

NATURAL CLIMATE BUFFER

DCP: Nataliya Fedorova
The photo is the result of our restoration work



Ukraine

Rescue the “Narcissi Valley”

Introduction

The overall goal of the work is to substantially improve the conservation management of Ramsar Site “Narcissi Valley” (256 ha) and support the tourist centre in response to severe climate change implications.

The site is located at the edge of Khust town (urban wetlands), Zakarpatska Province, Ukraine, the far western part of the country, a few dozen kilometres close to the border of Romania and Hungary. It is the alluvial and peatland floodplain of the upper Tisza River, a Danube tributary

The “Narcissi Valley” is not only a critically important biodiversity hotspot for Ukraine and a known refugium for the Carpathian region but wet meadow habitats are critically endangered across the larger landscape of the Black Sea Basin.

Climate changes in the river basin have led to changes in the hydrological regime (towards drier conditions) and a lack of traditional grass mowing/grazing, which stimulated bush and tree growth, regular fires, and a decreased narcissus population (by 70% during the last 10 years) and quality of wetlands habitats (by 40%). It looks imminent that without improved conservation measures, the Site might lose its unique natural values and Ramsar status.

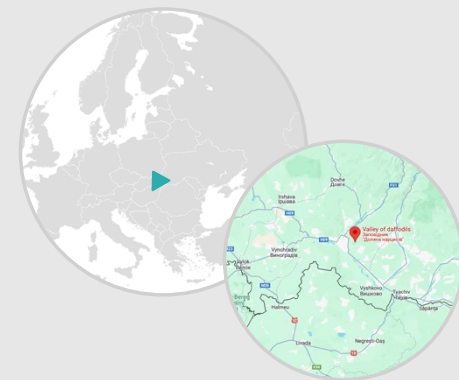
The project funds were used mainly to raise the groundwater table, restore the flooding regime, increase water retention abilities of habitats, mow grass after fruiting and eliminate bushes/trees, restore wetland habitats, support water buffalo grazing, impose ecological education measures against local fire, and improve nature protection.

The war has influenced the conservation management capacities of the biosphere reserve with financial and human shortages.

Results

The tangible successes achieved are the following:

- conservation results:**
 - the daffodil vegetation cover has increased by at least 20% over a total area of 120 ha (the daffodil vegetation cover in some areas has increased by almost 40%). The vegetation cover of the other 19 Red list species increased by over 10%. The populations of Red List animal species have increased by an average of 25% across 24 species; the number of wildfires decreased by an average of sixfold, and in some places, they have disappeared entirely;
 - the wet meadows for the areas of 120 ha are restored fully or partly already;
 - groundwater level rose by an average of 50% to ensure habitat survival;
- sustainable management of the site results:**
 - built 13 dams, of which 6 are wooden, the others are earthen and beaver dams, to raise the groundwater level;
 - built under local roads, the pipe connection to increase the level of water access through the transport infrastructure from the local channel to the dry territories of the daffodils disappeared or very low density;
 - established 5 shallow reservoirs to increase the reproduction of amphibians and raise water retention,
 - built a large barn called “Buffalo Dwelling” to increase the herd of buffaloes in the Carpathian Biosphere Reserve for grazing support and tourist attraction,
 - purchased technical equipment, such as 2 powerful brush cutters, an electric shepherd and a set of tools for building new dams;
 - organised a significant volunteer event with the participation of 200 participants to support environmental protection measures and ecological education;
 - mowed, mulched and grazed annually on 120 hectares for 3 years;
 - the bush and young tree areas of 25 ha in total were cleared.
- communication work**
 - we reached more than 2,705,000 people, including a total potential reach in media of over 2,289,000, and the reach of project posts on Facebook is 416,000 FB users.



Legal Status

biosphere reserve (zone of anthropogenic landscapes)

Habitats and Protected Species

wetlands habitats with the largest Central European lowland population of rare pheasant’s eye narcissus (*Narcissus poeticus* L.), 19 other plant species, and 24 animal species listed in the Red Data Book of Ukraine (2009) and international lists.

Management

traditional agriculture (mowing, grazing, hay production) and water retention measures

Information sources

<https://www.youtube.com/watch?v=AilMfbJV2t0>

<https://rsis.ramsar.org/ris/2390>

https://rsis.ramsar.org/RISapp/files/RISrep/UA2390RIS_1908_en.pdf

Implementation organization

Danube-Carpathian Programme in partnership Carpathian Biosphere Reserve

With the support of EOCA and ORTOVOX

Lessons learnt & future

The ongoing conservation measures have been implemented during the ongoing war period. Nature must be protected at the most possible level, along with human life, during the war. Despite the advanced project work, the rescue mission is ongoing as summer heat waves (up to + 42 degrees) with the low water table due to locals’ extensive water use upstream, like building ponds, watering gardens, etc., lead to extensive soil dryness and changes in habitat composition. The increase in climate change provides additional tasks and keeps the conservation work far from over. The urban wetlands are located on the edge of possible and impossible restoration tasks.



BLUE-GREEN SPACE



CARBON SINK



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More info



Co-funded by the European Union

Eurosites Factsheet

Wetlands and Climate Change

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