

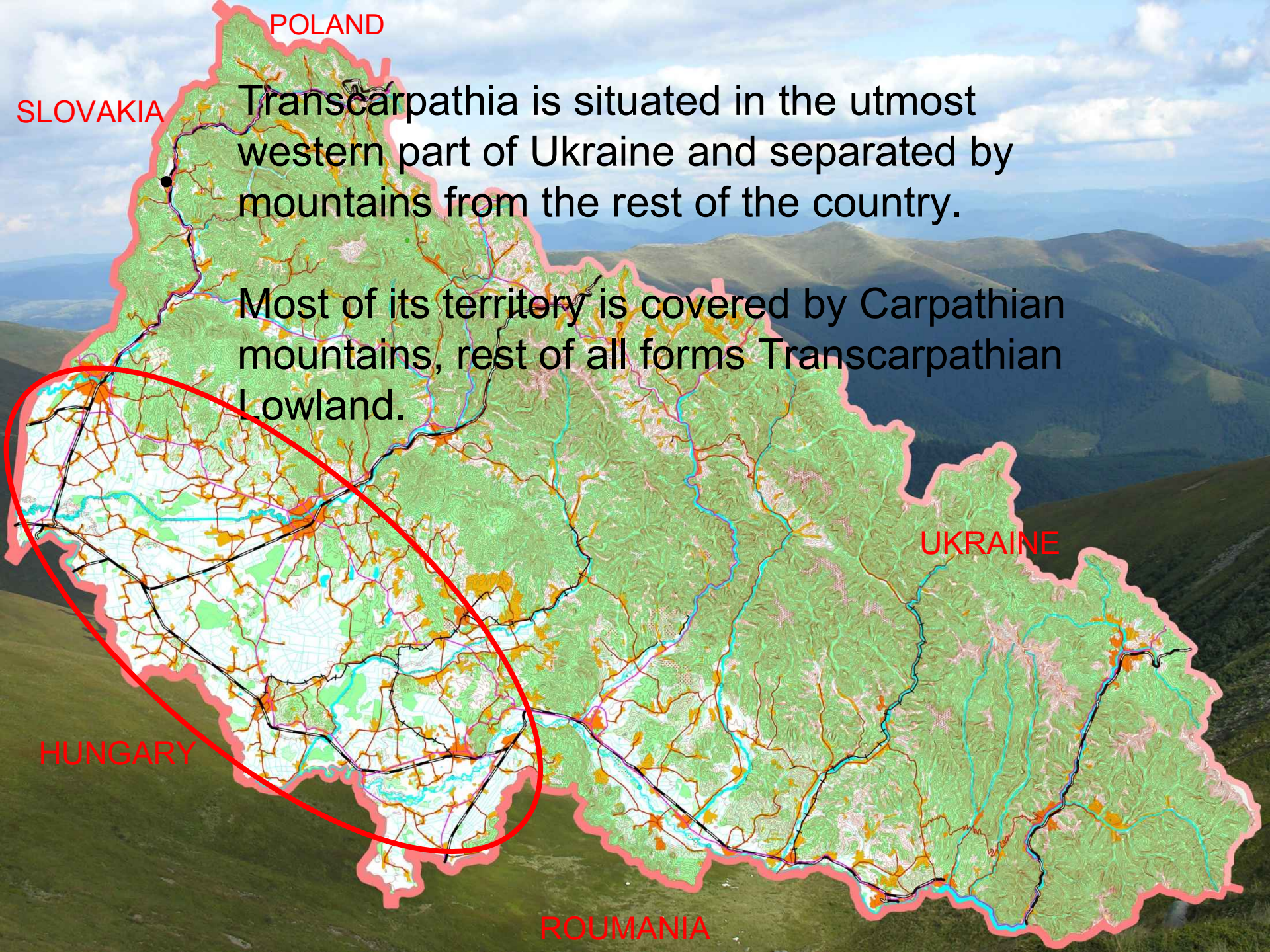


# **WETLANDS OF TRANSCARPATHIA LOWLAND PART (UKRAINE) AND ENSURING OF ITS PROTECTION**

Andrik Eva,  
Kish Roman

**Laboratory for Environmental Protection  
Uzhhorod National University (Ukraine)**





POLAND

SLOVAKIA

Transcarpathia is situated in the utmost western part of Ukraine and separated by mountains from the rest of the country.

Most of its territory is covered by Carpathian mountains, rest of all forms Transcarpathian Lowland.

UKRAINE

HUNGARY

ROUMANIA

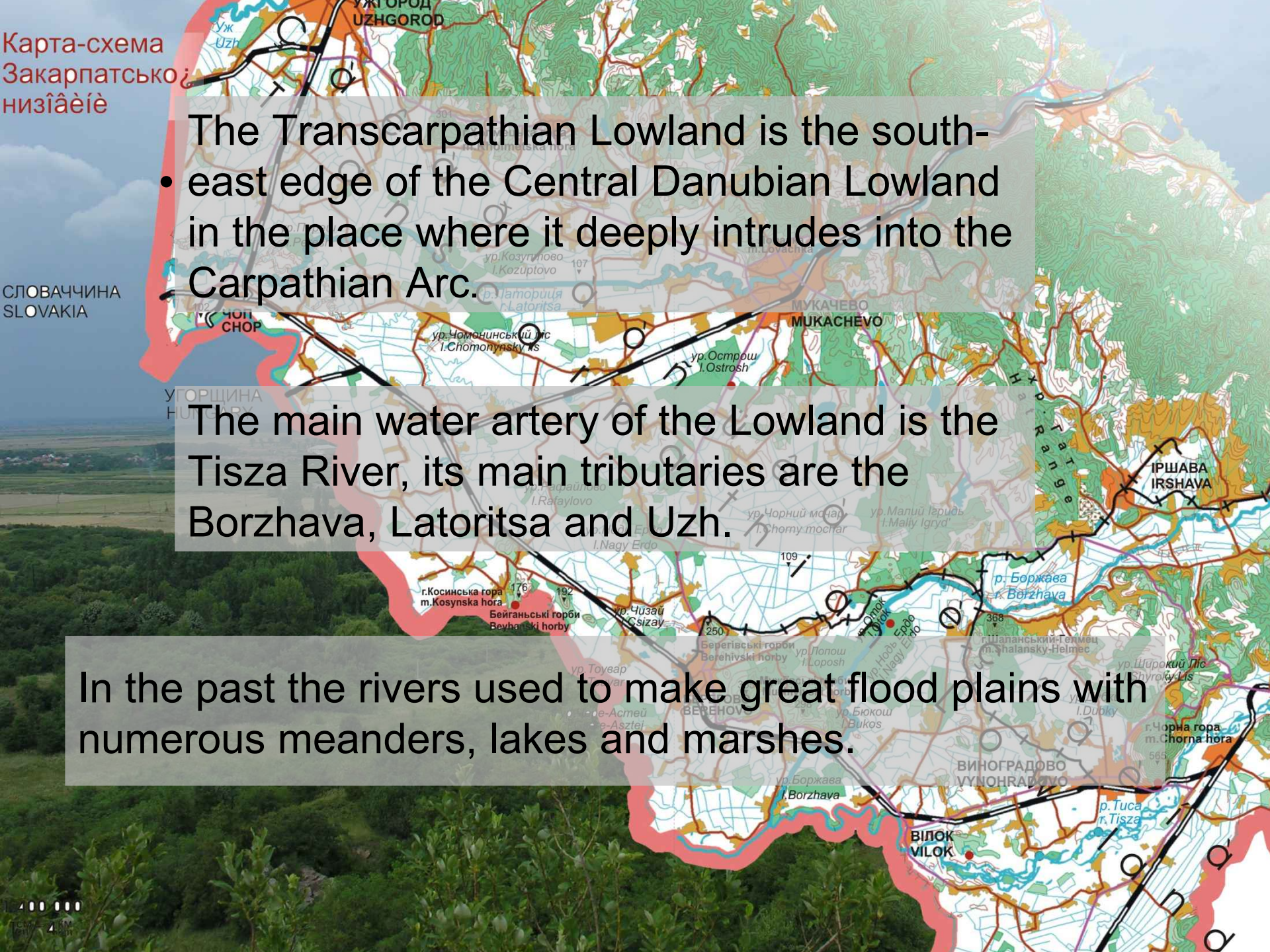


Карта-схема  
Закарпатської  
низини

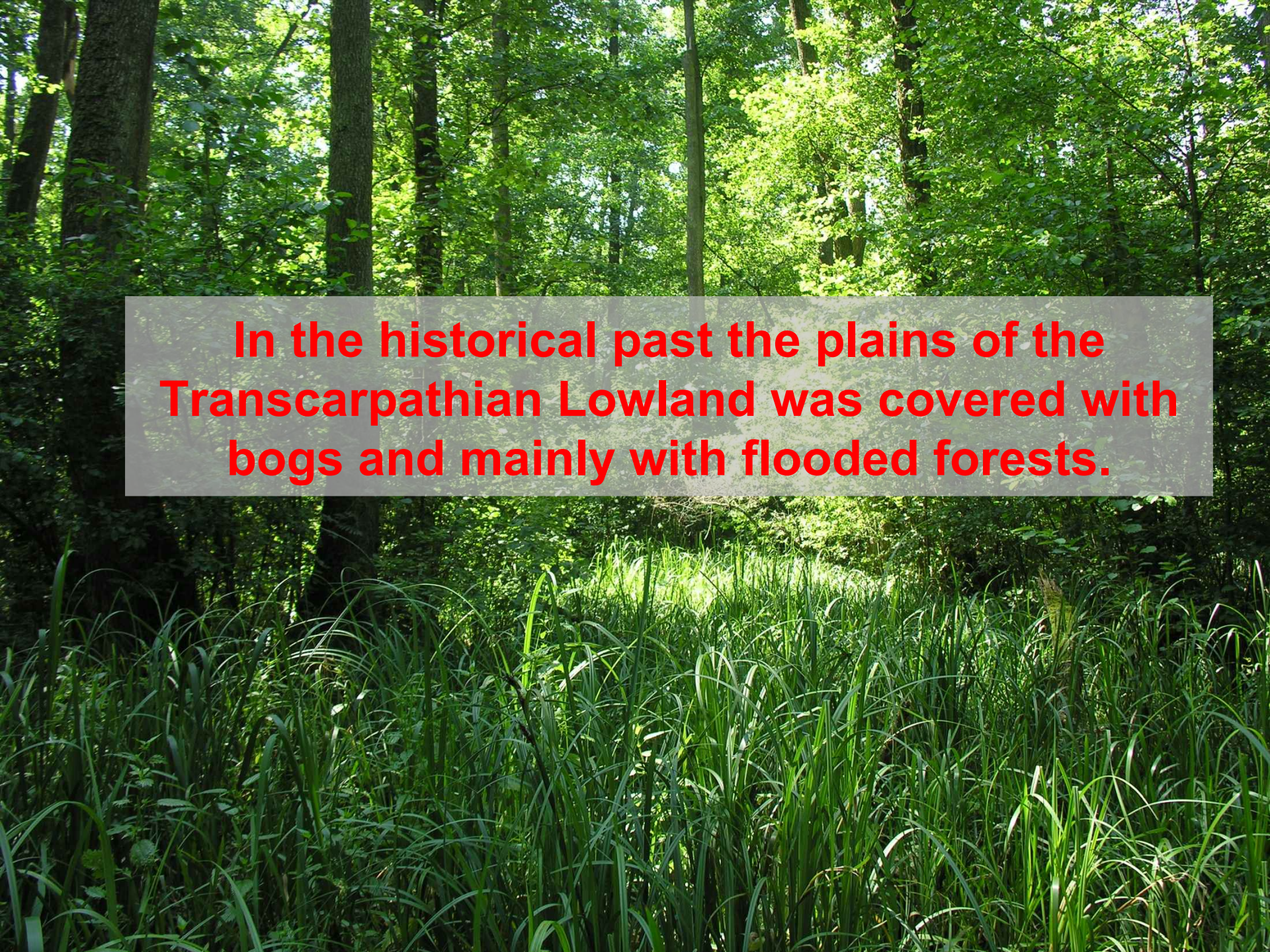
The Transcarpathian Lowland is the south-east edge of the Central Danubian Lowland in the place where it deeply intrudes into the Carpathian Arc.

The main water artery of the Lowland is the Tisza River, its main tributaries are the Borzhava, Latoritsa and Uzh.

In the past the rivers used to make great flood plains with numerous meanders, lakes and marshes.





A photograph of a dense forest. The background is filled with tall, slender trees and a thick canopy of green leaves. Sunlight filters through the foliage, creating dappled light. In the foreground, there is a field of tall, green grasses or reeds, some of which are in sharp focus while others are slightly blurred. A semi-transparent grey rectangular box is overlaid on the middle of the image, containing red text.

**In the historical past the plains of the Transcarpathian Lowland was covered with bogs and mainly with flooded forests.**

















**In last 150 years the Lowland totally have been changed.**



- **The present forested areas amount only about 10%, and are often forest plantations of changed composition.**
- **The major part of the territory is the farming land.**
- **All small rivers were regulated by canalization**
- **Melioration of the territory resulted in total extinct of the relic bogs, natural ponds etc.**
  - **transformation of the plain forests structure**
  - **extinct of many representatives of flora and fauna**





N. *Salamon* (Bleed)

*Summa*

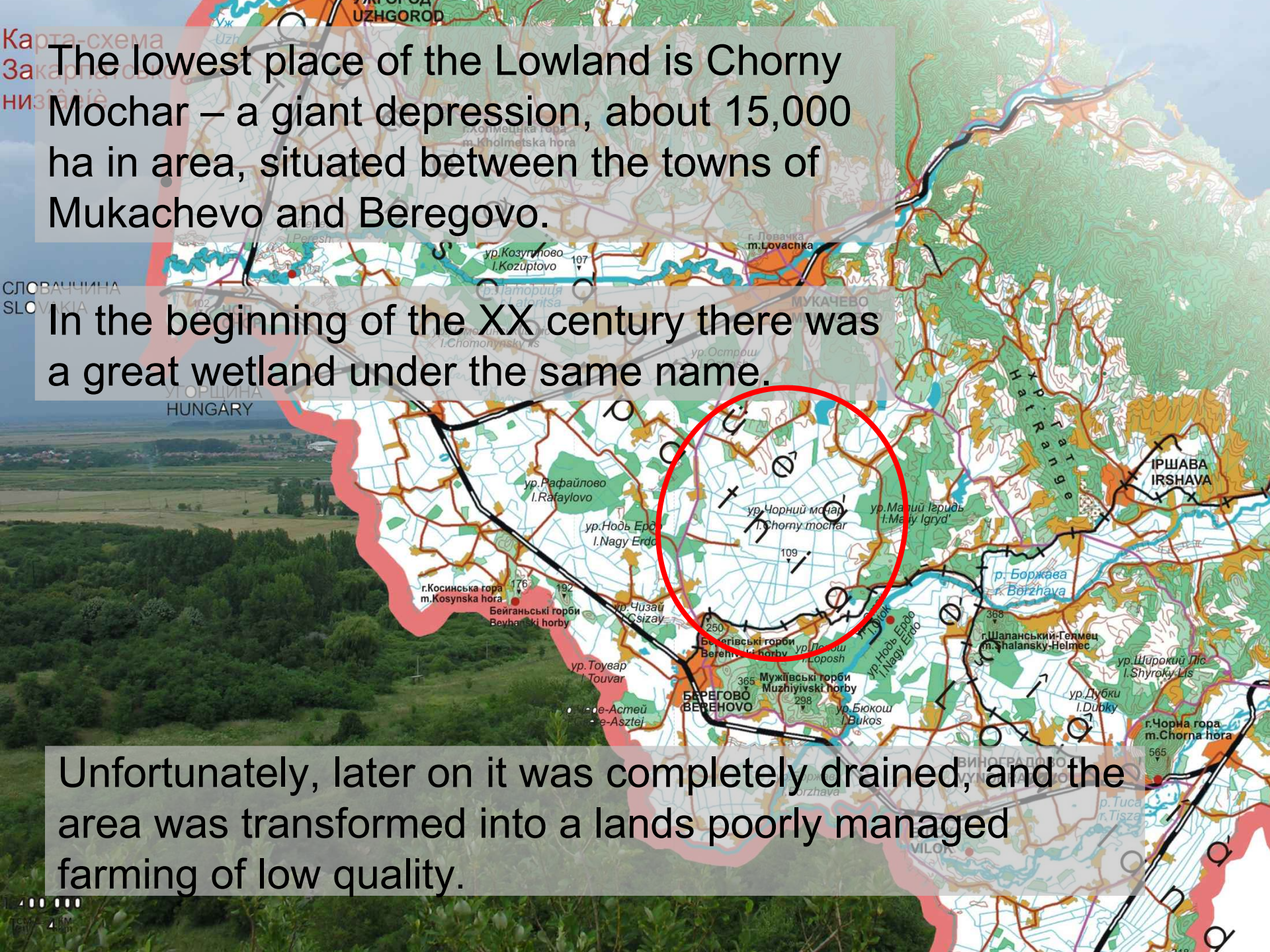
*Vater der Directi*

*Hauptmann „Kop*  
*des Major-Ingenieur Kop*  
*im Jahre 1858*

*aufgenommen und geze*

*Borona Erdő*



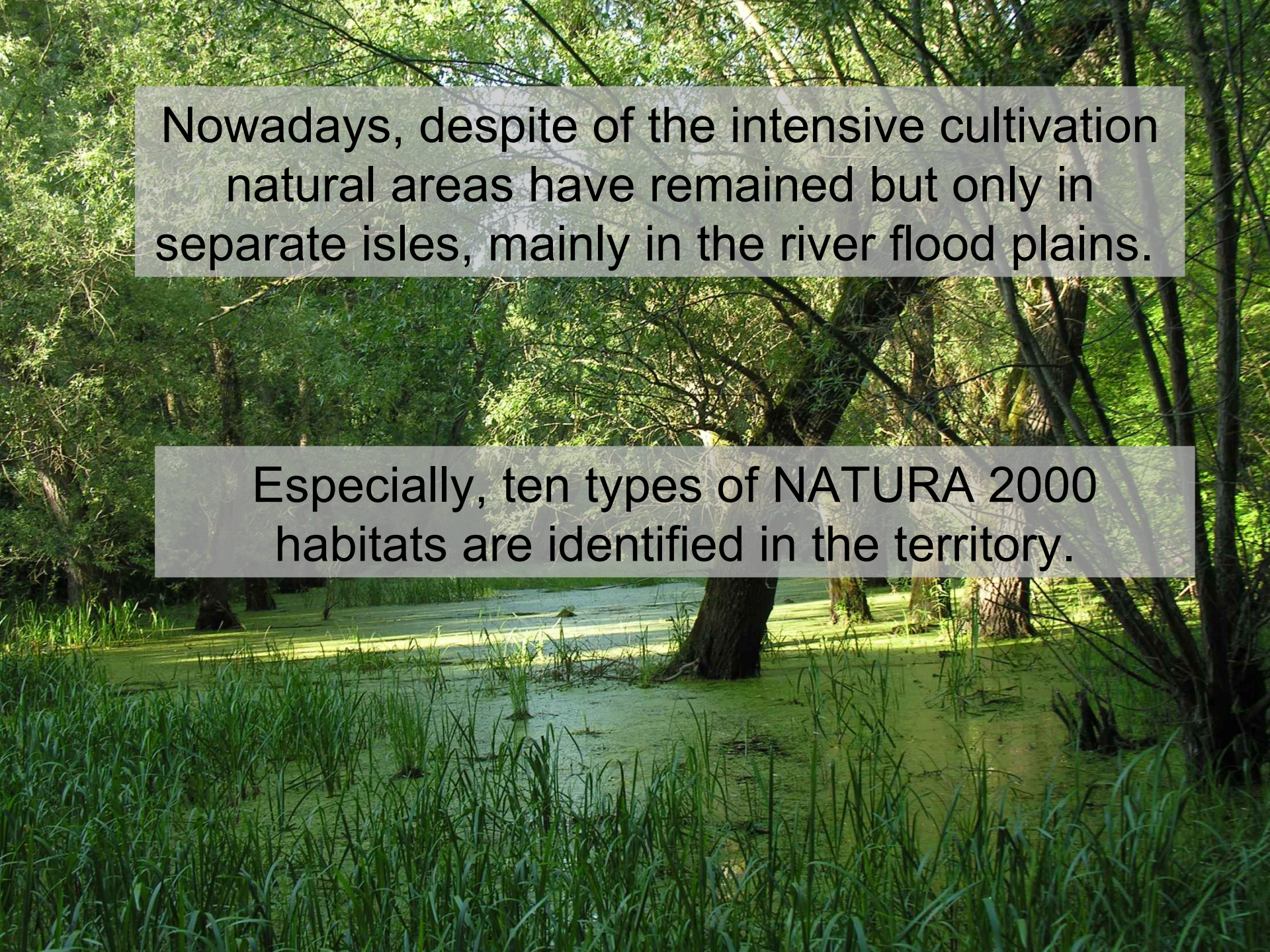


The lowest place of the Lowland is Chorny Mochar – a giant depression, about 15,000 ha in area, situated between the towns of Mukachevo and Beregovo.

In the beginning of the XX century there was a great wetland under the same name.

Unfortunately, later on it was completely drained, and the area was transformed into a lands poorly managed farming of low quality.





Nowadays, despite of the intensive cultivation natural areas have remained but only in separate isles, mainly in the river flood plains.

Especially, ten types of NATURA 2000 habitats are identified in the territory.

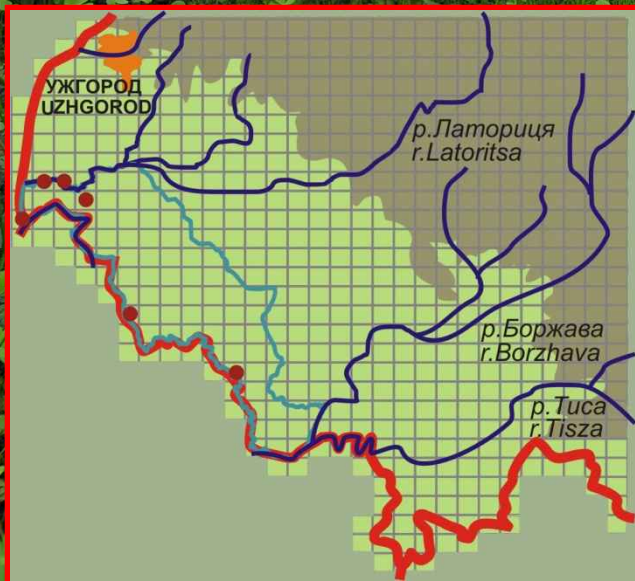


- 3130
- Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoëto-Nanojuncetea*
- 3140
- Hard oligo-mezotrophic waters with benthic vegetation of *Chara* sp. formations
- 3150
- Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* – type vegetation
- 3260
- Water courses of plain to mountain levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation
- 3270
- Muddy river banks with *Chenopodion rubri* p.p. and *Bidention* p.p. vegetation
- 6430
- Hydrophilous tall-herb fringe communities of plains and of the montane to alpine levels
- 6440
- Alluvial meadows of river valleys of the *Cnidion venosi* alliance
- 6510
- Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)
- 91E0
- \*Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)
- 91F0
- \*Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmenion minoris*)



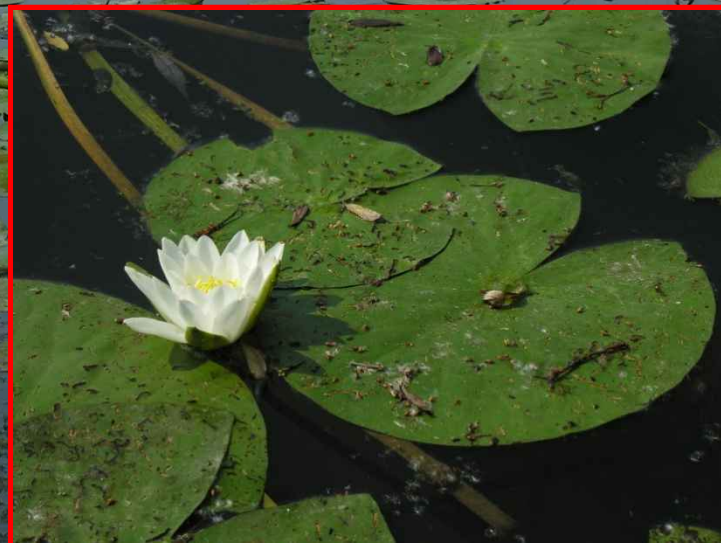
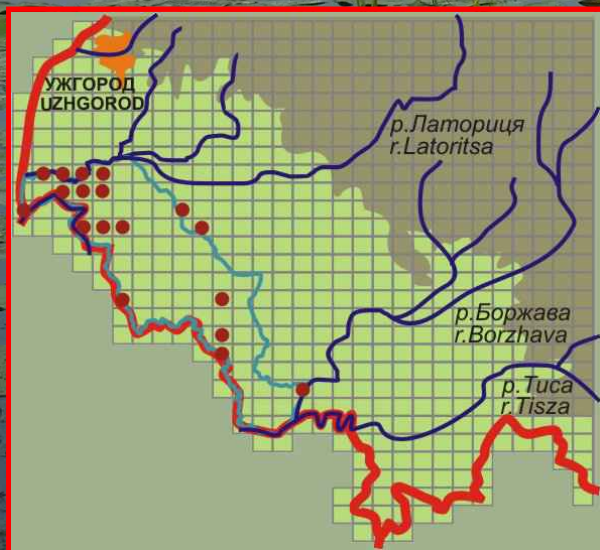
3130

Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoëto-Nanojuncetea*





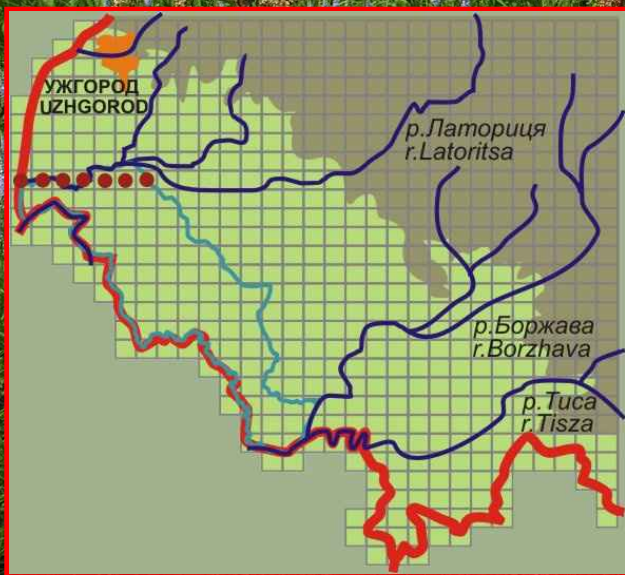
- 3150
- Natural eutrophic lakes with Magnopotamion or Hydrocharition – type vegetation





• 6430

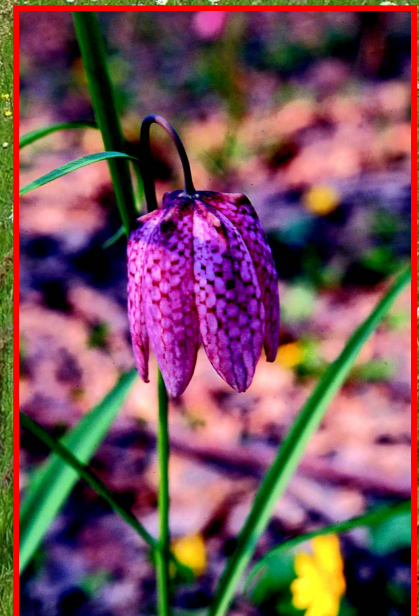
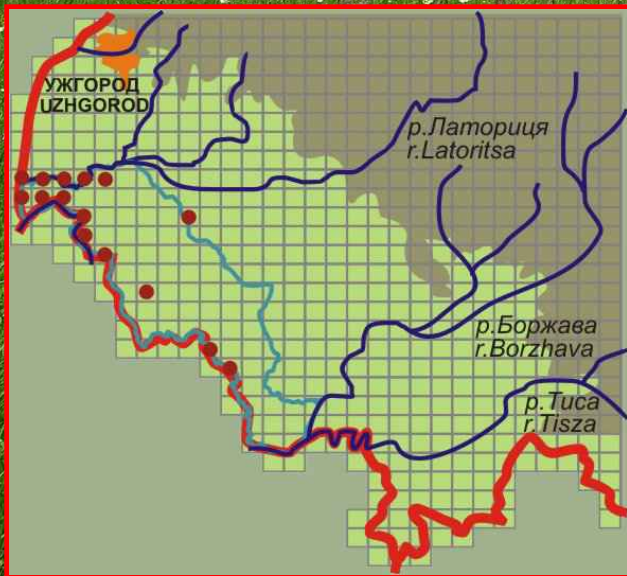
- Alluvial meadows of river valleys of the *Cnidion venosi* alliance





• 6510

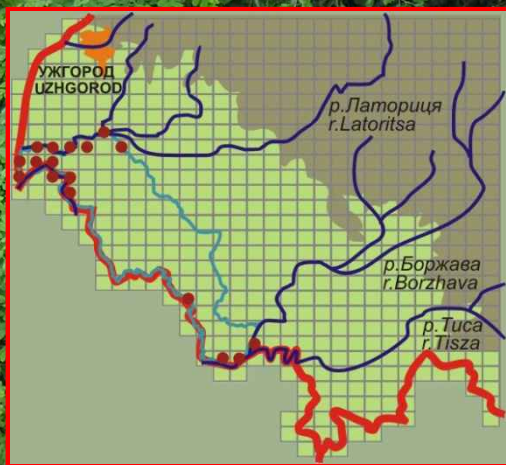
Lowland hay meadows (*Alopecurus pratensis*,  
*Sanguisorba officinalis*)





• 91E0

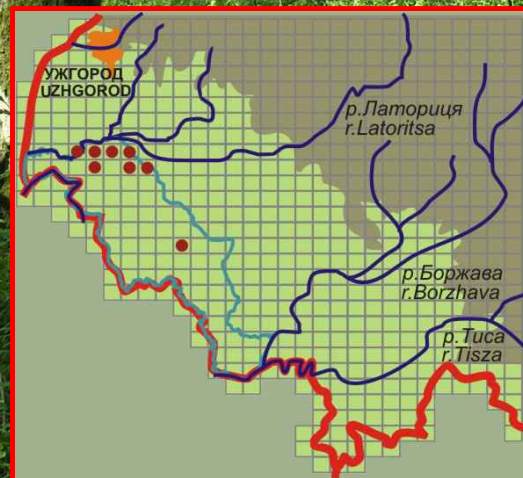
\*Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)



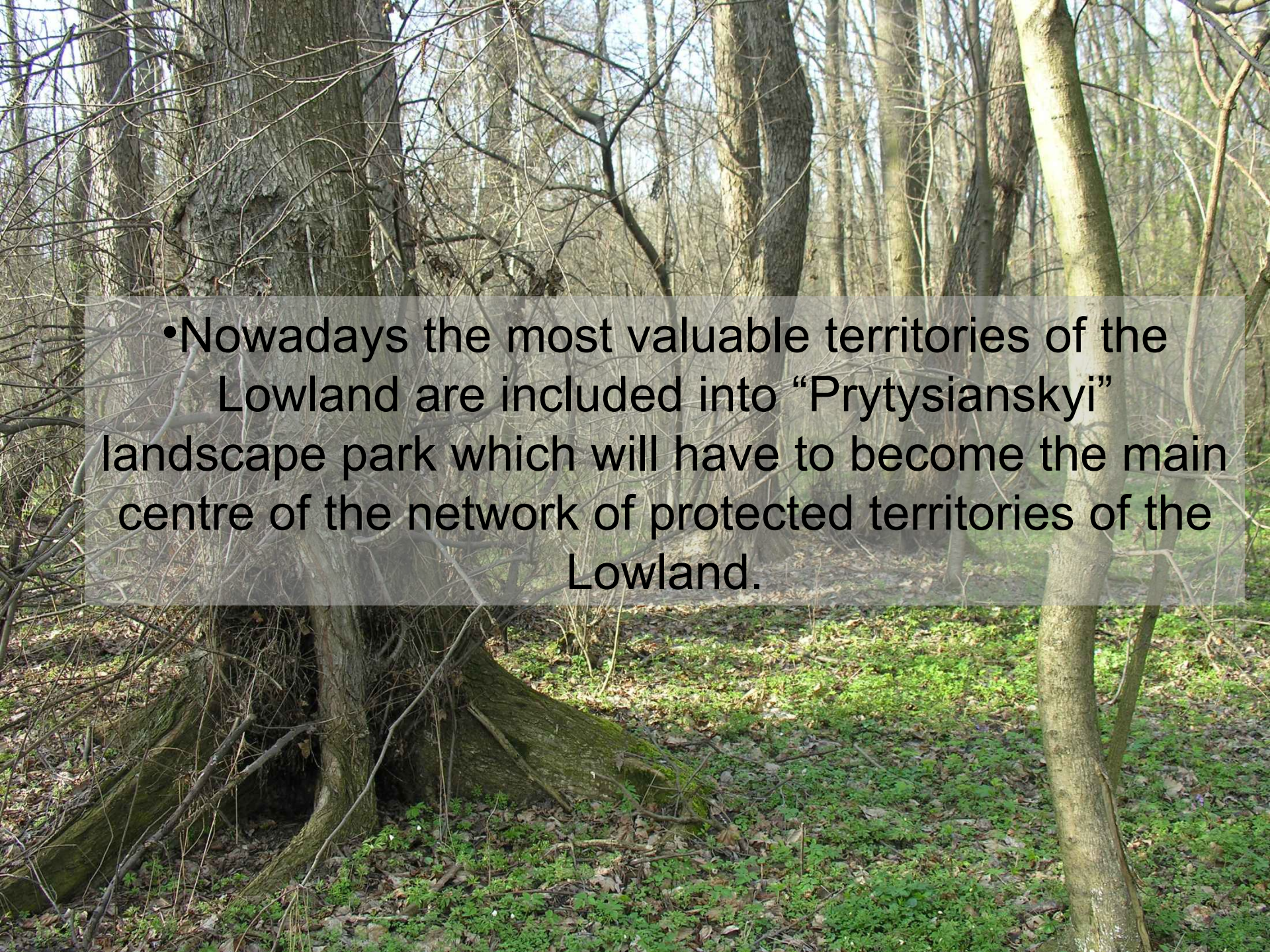


• 91F0

\*Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmenion minoris*)

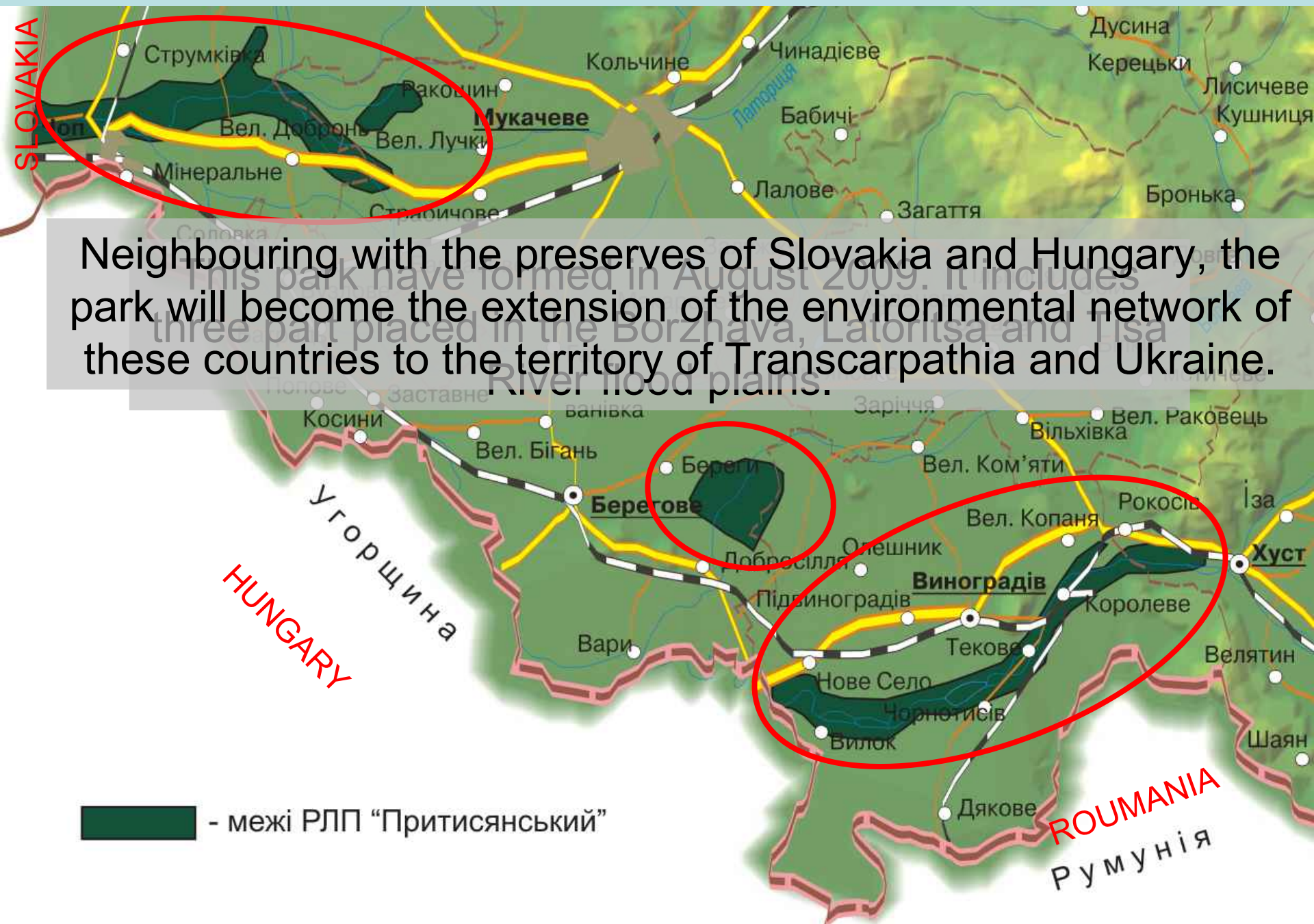




A photograph of a forest. In the foreground, a large, thick tree trunk is visible on the left, with its roots spreading out. The ground is covered with green moss and small plants. In the background, many thin, bare tree trunks stand vertically, creating a dense forest scene. The lighting is soft, suggesting a sunny day with some shade.

- Nowadays the most valuable territories of the Lowland are included into “Prytysianskyi” landscape park which will have to become the main centre of the network of protected territories of the Lowland.







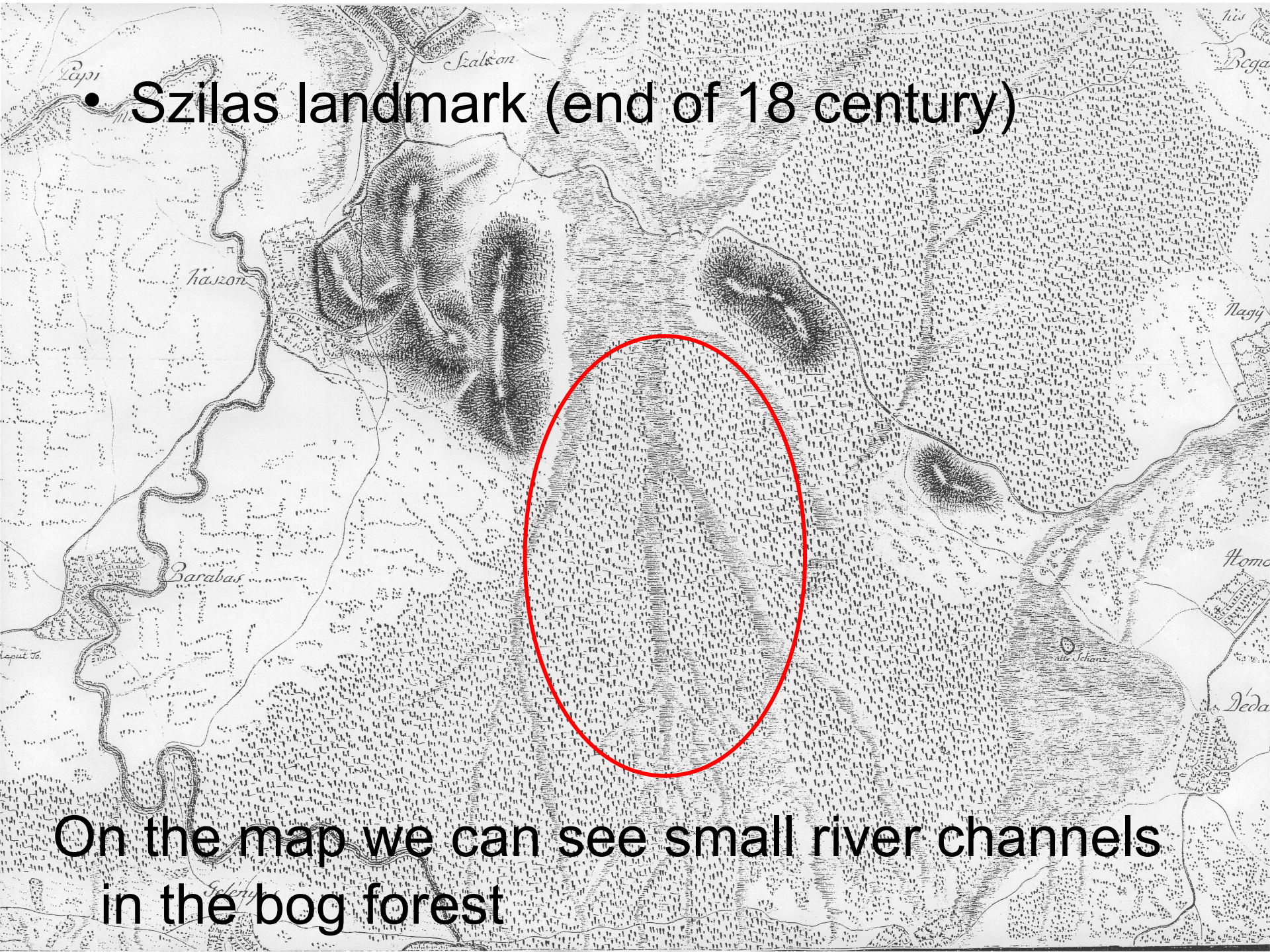
# ATTEMPT OF WETLAND REVITALIZATION

In 2009 the revitalization project of one of the Lowland valuable areas was developed.





- Szilas landmark (end of 18 century)



On the map we can see small river channels  
in the bog forest



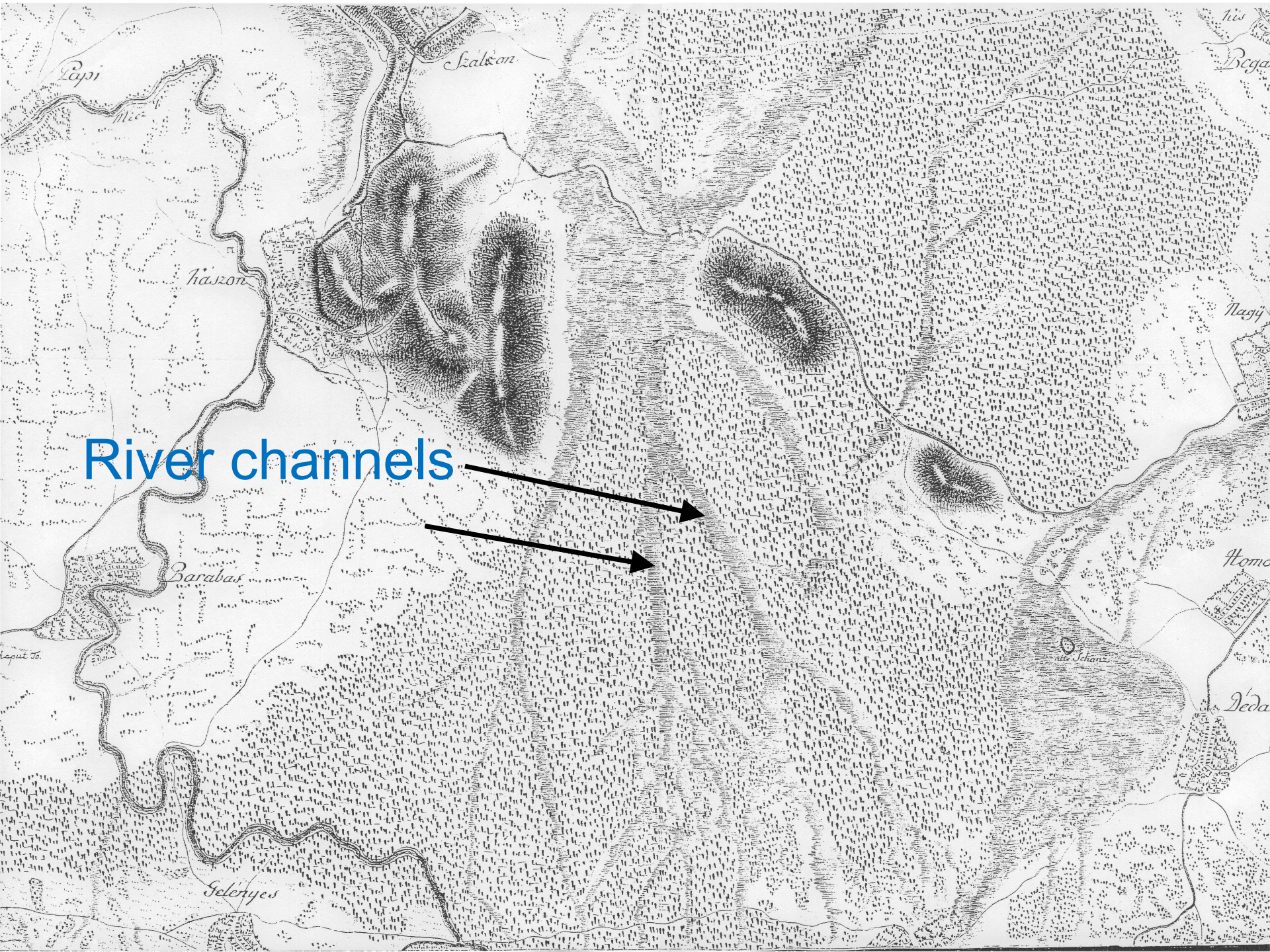
And now

channel

Hungarian-Ukrainian  
Border

- It includes partly closing of the territory melioration channels.





River channels



Now







Residual alder swamp woods  
in the territory





What we expect...







Thank You  
for your attention!

