

# NATURAL CLIMATE BUFFER



Slovakia

## Čiliž wetlands

### Introduction

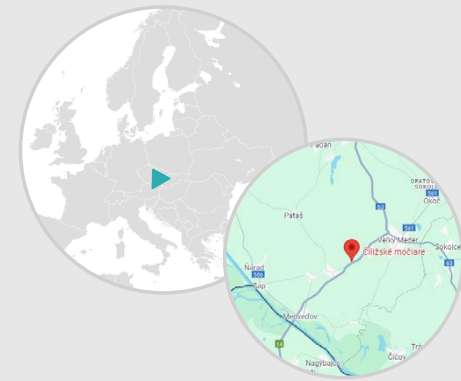
The Danubian Lowland has undergone many changes over the last century. It was interwoven with a series of melioration canals with the aim of draining the land so that it can be farmed. Wetlands, which were a significant feature of this area, represent one of the largest sources of biodiversity in the temperate zone, so these changes had led to its decline.

Since the year 2011 within the projects LIFE Microtus and LIFE Microtus II, by constructing a simple water management object, using original drainage canals and by creating a few supply canals, the water has returned to the wetland. Wetlands at the Danubian Lowland were characterized by dynamic flooding. Thanks to these objects, it is possible to imitate natural flooding even in such a significantly altered landscape.

The wetland now covers an area of more than 100 hectares, it can hold up to 70 000 000 litres of water and acts like an oasis for both animal and plant species in an otherwise inhospitable agricultural landscape covered mostly by large monocultures.

### Issues & key challenges

- The region is highly agriculturally productive, thus it was really important to make a space for biodiversity in the area that used to be characteristic by wetlands in the past
- Water from the melioration canals used for irrigation on the surrounding fields, so it was important to create a place where the water would be retained, especially during spring and summer, to prevent our wetland from drying out. We created a pond with an island, which will serve not only to retain water but also as a source of microhabitats for amphibians, birds, and invertebrates.
- It was important to choose appropriate management, such as mowing in stripes, to avoid the accumulation of biomass. If left to grow freely, the level of a wetland slowly rises, requiring much more water to maintain the same wetland conditions. In the past, a wetland might disappear—turning, for example, into a forest—while elsewhere a river or stream would overflow and create a new wetland. However, in today's conditions it is not possible thus prevention of grounding is necessary.
- One of our goals was to expand the wetland to fulfil the potential of this area. This was made possible thanks to our generous supporters who helped raise the amount needed to preserve this site.



### Legal Status

Natura 2000 site, protected area

### Habitats and Protected Species

Habitats: Wet sedge-reed meadows

Species: Pannonian root vole, northern lapwing, great egret, western marsh harrier, smooth newt, European green toad, European tree frog, rare species of plankton crustaceans e.g. *Wlassicsia pannonica*

### Management

BROZ – conservation association

### Information sources

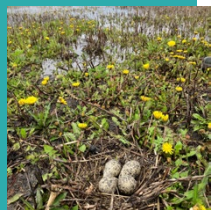
<https://broz.sk/en/we-saved-the-wetland/>

<https://broz.sk/en/cilizske-mociare-maju-nove-jazierko/>

<https://broz.sk/en/connection-of-wetlands-by-cilizsky-potok-brook-restoration/>

### Outcomes & benefits

- biodiversity boom; it provides a home for herons, a food source for storks, a shelter for the rare Pannonian root vole; soil invertebrates, amphibians, and pollinators also thrive here
- wetland helps to adjust the local microclimate, it cools down its surrounding ; it also acts like a sponge in the landscape, during a longer period of drought the water evaporates much more slowly than from the surrounding fields
- it helps us mitigate the consequences of the climate crisis by efficient sequestration of carbon



### Lessons learnt & future

- even small-scale measures (the small water management object installed at the drainage canal in this case) can have huge impact
  - cooperation with stakeholders is key
  - community is interested in nature protection and crowdfunding could be a source of funding
  - land ownership is crucial for effective nature restoration project implementation in current conditions
- As a next step nature-friendly grazing is to be introduced. Grazing used to be common in this area, it can help with prevention of grounding as well as support biodiversity and different groups of species. For promotion of the site, a watching tower will be installed to enable visitors to explore the area from above.



BLUE-GREEN SPACE



CARBON SINK



NATURAL SPONGE

More info



Co-funded by the European Union

Eurosite Factsheet

Wetlands and Climate Change

[www.eurosite.org](http://www.eurosite.org)

[info@eurosite.org](mailto:info@eurosite.org)