# LIFE13/NAT/HU000388 Old-Drava



# Layman's report

## Background:

Nature doesn't respect administrative borders, often says. Within the Drava region the river and the state border crossing each other so many times between Hungary and Croatia. The project area, the Old-Drava is situated on both side of state border, nature reserve in both counties and part of the Mura-Drava Transboundary Biosphere Reserve, established by the neighbouring countries.





## Common values:

The former Drava curve has developed into an oxbow surrounded by softwood and hardwood gallery forest. The habitat complex, formed by water, reed and willow shrub is the part of Natura2000 network in both countries. Among the habitat types the 3150, 91E0 and 91F0 shall be protected, among the protected species we can find fish species like European



bitterling (Rhodeus amarus) and spined loach (Cobitis taenia), dragonflies (Anaciaeschna isosceles, Libellula fulva), amphibians like pool frog (Pelophylax lessonae) and agile frog (Rana dalmatina). The bird fauna is also rich, we can mention night heron (Nycticorax nycticorax) or ferruginous duck (Aythya nyroca). Among the protected plant species we find the water chestnut (Trapa natans), fringed water lily (Nymphoides peltata) or within the forest there are rough horsetail (Equisetum hyemale) or sword-leaved helleborine (Cephalanthera longifolia).



## Common challenges:

Although the oxbow and surroundings has rich flora and fauna, several negative tendencies are observed, caused by either natural reasons or human activities. These challenges facilitated the joint LIFE project:

decreasing water level: Even the Rinya creek provide permanent water supply, significant amount of water can escape to river Drava trough Fekete canal. Especially in dry season the extreme low water level can jeopardize the aquatic

biota.

the decreasing watertable bellow the gallery forest also caused degradation in natural habitats.

tree plantation: some of the natural forest has been replaced with tree plantations with less divers wildlife

abandoned angling piers: the angling is a popular leisure activity in both countries. If the anglers respect the regulations, the angling will not jeopardize natural values, but – in case of Old-Dravathe abandoned angling piers occupy natural habitats and deface the landscape.





#### What we have done:

The activities, which have been realised within the project could be classified into four categories as preparation activities, concrete conservation actions, monitoring and dissemination.

#### Concrete conservation actions:

- construction of water retention artefact: The key action of the project was the construction of a bottomweir on the Fekete canal. This artefact can retain water within the Old-Drava to increase and stabilize its water level and prevent the extremely low water situation. The bottomweir was built onto a circumspectly determined place, when the smallest artefact resulted the most effective water retention. Furthermore the crest level is low enough, that the floodwaves from river Drava could overflow it and



fill up the oxbow. Close to the bottomewier a fishpath has been constructed to help the migration of certain fish species. To prevent the erosion the core of the artefact was built by concrete, but it was covered by stone to fit into natural environment.







Concrete conservation actions:

- Even we don't want to disturb the natural aquatic vegetation, a small scale dredging has been realised in the open water surface to improve the diversity of habitats. The dredging affected approximately 600 m length and 7000 m3 of silt have been removed to create a deeper section where the weed could be less and certain fish species could use this place for wintering. The dredging was realised by hydromechanisation, a floating dredger pumped the silt into the river Drava trough a pipeline.





#### What we have done:

## Concrete conservation actions:

- along the oxbow there are also tree plantations, replacing the natural gallery forest. These plantations are much less diverse than the natural forest. During the project native tree species (Tatarian maple, wild pear, common aspen) has been planted into an oak plantation to improve the variety of species. To protect the young trees against game species, the seedlings were planted into 15 fenced quadrants, 50-100 seedlings per each.



- with the help of local anglers the angling infrastructure were partially renewed. More than 40 abandoned piers has been

demolished and the waste materials has been removed. 30 piers has been renovated, so there will be no need to build new ones in the future, furthermore 6 new piers were constructed for public use.



LIFE 13/NAT/HU000388 Old-Drava

#### What we have done:

# Preparation activities:

The construction of bottom weir was based on carefully planning, in which experts were involved from both countries. During the planning either the targeted water level or the place of the artefact were jointly determined. The permitting procedure, because the artefact affected the territory of both countries, were much sophisticated, than it used to be. After obtaining environmental permits from Croatian and Hungarian authorities, the final construction permits were issued by Croatian

authority.



# Monitoring activities:

During the project implementation the biota of project area has been surveyed. A habitat map were developed, botanical monitoring were realised in aquatic and terrestrial ecosystems, the fish and amphibian fauna were also measured. Biologists also researched water related insects, and the rich bird fauna was also monitorised. The collected data were used for permitting procedure and those will be used reference values for after-LIFE monitoring.







### What we have done

## Dissemination:

To share information about our project several kind of communication channels were used. At the beginning of the project the website www.olddrava.com were launched, where we continuously reported the status of the project implementation. Besides short news other

longer documentation (plans, studies) are also uploaded to the site. We also printed leaflets (in Hungarian, Croatian and English languages) and thematic newspaper, which were delivered to 4200 inhabitants. For pupils we developed an interactive exercise book, in which we described the values and importance of wetlands. We have established study trails and Croatian partners built a Natura 2000 information park, also. Jointly we prepared an education film to show the five years of the project.







### The future:

Even the project closed in April 2019, the work on Old-Drava will be continued. With the help of biologists we will monitories the result of the interventions. We will protect young seedling which we planted. Although the bottomweir were designed almost maintenance-free, we will perform all the necessary repair and operation activities. Furthermore we are intend to continue the close cooperation among the nature conservation organisations of the two countries, not just within Old-Drava region but in the whole Mura-Drava Danube Transboundary Biosphere Reserve. The Old-Drava project proved, that the crossborder management activities could be realised.



## Project data:

Coordinating beneficiary: Duna-Drava National Park Directorate

Beneficiaries: Horgász Egyesületek Somogy megyei Szövetsége, Javna ustanova za upravljanje zaštićenim prirodnim vrijednostima Virovitičko-podravske županije (Public institution for management of protected natural values in Virovitica-podravina County), Municipality of Pitomaca, VIDRA - Virovitica-Podravina County's Regional Development Agency, WWF Hungary Foundation

Project duration: 01 June, 2014-30. April, 2019

Project budget: 833.985€

EU support: 74,78%