REGREEN Field trips to NBS sites in Paris region

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REGREEN 3rd Newsletter, Dec. 2021

The Regional Biodiversity Agency of Paris region (ARB îdF, part of l'Institut Paris Region) is one of six Urban Living Labs in REGREEN. ARB îdF hosted the fifth REGREEN project meeting from September 13 to 17, 2021. Due to Covid restrictions, only the field trips could take place in Paris region while the project meeting was held purely online.

Themes for the field trips included flood expansion zone, parks under ecological management, wasteland, green roofs, and restored ecosystems. Several field visits were organized over the 3 days:

Le Petit Rosne reopened in Sarcelles

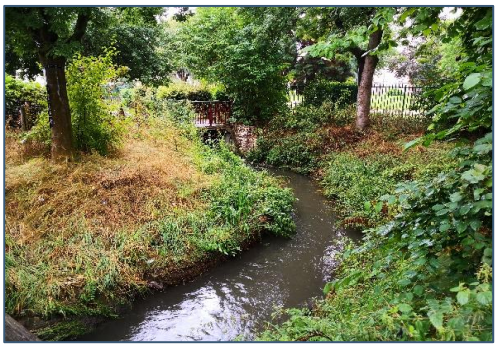

Photo: Marc Barra, IPR

The canalization and burial of the Petit Rosne waterway increased the flooding in downtown Sarcelles. In order to bring back the river to life, the Intercommunal Syndicate for the Hydraulic Development of the Croult and Petit Rosne valleys (SIAH) have demolished the concrete slab, de-canalised the river, created a new river bed and revegetated the banks. Despite the small amount of space available and the strong urbanization of the area, the Petit Rosne is now endowed with a wetland and numerous facilities offering the site full accessibility.

Vignois flood expansion zone in Gonesse

In order to combat the recurring flooding problems in the Vignois district in Gonesse that is caused by the canalising and constructing in the Croult river bed, the Intercommunal Syndicate for the Hydraulic Development of the Croult and Petit Rosne (SIAH) initiated an ecological restoration project to create a flood expansion zone. In 2019, Le Croult was renatured over 800m and found a new river bed almost identical to its original bed, with meanders, flared and vegetated banks. The former mono-culture agricultural land, through which the river flowed, has been transformed into a 12 hectares wetland of major interest for biodiversity but also for rainwater management. In

Photo: Marc Barra, IPR

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the event of heavy rains, the river can again overflow into its wetland, capable of storing up to 55,000 m3 of water.

This new natural space also makes it possible to improve the living environment and the green and blue networks in an area where urbanization remains dynamic.

In order to measure the contribution of this site for fauna and flora, ARB îdF has engaged with the SIAH, the Office for Insects and their Environment and the naturalist studies office EcoloGIE a protocoled ecological monitoring of the biodiversity such as day and night butterflies, odonata, orthoptera, bats, birds, micromammals and flora-pollinator interactions. An explanatory film of the area and interview with project implementers can be viewed here

The Epinay-sur-Seine ecological reserve

Photo: Gwendoline Grandin, IPR

The ecological reserve of Epinay-sur-Seine was originally a land reserve for the town of Epinay-sur-Seine, made up of former private gardens and where public facilities were planned constructed. Left fallow for more than 12 years, nature gradually transformed into a valuable space of refuge for wild nature. Based on this observation, the municipality finally gave up the construction project and decided to open up this natural space to the inhabitants of the city while maintaining the existing habitats. Inaugurated in 2020, the Ecological Reserve accommodates family and shared gardens, a wetland, an orchard, a phytoremediation zone and spaces left in free evolution. This place has also become a tool for raising awareness of nature in the city: each year, several thousand people, children and adults, come to participate in educational projects and workshops run by the city of Epinay-sur-Seine.

Peach walls of Montreuil

The “Peach walls” were walls used for the cultivation of peach trees in Montreuil. With the end of fruit production in the 20th century, orchards and walls were gradually destroyed and almost disappeared in the urban fabric. The city of Montreuil has implemented a programme to protect these peach walls for several years, with the help of citizens' initiatives and associations. The program is based on 4 main themes: urban agriculture with the creation of micro-farms; heritage; culture; and biodiversity through the creation of ecological corridors and the renaturation of watercourses. In 2015, a range of activities was implemented aiming to preserve the heritage of the peach walls: restoration of the walls, reinforcement of the natural potential of the site (with

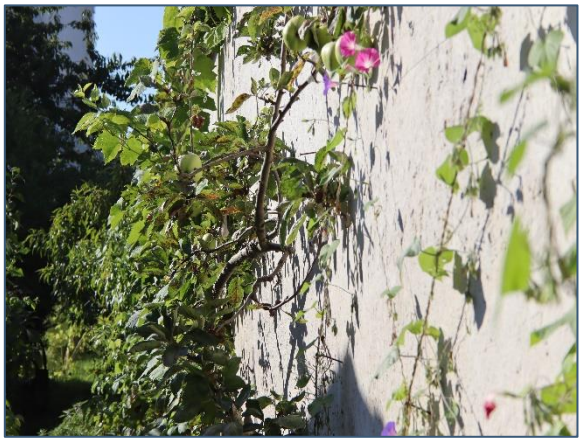

Photo: Gwendoline Grandin, IPR

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the opening of the river Ru Gobétue); opening of a large number biodiversity pathways; opening of a new public garden (The shared Garden). This short film gives an impression of what the the peach walls look like.

The Little Belt of Paris ' La Petite Ceinture'

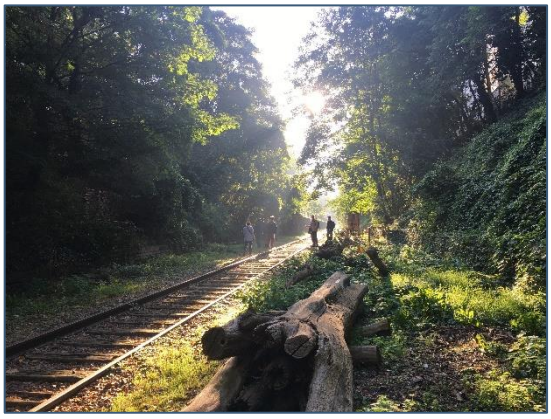

Photo: Gwendoline Grandin, IPR

Built around Paris during the Second Empire (1852 - 1869), the Petite Ceinture is a 36 km railway line, which transported passengers until 1934 and goods until the 1970s. In the 15th arrondissement, it served in particular the Citroën factories (André-Citroën park) and the slaughterhouses of Vaugirard (Georges-Brassens park). Since the train stopped, vegetation has spontaneously settled on the embankments, ballast, bridges and low walls, forming different layers of vegetation where many animal species find refuge. The Association 'Espaces' manages the Petite Ceinture of the 15th arrondissement applying a differentiated approach, for instance some portions are kept fallow to create refuge areas for biodiversity.

The banks of the Seine on Île-Saint-Germain

The banks of the Seine river in Paris Region are very artificial. There are rock fills, rip raps, concrete dikes and sheet piles. These developments have contributed to reducing the physical-chemical, hydro morphological and ecological quality of the Seine. In the Ile Saint-Germain sector, the Espaces association has been responsible for the development of the banks in plant engineering since 1999. To do this, the Espaces association carried out several operations: stabilisation of the banks with willow fascines, creation of reed beds to limit erosion and vegetated islets. In total, 575 meters of banks and 300 meters of embankments have been restored on the Île Saint Germain sector using techniques derived from plant engineering.

Photo: Gwendoline Grandin, IPR

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The green roof of the Boulogne-Billancourt School of Sciences and Biodiversity

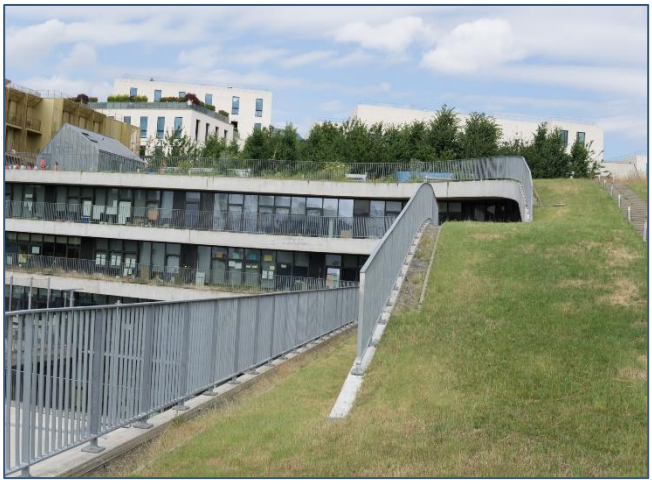

Photo: Audrey Muratet, IPR

The School of Sciences and Biodiversity is one of the exemplary buildings in Paris region in terms of green roofs and walls. Opened in 2014, it is the result of a partnership between architects and ecologists. On the roof, the depth of substrates varies between 30 cm and 1 meter, making it possible to create a multitude of habitats ranging from meadows to urban "micro-forests" with more than 200 trees. This space is accessible to children and to educational teams who organize nature education outings and educational workshops. The facade of the building has been designed to evolve over time and accommodate wall vegetation. The variable geometry of the walls provides nesting sites for different species of birds and will eventually allow for bats.

Regular inventories of flora and fauna have been set up there on the roof to follow the evolution of biodiversity, in addition to being one of the sites studied by the ARB îdF as part of the GROOVES study. The roof is currently being reseeded using hay and seeds (Meadow Sage, Bromus Erectus, and Amourette) harvested from a nearby meadow. By harvesting from a nearby meadow, the architectural agency Chartier Dalix and the ecologist Aurélien Huguet aim to change the flora composition towards a larger quantity of perennial, flowering, local species adapted to the conditions of the site.

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