







# History, Presence and Future of the Traditional Pasturing System of Lonsjko Polje Nature Park



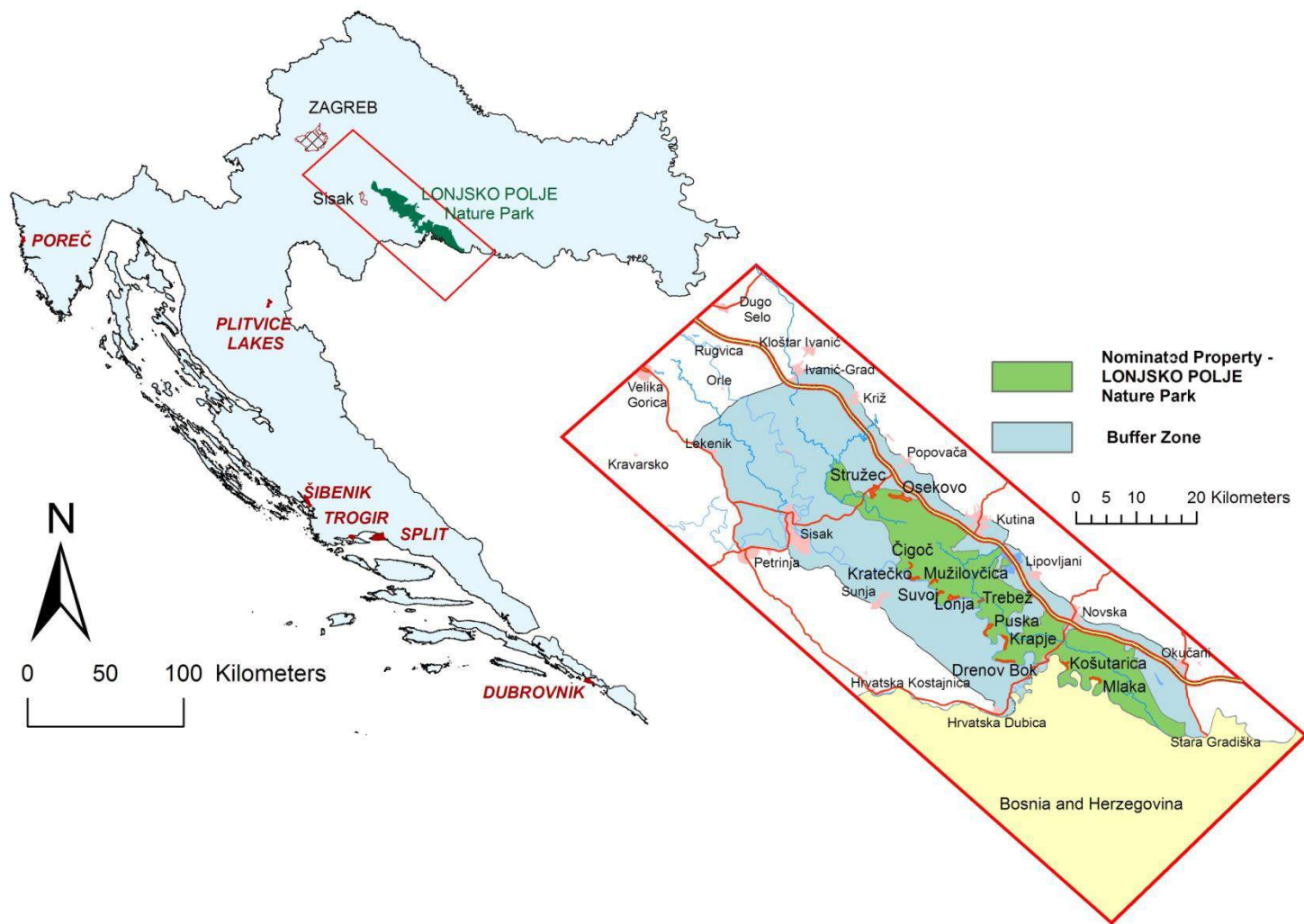
Goran Gugić



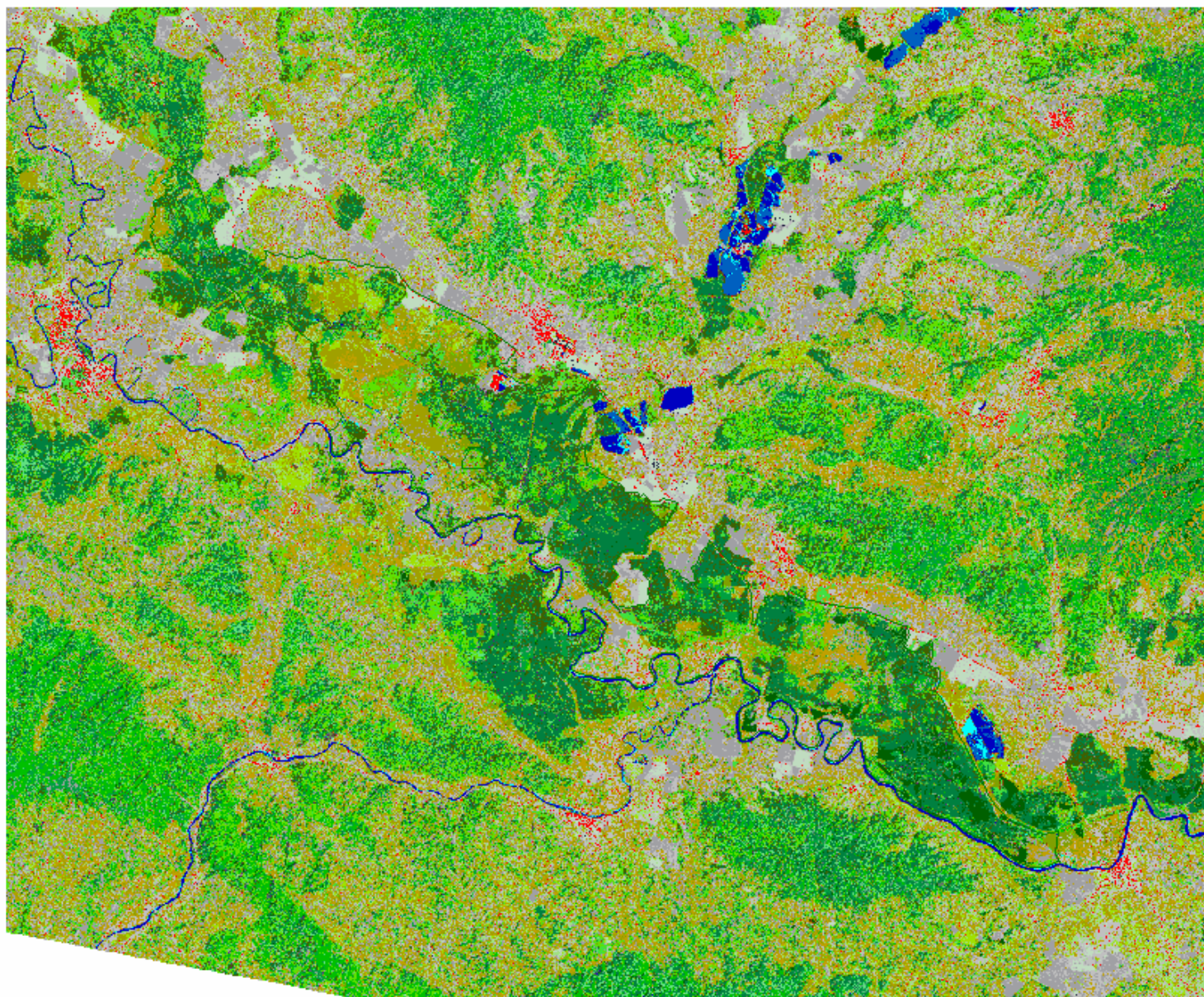
# Riparian Lowlands – Former Cores of Animal Husbandry



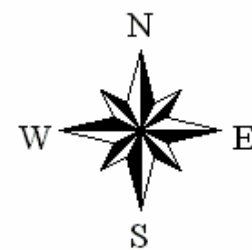
Lonjsko Polje Nature Park constitutes a unique example of an organically evolved landscape with a preserved medieval system of the common pasturing typical of the whole of Central Europe's lowlands until the second half of the 19th century.







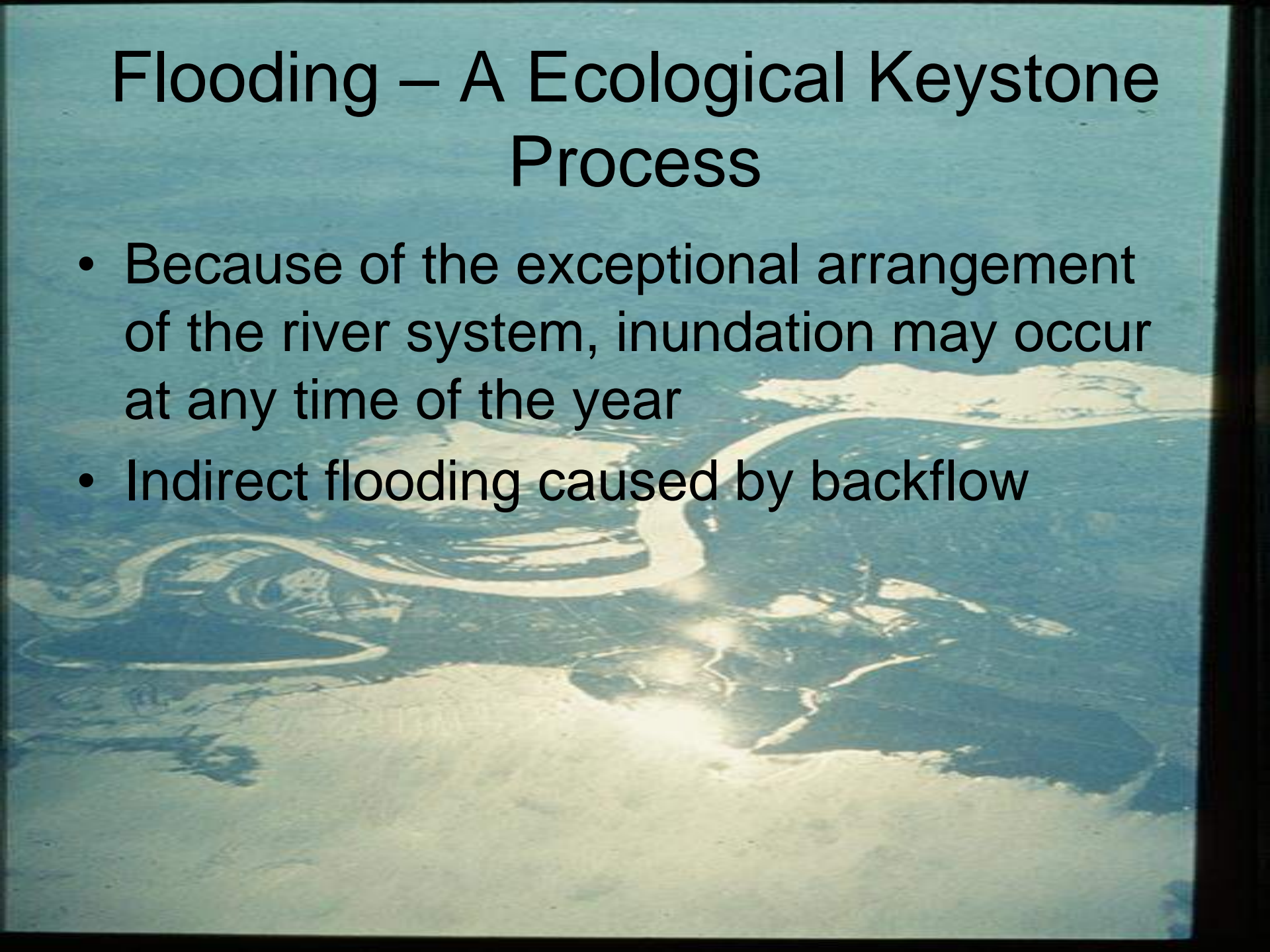
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# Flooding – A Ecological Keystone Process

- Because of the exceptional arrangement of the river system, inundation may occur at any time of the year
- Indirect flooding caused by backflow



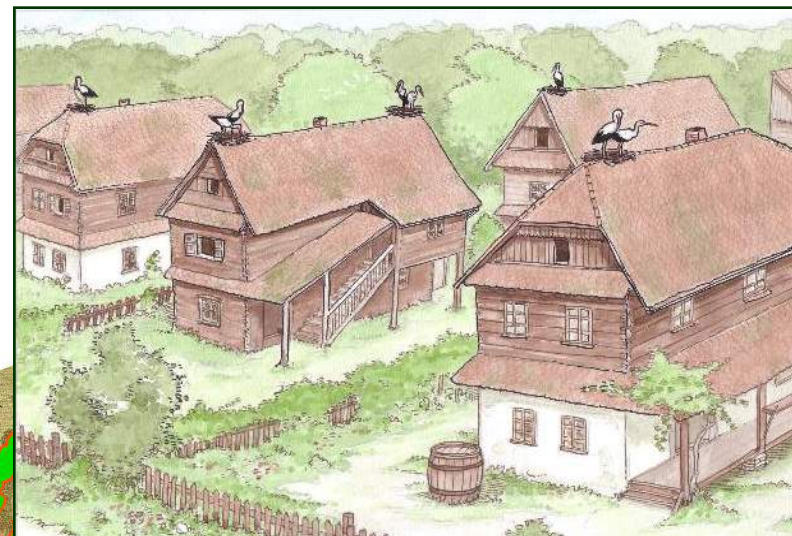
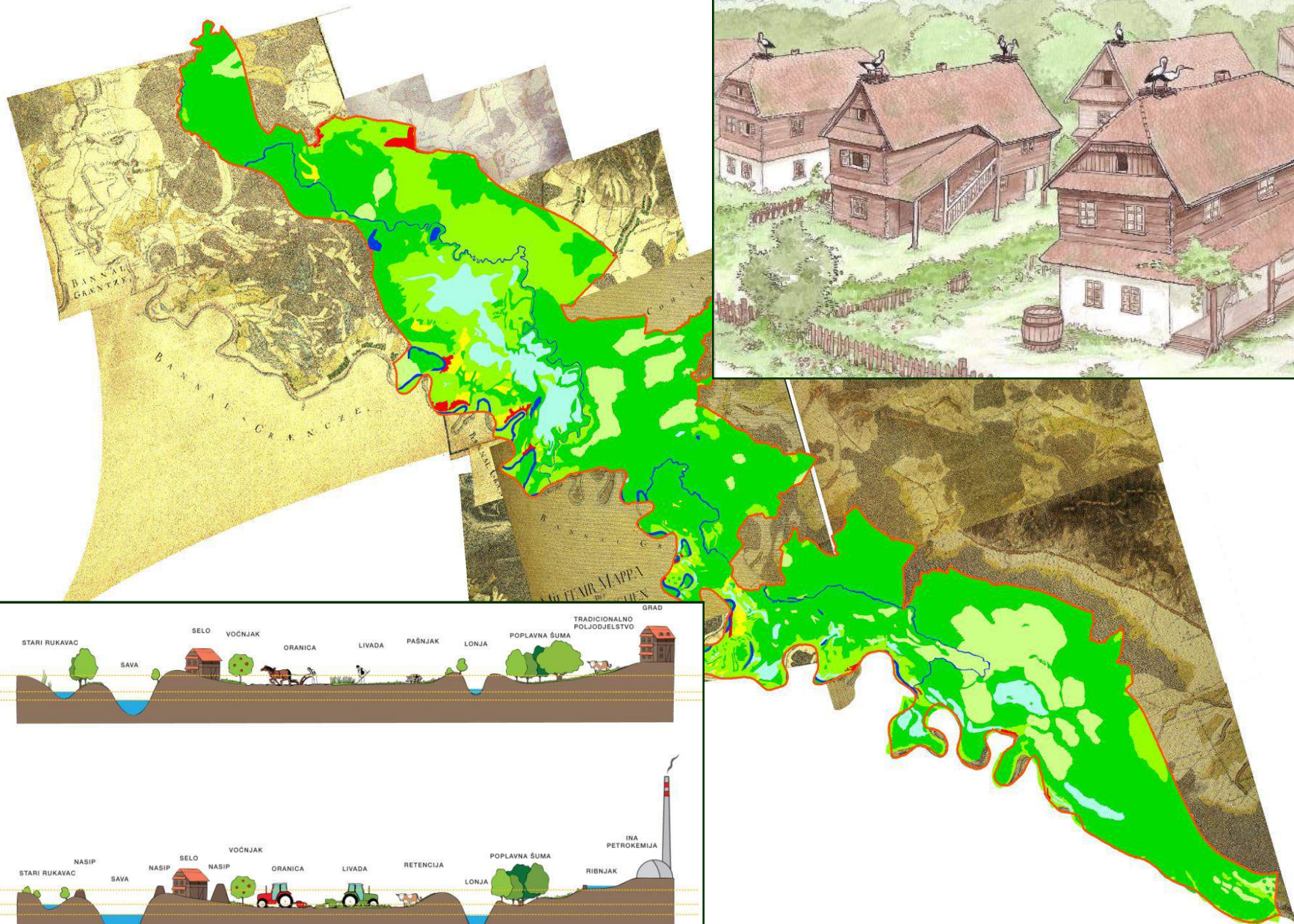




# Adaptation to Flooding – A Cultural Keystone Process









# Spoonbill

- The only recorded breeding area where the adult birds use the wet pastures for foraging
- The only recorded permanent colony of this species situated in an oxbow





# Fish Spawning

- Wild carp needs shallow water, warmed up to 18°C, and likes grass





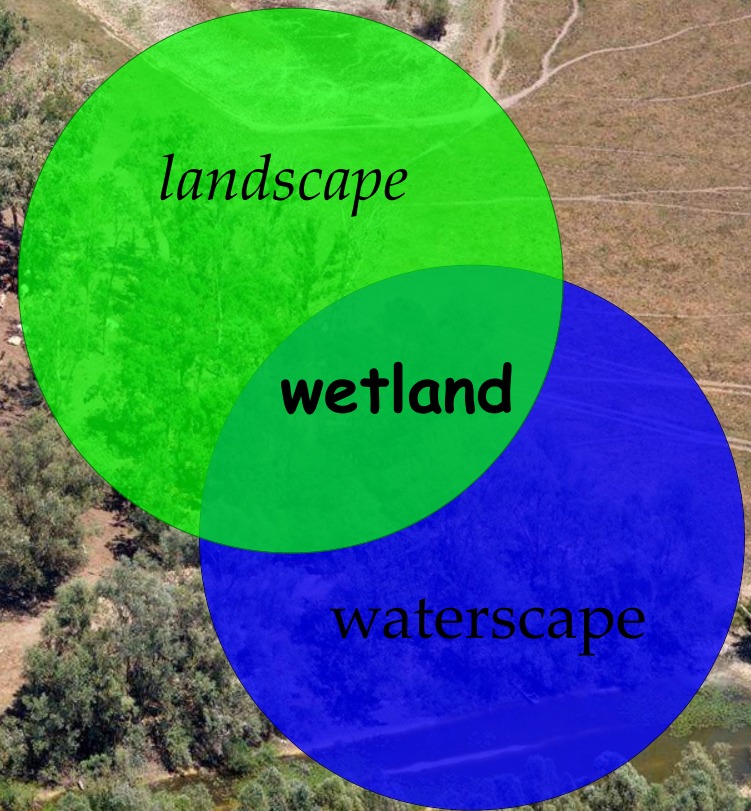
- It is here where the White Stork attains the greatest nesting success ever recorded in the literature





# How to integrate wetlands into river basin management?

- Wetland management within the context of both surrounding waterscape and landscape
- Match water resources strategies with land use strategies
- Make “hard-wired” management objectives



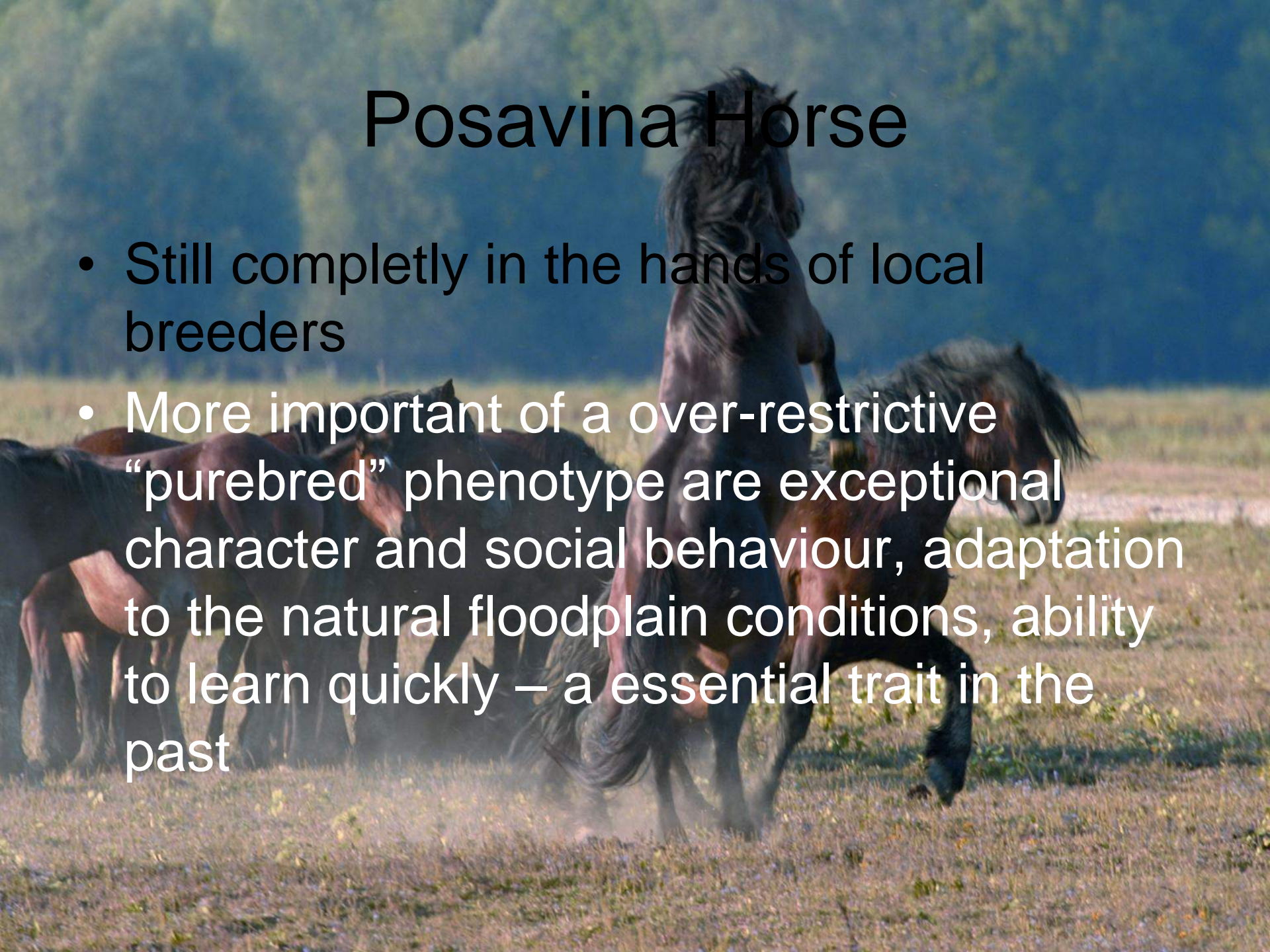


# Basic Forms of Pasturing

- The commons (*gmajna*): occupy the area on the great flood-labile grazing lands used in common
- Haymaking complex (*sjenokoša*): on private or common areas of meadows used for both pasturing and hay-making.
- Poloj: pasturing using the embankments, the edges of the roads, the copses and the inundation area between the Sava and the embankment, referred to as *poloj*.

# Posavina Horse

- Still completely in the hands of local breeders
- More important of a over-restrictive “purebred” phenotype are exceptional character and social behaviour, adaptation to the natural floodplain conditions, ability to learn quickly – a essential trait in the past









# Masting

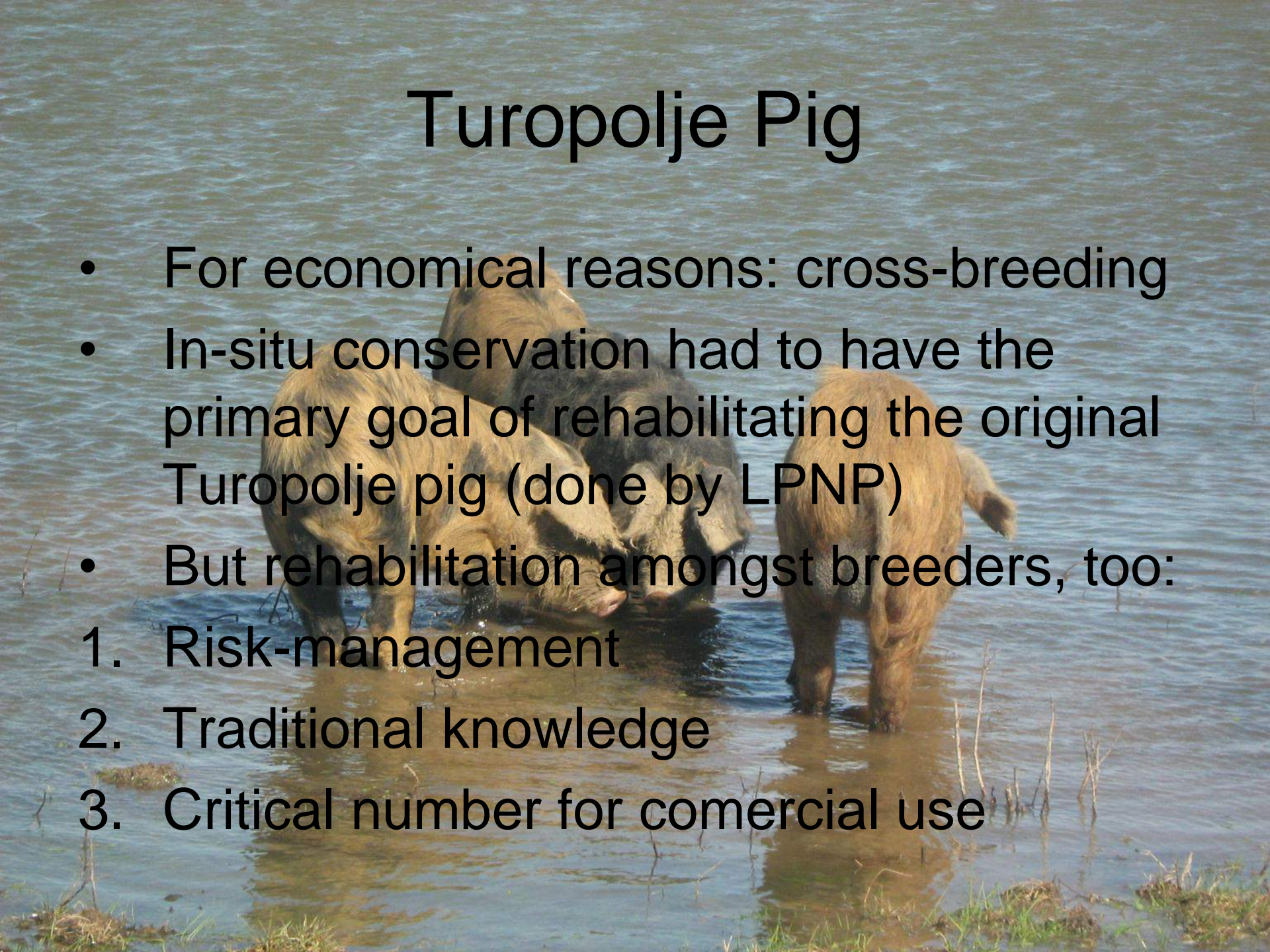
- Quite large number of breeders with knowledge about the traditional system of foraging the pigs





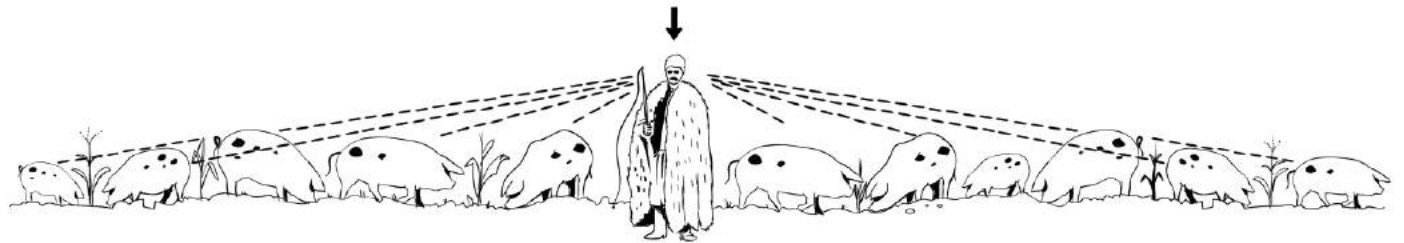
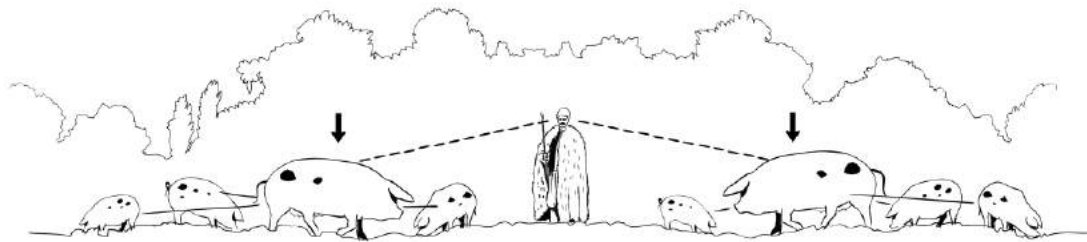
# Turopolje Pig

- For economical reasons: cross-breeding
- In-situ conservation had to have the primary goal of rehabilitating the original Turopolje pig (done by LPNP)
- But rehabilitation amongst breeders, too:
  1. Risk-management
  2. Traditional knowledge
  3. Critical number for commercial use





# Herd- and *Jato* Management





# Pig Pasture

- Rejuvenation of annual plants
- Rooting establishes a microrelief with greater structural diversity
- Crucial for biodiversity: *Mentha pulegium*, *Pulicaria vulgaris*, *Teucrium scordium*, *Marsilea quadrifolia*, *Gratiola officinalis*





# Slavonian-syrmian Grey Cattle

- Remaining base stock considered as critical endangered
- By now completely in the hands of LPNP to minimise inbreeding at this stage



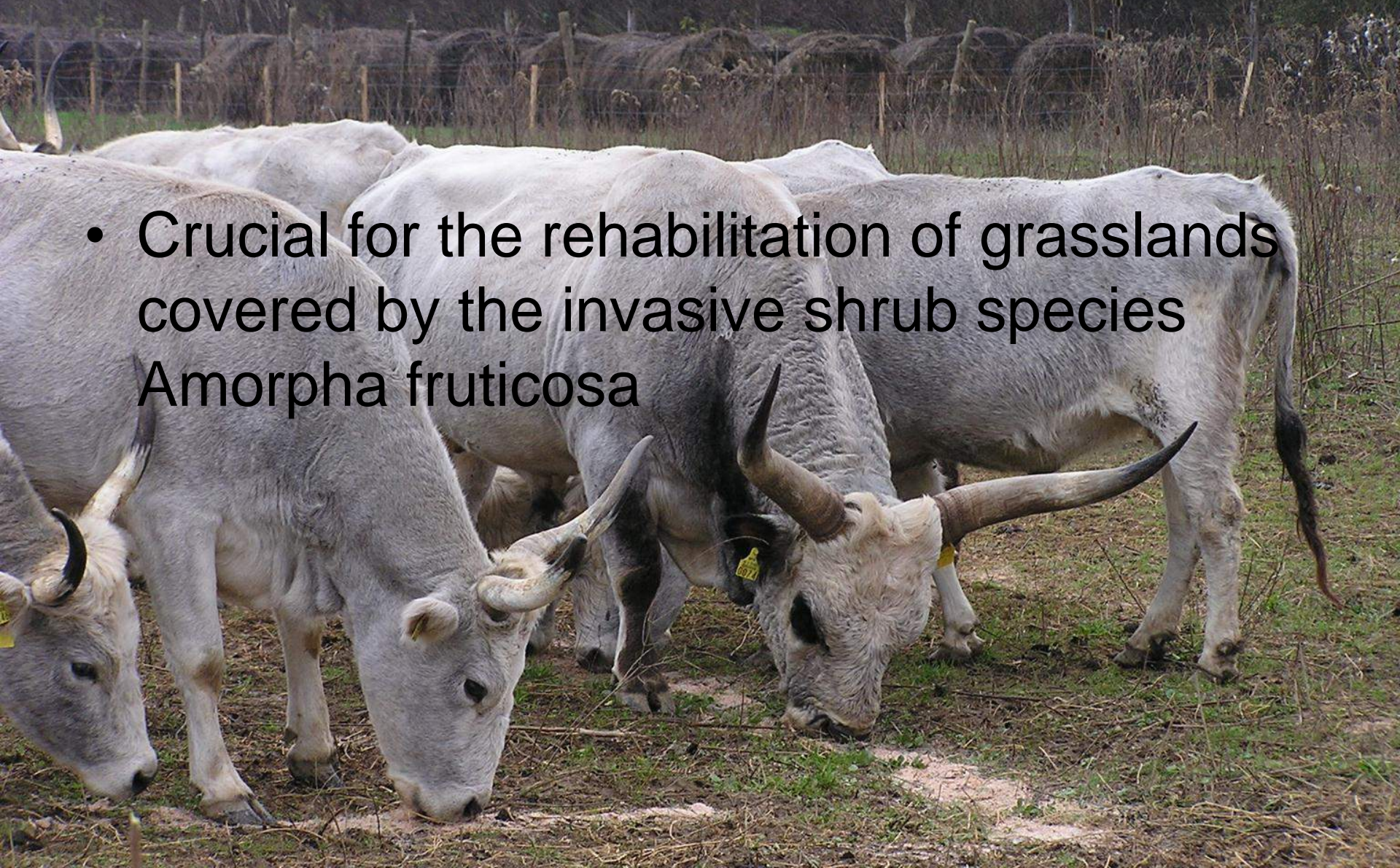
# Invasion of *Amorpha fruticosa*





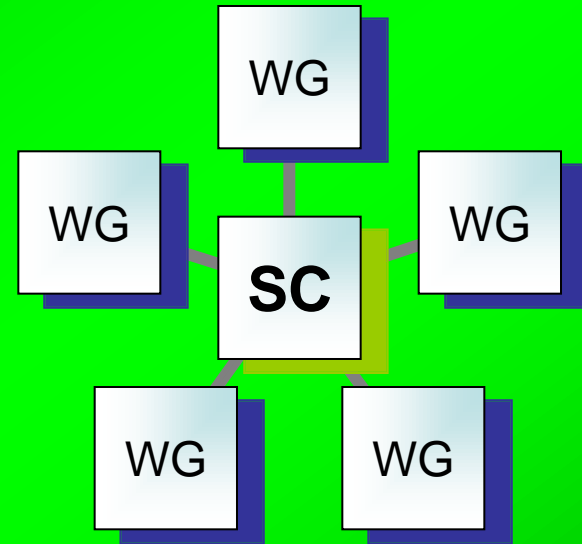
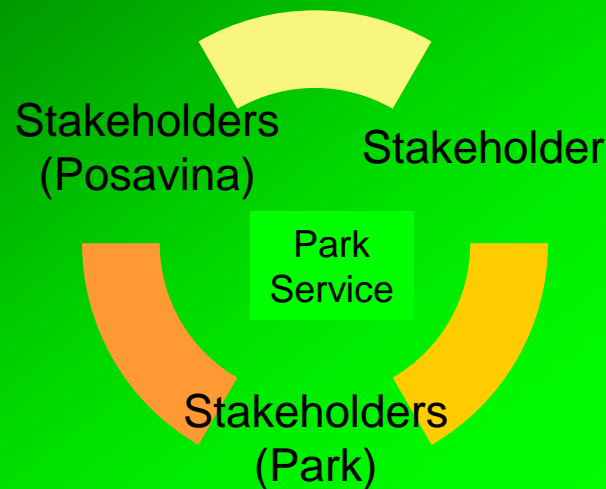
# Slavonian-syrmian Grey Cattle

- Crucial for the rehabilitation of grasslands covered by the invasive shrub species *Amorpha fruticosa*





# Towards Integrated Management



- ✓ Stakeholder analysis dionika
- ✓ Establish appropriate structures
- ✓ Learn appropriate techniques of integrated management
- ✓ Learn the stakeholders' language
- ✓ Ensure the feed-back of information



# Finding a mutual vision

- Identify existing problems
- Elaborate possible solutions
- Give guidance for further development

