

Revitalization of The Hostavický Stream



Potoky pro život – Streams for Life

FAUNA AND FLORA OF THE HOSTAVICKÝ STREAM

From the natural perspective the surroundings of the retention Reservoir Slatina is the most interesting. It is one of the most valuable water bodies in Prague. In the East and Northeast parts there are extensive canebrakes along with spreads of *Typha latifolia* (broadleaf cattail) and *angustifolia* (narrowleaf cattail). *Carex pseudocyperus* (cyperus sedge), *Lythrum salicaria* (purple loosestrife) or *Deschampsia cespitosa* (tufted hairgrass) are only very scattered and grow usually closer to the bank. At the edge, in the drier areas we can see spreads of *Phalaris arundinacea* (reed canary grass). The West part has only a narrow strip of the littoral zone, in which species such as *Persicaria hydropiper* (water-pepper), *Persicaria lapathifolia* (pale persicaria) and *Bidens frondosa* (devil's beggarticks) dominate.

During a survey, which was accomplished in 2013, 60 bird species in total were found here, of which 29 nest there. The significant species are e.g. *Anas clypeata* (northern shoveler), *Vanellus vanellus* (northern lapwing) or *Podiceps cristatus* (great crested grebe). From amphibians we can often hear *Pelophylax kl. Esculentus*, *Bufo bufo* (common toad), *Bufo viridis* (green toad) and *Bombina bombina* (European fire-bellied toad). *Lissotriton vulgaris* (smooth newt) also lives in the littoral.

Anas acuta (northern pintail)



Ixobrychus minutus (little bittern)



Bombina bombina (European fire-bellied toad)



Luscinia svecica (bluethroat)



REVITALIZATION IN DOLNÍ POČERNICE 2015

Revitalization of the Hostavický Stream in Dolní Počernice was accomplished in 2015 as the last one. Its target was to integrate the watercourse into the surrounding greenery and increase the ecologic, aesthetic and recreational potential of the area.

The revitalization was proposed in the length of 1 km from the Českobrodská Street up to the confluence with the Štěřboholský Stream with respect to the property rights. The stream served 'only to water conversion' and its ecologic, aesthetic and landscape value was minor. The surroundings of the stream was revised more likely to a park with several playgrounds, forest and scattered vegetation, which was in a very bad condition, especially vegetation of non-native *Acer negundo* (maple ash).

Within the revitalization the whole area was cleaned up and afterwards a broader depression called berm was built there, in which a lower meandering channel of the Hostavický Stream was created. While small stream bed serves for normal flow, then the berm is used for flood flows. The original stream bed was covered almost along the entire length. In the surroundings of the stream several small bodies of water, especially for amphibians, were built.

Along the stream you can walk on the new gravelly paths, the original footbridges have been preserved there and enable access from the Zahorská Street. The paths are lined with several benches and new game elements impeded the final touch to the playground.

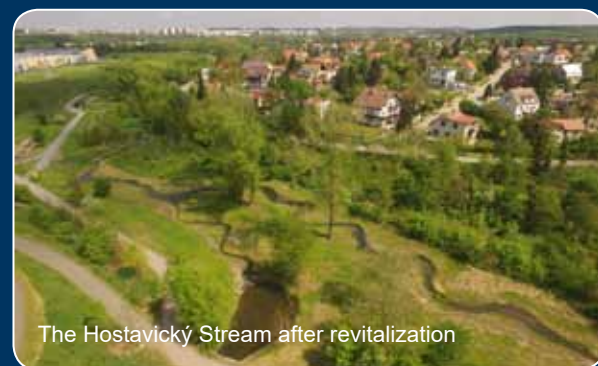
The project was co-financed by the Operational Programme Prague-Competitiveness.



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Original channel before revitalization



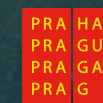
The Hostavický Stream after revitalization

Issued in 2017 by the Environmental Protection Department of City Hall of Prague.

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Aerial photos: www.andruvision.cz

www.praha-priroda.cz



POTOKY PRO
Život

THE HOSTAVICKÝ STREAM

Stream length: 6.13 km

Catchment area: 8 km²

Flow Manager: City of Prague represented by the Organization City of Prague Forests

Investor: City of Prague represented by the Environmental Protection Department of City Hall of Prague

Flow maintenance: City of Prague Forests

The Hostavický Stream is a left-sided tributary of Rokytka, rises in Dolní Měcholupy and its length is 6.13 kilometres. The stream then flows through the territories of Dubeč, Dolní Počernice and Hostavice. It meets Rokytka in the Čihadla dry retention reservoir. The Hostavický Stream fills the only single water reservoir, the retention Reservoir of Slatina, in Dubeč.

In the 80s of the 20th century the greater part of the stream was straightened due to the mouting of sewerage system from newly built housing estates and compounds capacity was increased and the stream bed concreted. It was a kind of revitalizing adjustment, when the concrete was poured under pressure into the prepared mats and thus some kinds of buns were made.

They were then completely overgrown with vegetation. Unfortunately, afterwards it appeared that fortification overgrew only partially. Trees and bushes that grow in sedimentary soil are not stable, the reason is that the roots cannot penetrate to high-grown terrain. Thus the Hostavický Stream has remained in a hydro-morphological and environmental unsatisfactory condition for years.

The stream has preserved its natural character only in Dolní Měcholupy.

REVITALIZATION IN ČIHADLA

2008

The first revitalization of the Hostavický Stream took place in 2008 within wide modifications in the area of the detention basin Čihadla. In the 80s of the 20th century the channel of the Hostavický Stream was straightened and fortified by semi-grass building blocks during the construction of the Prague's largest detention basin.

During the revitalization in 2008 a part of this original narrow stream channel was covered. In the length of 273 m a new meandering channel was built and its bottom was strengthened by riprap.

A new pool was built out of the original channel. Over the Hostavický Stream a ford was constructed at the confluence with Rokytka for maintenance purposes. Pedestrians may use a newly built footbridge of acacia wood.

The project was co-financed from EU funds – JPD2.



The Hostavický Stream after revitalization

REVITALIZATION ABOVE THE SLATINA RESERVOIR

2015

Another revitalization of the Hostavický Stream was performed in 2015 in Dubeč above the retention reservoir Slatina in the length of 266 m. The stream was originally stabilized by the already mentioned concrete fortifications and concrete steps and a trap for sediment were also located there.

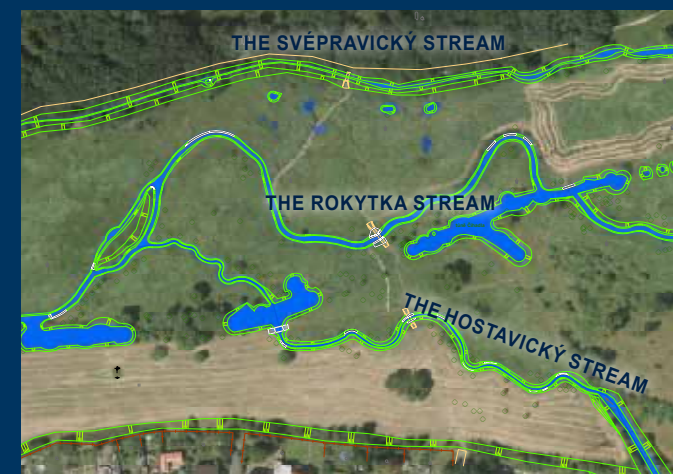
Within the revitalization the original stream bed was covered and a new nature like meandering river bed was created next to it. It is more consistent with the current requirements for watercourses and nature protection. Whereas the rainwater from Měcholupy is led to the stream above the reservoir, a wide berm with pools was built there for transferring huge amount of water. Just above the mouthing of the stream into the retention reservoir Slatina the revitalized channel was terminated, so the water spills into small wetlands there. The revitalization was completed by planting of new trees, shrub willows, and the whole berm was sown with grass.

This revitalization incorporated the Hostavický Stream into the surrounding green vegetation that is linked to the retention Reservoir Slatina.

The project was financed by the Operational Programme Prague – Competitiveness.



Revitalized channel in the Čihadla dry retention reservoir



CHARACTERISTICS OF THE CHANNEL OF HOSTAVICKÝ STREAM

Natural: 0 km

Close to nature: 0,615 km

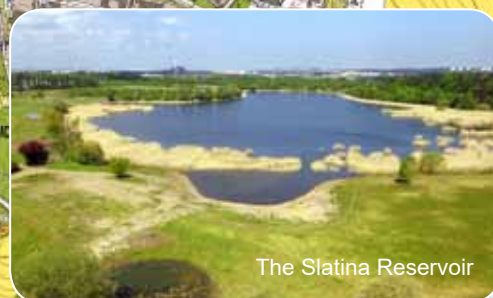
Technically modified: 2,49 km

Vaulting: 0,89 km

Water areas: 0,48 km

Revitalized: 1,65 km

Pools: 706 m²



The Slatina Reservoir

