

# trans4num NbS webinar

## Session 4

Wednesday 5<sup>th</sup> of April, 2023

Hungary - Szigetköz

FŰZFA Zoltán - PKE

# The beginning of the landscape





Szigetköz, the inland delta of Danube

# Landscape development in nutshell





# Reef development with pioneer species



# Growing of willow bush, increasing sediment deposition



# Beach break, a continuously migrating island system



# Broken shores by the strong currents







Stringing backwaters are developing

# Replenishment backwaters are coming



# Bog formation



# Formation of swamps



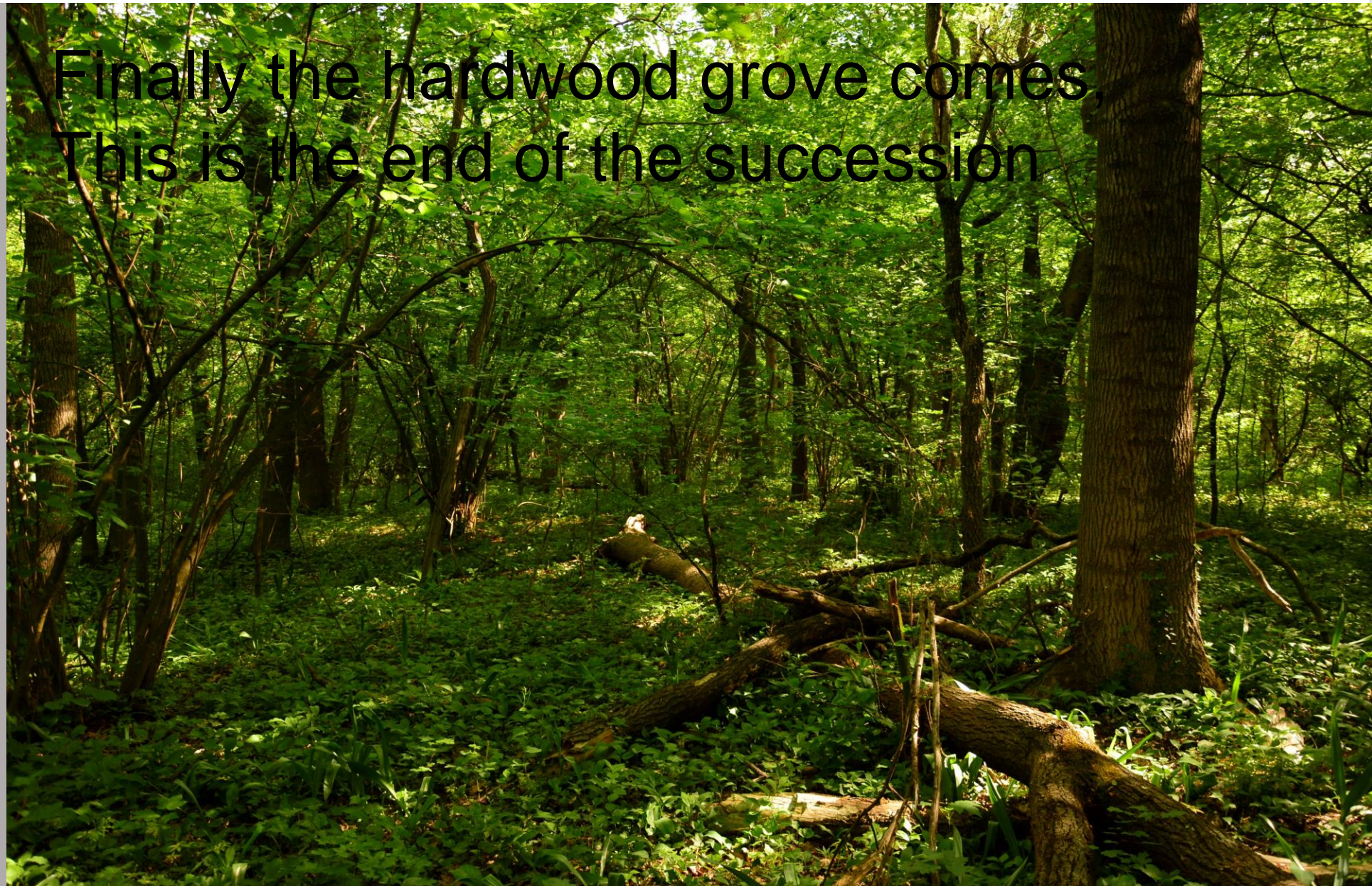
# Formation of willow-poplar forests



# Regular floods



Finally the hardwood grove comes,  
This is the end of the succession



# Dunasziget orthographic photo







12/2016  
Mosaic habitats and various landuse:

Pebble reefs

Hardwood forests

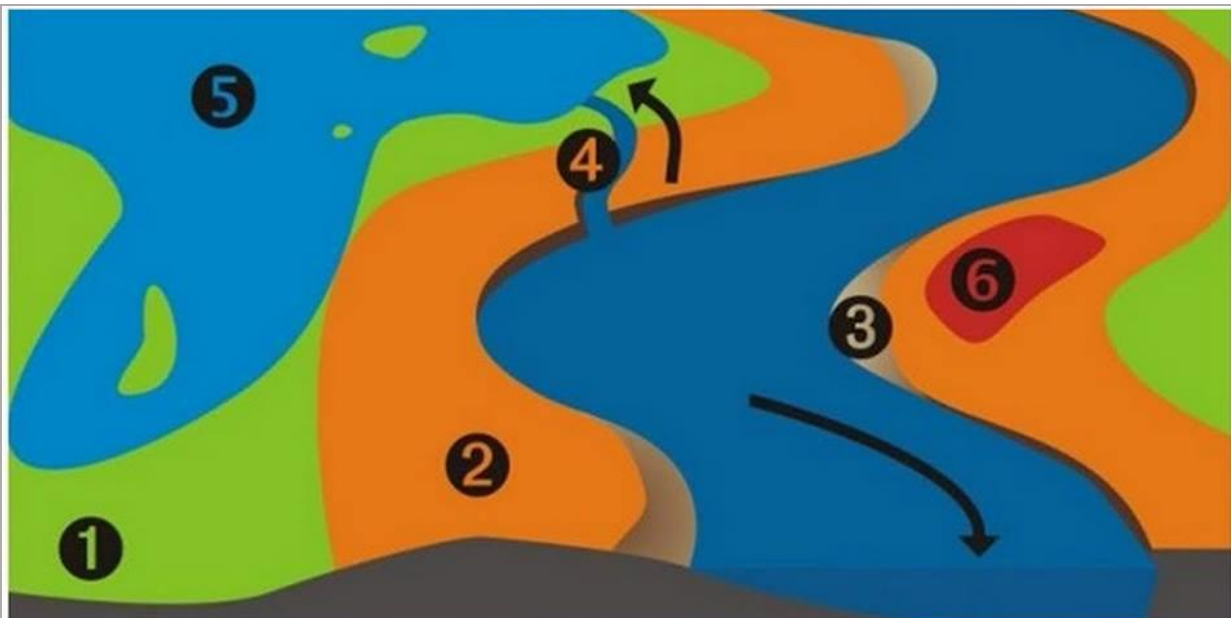
Alder swamp forests

Willow-poplar forests



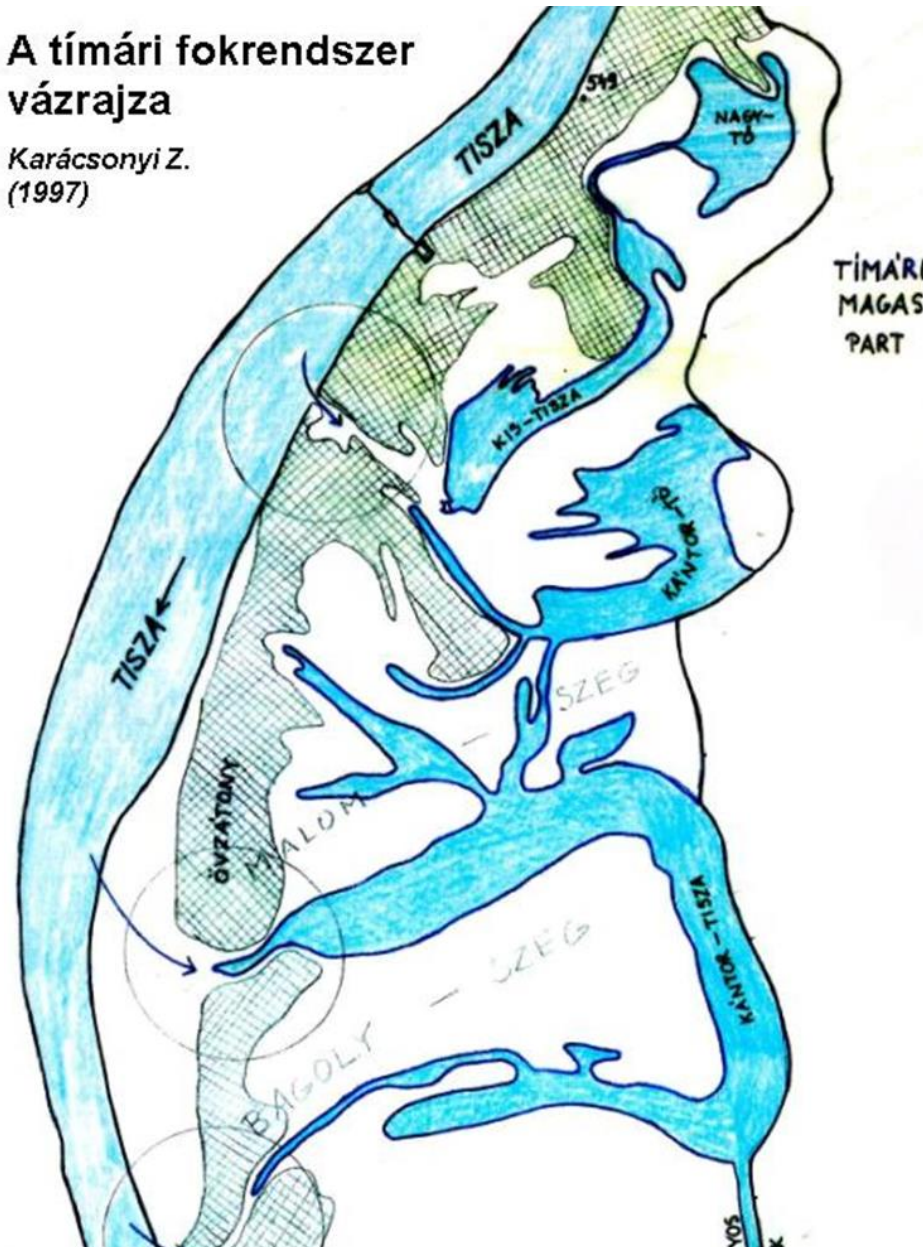
From 1992 the situation even more complex and man regulated, by a hydroelectric power plant





## A tímári fokrendszer vázrajza

Karácsonyi Z.  
(1997)



# Fishing



# Grazing



# Grazing in Szigetköz



# The memento of grazing: big oaks as shades





# Floods with floodresistant cultura



# Simple but circular economy





PIROS KÁLVIL



CEGLÉDI PIROS



ŐSZI POGÁCSA



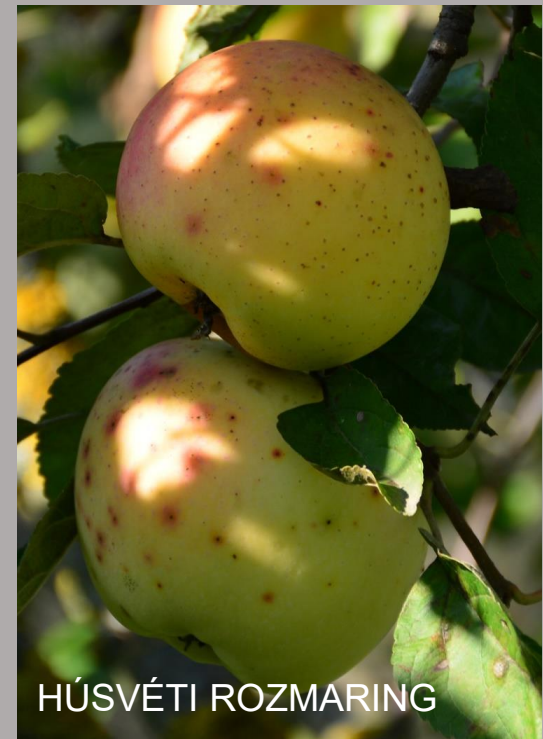
FEHÉR KÁLVIL



SIMONFFY PIROS



In Hungary only from apples more than  
600 different kind was cultivated!



HÚSVÉTI ROZMARING

# Belt parcels



### Before river regulations

- Very different underground water level: 1-3 m
- 1-6 m water level fluctuations
- Lot of fresh alluvium
- Raw fluvi soil
- Very calcareous soil: some places more than 20% calcium carbonate

### Nowadays

- Low underground water levels: 4-6 m
- little and extreme precipitation
- Few but extreme floods between dikes
- No fresh mud on fields



- FÚZFA Zoltán
- Biology & geography teacher
- Environmental education expert
- Leader of PKE & Ecopark
- Teacher in Hungarian Waldorf Training Courses