschernja) and German Crnja (Deutsch-Tschernja), the families in this town received the arable land and pastures. The first attempts of settlement in 1863-65 were successful. Their obligation was to raise and protect embankments and improve part of Pančevo wetland to arable land. In times of high water, levees were breached and the village was flooded for several times. After flood in 1976, most residents of Gizelahajm returned to Molin (Bugarski, 1985, http://www.molidorf.com/MigrationMap.htm).

In 1869, it also began the colonization of families from Katrajnfeld (today Ravni Topolovac), Klek, Stefanfeld (today Krajšinik) and Ečka The most successful period for the development of the village was from 1868 to 1870. The village rapidly developed because the harvest was above average. In March and April 1870, the first major floods occurred, and the city was almost totally destroyed, and the inhabitants moved to neighboring villages. Reconstruction of the village at a higher location began in the summer of the same year, although many residents did not return to Gizelhajm. Following eight years from 1871 to 1880 were, on average, less successful, due to the heavy rains. Despite all, the village had at one time up to 1000 inhabitants. However, the biggest floods oc-

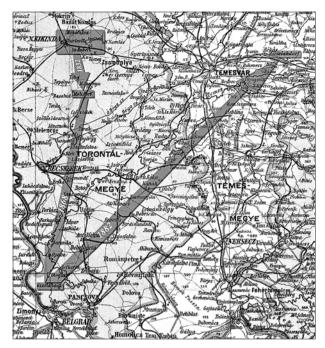


Figure 4. Migration to Gizelhajm and Gizeldorf Source: http://www.molidorf.com/Maps.htm

curred in March 1880. Colonists from neighboring villages suffered the same fate, so it can be concluded that the colonization of this area were unsuccessful. Count Joseph von Bethlen, the administrator of the property in Timisoara, offered to individuals the option of moving to a new location. After concluded agreement Gizelhajma population began in the spring of 1881 to emigrate to Gizeldorf (http://www.molidorf.com/MigrationMap.htm).

In 1872, in Molidorf and surrounding area there was high water. After that, the baron H.H Bourbon joined Molidorf Plain to waterpower Tamiš-Bega-Tisa regulation in Vršac (Remsing, 1988).

### **Population**

For quantitative population trends of Molin is characteristic that there were long periods with tendencies of increasing or decreasing numbers.

Table 1: Quantitative population trends of Molin, according to censuses from 1869 to 1953

1869	1880	1890	1900	1910	1921	1931	1948	1953
794	783	936	1202	1063	1272	1203	423	1121

Source: Bugarski, 1985

From 1869 to 1880 the population decreased, and to the next period, the number increased by 266 inhabitants. Since the Census in 1900 to 1910 the population reduced by 139 people, although in those years, natural increase was positive. In the next period the population increased again. After the liberation in 1944, in Molin it was established a concentration camp for Germans, which existed until 1947 when it was dismantled, and Germans definitely went from Molin (Bugarski, 1985). The camp held thousands of Germans, from the camp they were sent if necessary, to other camps in Vojvodina, or to forced labor in Russia (Remsing, 1988).

After the war, in Molin, it was conducted colonization by "internal colonists". By colonization after WWII the war, land was given to the landless families of twenty-seven villages of Banat. The process of colonization began in 1946 and ended in 1948. According to the list of recapitulation, colonization and the allocation of properties to colonists, drawn up in Molin on March 22, 1948, and kept in the funds of Archive of Vojvodina, 265 families with 1,160 members were actually colonized.

While the "Statistical Bulletin" of the Provincial Bureau of Statistics states that Molin according to the Census on March 15, 1948 had 423 inhabitants, hitherto other sources, the book of the censuses in 1961, states that in 1948 the population of Molin was listed together with the population of Nova Crnja (Bugarski, 1985).

According to the census in 1953, Molin had 1121 inhabitants.

Table 2: Number of families for whom was made decision on colonization in Molin by villages

Nº	Village	Number of families	Nº	Vlillage	Number of families
1.	Banatsko Aranđelovo	35	15.	Krstur	6
2.	Banatski Dušanovac	5	16.	Livade	21
3.	Banatska Topola	1	17.	Mokrin	17
4.	Bašaid	6	18.	Nova Crnja	14
5.	Čenta	1	19.	Novi Kneževac	3
6.	Dragutinovo	22	20.	Ostojićevo	12
7.	Đala	5	21.	Padej	1
8.	Gornja Mužlja	12	22.	Rusko Selo	2
9.	Hetin	1	23.	Sanad	2
10.	Iđoš	18	24.	Srpska Crnja	5
11.	Jazovo	7	25.	Toba	4
12.	Karađorđevo	40	26.	Višnjićevo	1
13.	Kikinda	15	27.	Vojvoda Stepa	9
14.	Klarija	3			

Source: Bugarski, 1985

In terms of ethnic structure until the liberation of Molin, the largest group of the population consisted of Germans, with over 90% of the population. The share of the Hungarians was much smaller, but in numbers they were just behind the Germans. Af-

ter WWII and camp almost the entire German population moved out to the fatherland. The Ethnic structure of Molin after the war and the arrival of new settlers completely changed and the majority population became Serbs.

Table 3: Population of Molin by ethnic structure according to the Census in 1953

Serbs	Yugoslavs and undecided	Hungerians	Romanians	Other Nations	
888	2	196	2	33	

Source: Bugarski, 1985

The analysis of census data in 1900 and 1910, shows that the age structure in the early 20th century was good. The group of younger and middle-aged population was the most numerous. However, in subsequent censuses, structure of the colonized population was favorable.

Table 4: Population of Molin by gender and age, according to the Census in 1953

Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and older
Total	160	140	133	114	94	88	76	53	92	63	47	34	9	18
Male	75	64	76	45	51	35	32	29	46	34	28	17	6	4
Female	85	76	57	69	43	53	44	24	46	29	19	17	3	14

Source: Bugarski, 1985

The population structure was favorable. The largest group consisted of children aged 0 to 4 years. Also the younger age population group was numerous, as well as the middle-aged population group. Number of people older than 50 years was decreasing.

Table 5: Working-age population of Molin by type of activity and gender, according to the Census 1953

Working-age population	Total	Agriculture	Traffic	Craftsmanship	Services	Administration	No activity	Unknown
Total	459	405	5	9	2	10	27	1
Male	341	292	5	9	2	6	26	1
Female	118	113	/	/	/	4	1	/

Source: Bugarski, 1985

At the time of the census number of working-age inhabitants was 459, or 40.9%. The number of dependents was 662 or 59.0%. Most of the population was engaged in agriculture, even 36.1% of the population. The number of inhabitants who were engaged in other activities was much smaller or secondary activities in Molin were poorly developed.

### The economy

During existence of Molin, most of its households had the largest incomes from agricultural activities. One of the first measures taken to improve farming was increasing arable land. This is achieved by plowing grasslands. For the agricultural development it was important the establishment of agricultural and credit cooperatives, both cooperatives were established before World War II. In the structure of agricultural land, the largest area was arable land. Gardens, vineyards and pastures were rarer and there were no orchards and meadows (Bugarski, 1985).

Around 1910, landlords sold their fields through installment payments to their tenants and their employees from the then Molidorf. This is could be described as a land reform. Then the tenants became farmers, but the first years were very difficult for payment of installments and procurement of working tools (Remsing, 1988).

After World War II, the agrarian social structure of Molin has changed, land was seized from Germans and included in the sovereign wealth fund. Part of the land was given to the colonized families. Each colonized family received 50% of better and 50% of worse land, in addition they were given 800 square fathoms for gardens near the village. According to the established key, depending on the number of household members was households received up to 9 acres of arable land. The second part of the land was given to the local farmer working cooperative and agricultural station. It is also interesting that the allocation fund included 270 acres in a cadastral municipality Bašaid and 150 acres in cadastral municipality Banatska Topola. Cooperative "Miloš Klima" in Molin was dismantled in 1953.

Crafts were performed by a small number of people, so they managed to meet the basic needs of manufacturing and services. Trade was performed at fairs, but there was also organized and compulsory purchase of agricultural products. Wholesale trade was dealt by middlemen-traders from major towns (Bugarski, 1985).

Traffic conditions were very bad. For the entire time of its existence, the village had no built streets, or roads to neighboring villages. Between Molin and surrounding villages people used animal-drawn transport means over summer roads or people walked. In 1898, Count Čekonić built a narrow-gauge railway from Zrenjanin for passenger and freight traffic, which had advantages for Molin although not connected to the railway network. First stop was 7 km away from Molina. At that time, important novelty was deepening and purification of river bed of the Bega river, in 1910, for passing of larger ships, which transfer grain to Timisoara (Remsing, 1988).

### MORPOLOGY OF THE VILLAGE

During populating the wastelands, there was precisely set agenda for future settlement. The settling of wastelands should be performed in the way to settle only those that are closest to the water. In the middle of the village should build a school, church and community hall. Streets should be 18-20 (35-38) fathoms<sup>1</sup> wide. The estates could be divided in whole, halves or quarters (Remsing, 1988). For that time, the village was wellplanned, with the proper square base, belonged to the Pannonian type with large plots and wide streets intersecting at right angles, and whose sides were 750 m long (Bugarski, 1985).

In the seventies it was created a small church with walls from unbaked bricks and thatched roof. Once the population increased, church was too small, and at the initiative of Herzog von Parma old church was demolished and in the same place a larger church was built from bricks. Next to the church at the same time it was built a primary school in which the barons brought teachers, the school was optional. Molidorf did not have a parish, but together with the municipality of Toba, where was the headquarters of the parish, there were the church books of Molidorf. After the Banat came under Hungarian rule, primary education became mandatory, in the beginning three classes, and later four grades. In school children were taught in German and Hungarian. The first municipal building was erected near the school, consisted of one room for municipal affairs, one room for the cash register and one for an association of men. Molidorf did not have municipal management, it was managed from neighboring Tobe. In 1923, Village got its own municipal government. The village's drinking water was available using four artesian wells.

Almost all the houses were built at the beginning of parcels, all were ground, facing the street with a gable to the street. The houses were built with one room facing the street, kitchen, pantry and staircase to the attic. Wealthier families had two rooms. They did not have basements, because of danger of high water. Houses were built of materials that were found on the field, mud, and the roof was covered with reeds. Soil was used for impaled walls thick up to 60 cm, and for maximum strength this soil was mixed with straw, so the connectedness was higher.

Territorial expansion of the village was done by the end of the 19th century. During the 20th century the village was the most expanded in the second decade. In Molin area there were three farms. One (Ferenc's) was given to the local agricultural station, and the other two to farmer working cooperative. The village had a post office, craft association, book club and church group. (Bugarski, 1985). In 1925, then Molidorf began the construction of a new church on the site of the original small church. In 1930, the municipality of Molidorf built a new school with the later addition of the municipal building. The school had two classrooms, and a total of six grades. In first and second grades children were taught in German, and from the third grade in Serbian. The sixth grade was taught Gothic, Latin and Cyrillic (Remsing, 1988).

 $<sup>1 \</sup>text{ foot} = 0.3048 \text{ m}, 1 \text{ Fathom} = 6 \text{ ft or } 1.8288 \text{ m}.$ 

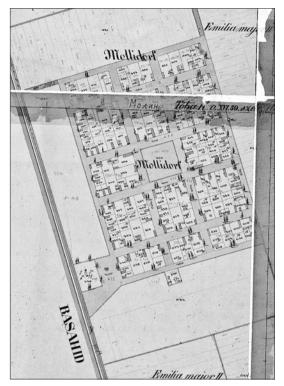


Figure 5. Plan of settlement of Molin Source: Real Estate Cadastre of Nova Crnja

Today when walking in the forest, along established trails, it can be seen the bricks covered with grass, but also various concrete remains of former buildings. The remains of the cemetery are clearly visible, destroyed and preserved monuments, overgrown with grass, located on the outskirts of the village. However, the village itself has no major and visible buildings and houses.

Displacement of Molin was started during the floods in 1956 and was completed in the summer of 1957. Most of the families returned to the towns from which they had come. Obtained land they could not sell, and these families trough settlement extended parts of Nova Crnja and Vojvoda Stepa (Bugarski, 1985). Those who bought the house did not have the right to receive parcels, and materials and roof tiles from houses in Molin could not take away. At the time of displacement of the village, the inhabitants of the surrounding villages brought construction materials from the population of Molin. Nowadays in these surrounding neighborhoods it can be heard stories from the older population that they personally bought tiles, bricks for their own purposes. Then, at the site of the village was planted poplar forest, so called "Molin Forest".

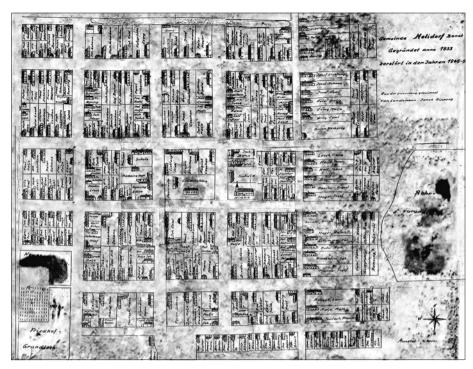


Figure 6. Map of Molin Source: http://www.molidorf.com/

#### CONCLUSION

Molin is an example of badly selected location for the establishment of settlement. Along bad weather conditions, such as high rainfall and prolonged retention of snow, the consequences are disastrous. Molin is not an isolated instance, this is just one case, but similar problems are faced by a large number of villages throughout the Banat. The high groundwater is also problem of residents of surrounding villages such as Bašaid, Banatska Topola, Torda, Banatsko Karadjordjevo, but also other villages throughout municipalities of Kikinda, Nova Crnja and wider area. The village existed something more than a century. Particularly major floods caused by inland waters were recorded in 1871 and 1942 and in disastrous 1956. After that, in May 1970, groundwater resurfaced. Later by digging a canal network, groundwater level was lowered. Although digging of the canal network reduced groundwater, however there have been no attempts to resettle Molin.

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