Grazing on Malyi Tataru Island

26 September, 2019

Based on information collected during WWF project in Danube Delta with the support of WWF NL

Majority of the data used was collected by Sergyi Podorozhnyi (botanist from Melitopol University)

Danube Delta and Maly Tatatu Isle

History of Malyi Tataru

Ownership - Izmail state forest enterprise
Area – 716,5 ha

1980th - embankment. Half of area used for plantations, orchards. Seasonal intensive grazing – sheep, cows, horses

1993 became part of Regional Landscape park

Middle 90th – cattle was moved from the Isle except horses

2003 – embankment partially removed

2005 – Ukrainian grey cattle was brought to the Island

2019 Introduction of water buffaloes and horses

2002

2018

@ WWF Ukraine/
Nikolai Bazhenov

1999 flora of grazed areas and meadows:

Actively grazed areas: *Carduus acanthoides, Abutilon theophrastii, Ambrosia artemisifolia, Cannabis ruderalis, Centaurea diffusa, Conium maculatum, Cyclachaena xanthifolia, Marrubium praecox*.

“Leftovers” of the meadows with *Potentilla reptans, Trifolium fragiferum, Cynodon dactylon, Lotus corniculatus*

+ and – of intensive grazing

+	-
“Cleaning” of the dykes from the weeds and bushes	High pressure on grass communities
Management of *Phragmites australis, Amorpha fruticosa* та *Glycyrrhiza echinata*	Weed seeds distributing
Creating of mosaic grass communities	Vanishing seedlings of the *Salix* (gallery forest species)

Why grey cattle?

- Ancient adapted breed, strong immune
- Strong feet that can tolerate wetlands
- Strong digestion system
- Strong maternity instinct
- Smart animals able to orient on the ground

2005

12 animals was brought to Malyi Tataru

Plan was:

People cut big trees of *Amorpha fruticosa*

Cows will manage the young plants and reed and create mosaic landscape

2006 first check

Max pressure on the meadows grass communities was exceeded in 2 times

So,

plants, that are not eaten by the cattle actively grow (*Bidens tripartite*, *Glycyrrhiza echinata*, *Xanthium*). It forms dense grass areas that decrease values of the grass community.

Overgrazed area

2006

2018

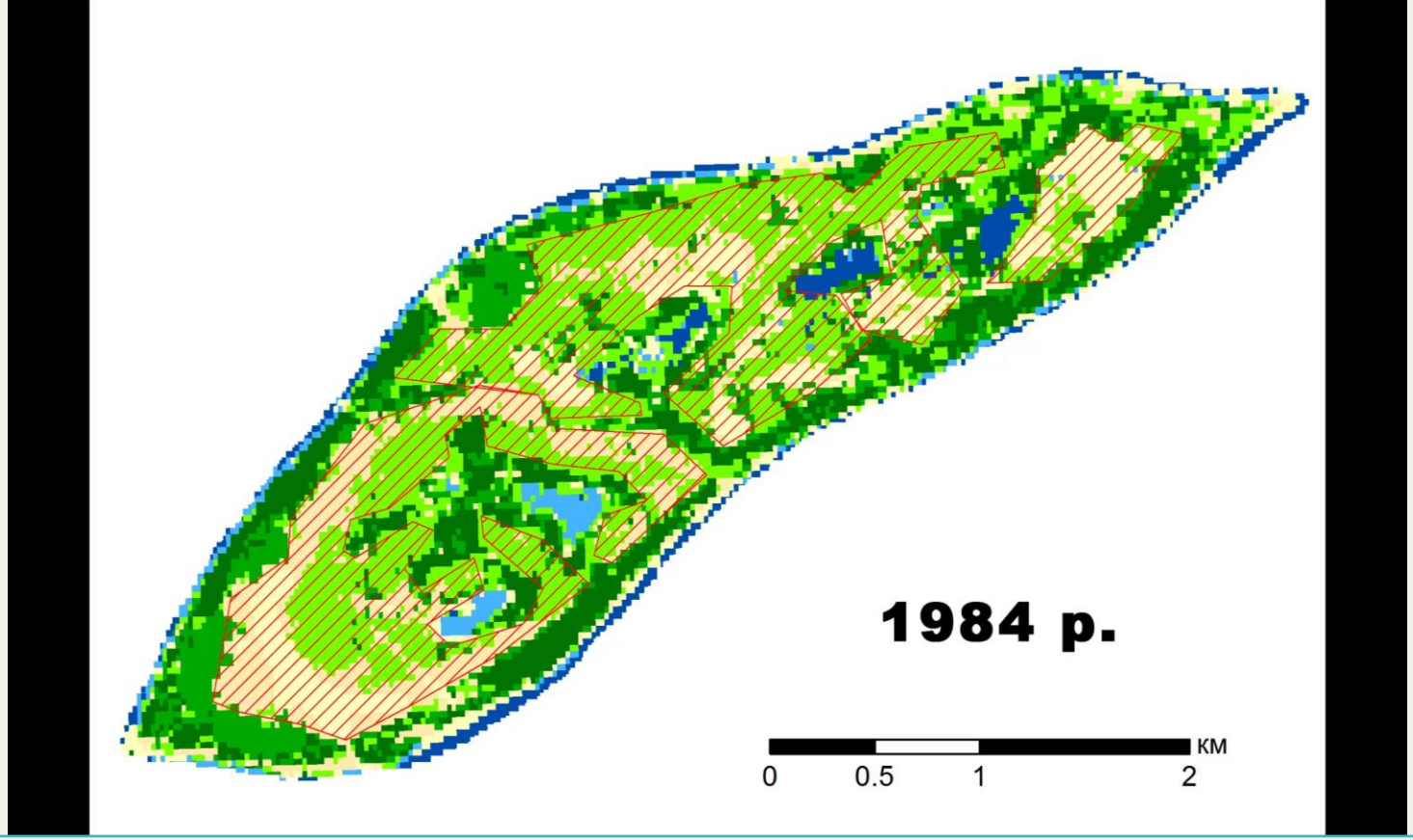
- Dams and other areas overgrown with trees and bushes like *Gleditsia triacanthos*
- Dams are not accessible for people in some places
- As the results 2/3 of the meadows were lost

2018

- 35 cows, no horses
- Some of the dams were separated due to tourists visits

2006 p.

2018 p.



Dark blue	Submerged & free-floating macrophytes
Blue	Floating-leaved macrophytes
Light green	Tall grass helophytes (Phragmition)
Dark green	Gallery forest and poplar plantations
Green	Shrublands (Salicion triandrae)
Yellow	Terrestrial pioneer species and degraded land
Caramel	Formed terrestrial species
Grey	Freshwater pioneer species
Red	Areas actively used for agriculture


(C) WWF / NIKOLAY BAZHANOV

What is next? Expert suggestions:

- Make sure the whole island is opened for cattle
- Bring several new animals to improve the herd of cows
- Introduce water buffalos
- Start management of grey cattle (vaccination, providing food and salt etc)
- Use combine herds of sheep and goats to manage *Gleditsia triacanthos* (new plants)

What is going on:

2019 Rewilding Ukraine

- brought two bulls of Hungarian grey cows
- introduced water buffalos
- Ukraine introduced Polskyi horses