



# Back on Senne



07.02.26  
03.01.27

## Visitor guide

Sewer Museum  
Porte d'Anderlecht - 1000 Brussels  
sewermuseum.brussels

@sewermuseum

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# Back on Senne

Senne, that's what you called me. Though only a small river - unlike my Parisian homonym - I have shaped the landscape of the Brussels valley over millennia.

Today, almost two-thirds of my journey through the Brussels Region takes place underground. Here I lie, a few metres beneath your feet, light-starved and hidden from view. But before we meet, why not take a quick look at some of our shared history? Through this exhibition, I want to remind you that I am a living entity: both a memory of a vanished landscape and a river with a remarkable capacity for renewal.

To elevate our underground encounter, artists Romain Tardy and Coline Cornélis have chosen to put me in the spotlight and give me a voice. Pause with me here for a moment, and imagine what the future could look like if I were given another day in the sun.

Follow me...



# Nourishing river

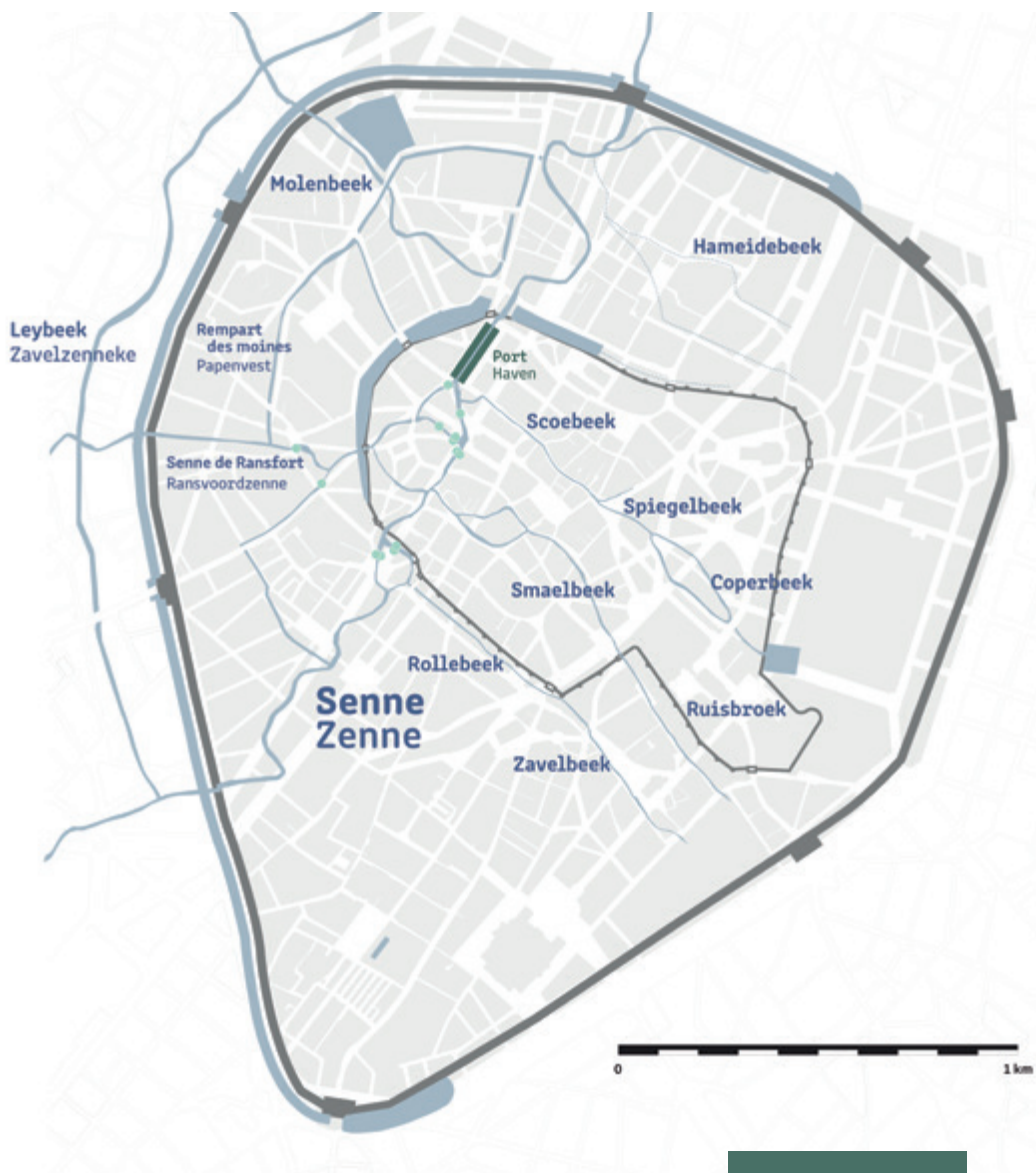
The river I am today is not the river I've always been - far from it! I'm counting on your imagination to bring back memories of my presence in the landscape and in the daily lives of the people. I played a fundamental role in the city's development: shipping route, powering mills, providing food and resources for craft activities - and, yes, even taking care of waste disposal.

During the 2019 construction works of Brucity, the administrative centre of the City of Brussels, archaeologists unearthed significant remains of the city's first port (10<sup>th</sup>-16<sup>th</sup> centuries), dating from a time when my waters carried boats, powered mills and contained fish.

My many arms, and the presence of certain key species, suggest that human activity had not yet compromised the health of my ecosystem.



**Map of Brussels by Georg Braun and Frans Hogenberg,**  
1572, engraving enhanced with watercolor (detail showing  
the old port of the Senne and the new port of the Willebroek canal).  
© Museums of the City of Brussels – Maison du Roi



The parcel investigated by archaeologists along the course of the Senne.

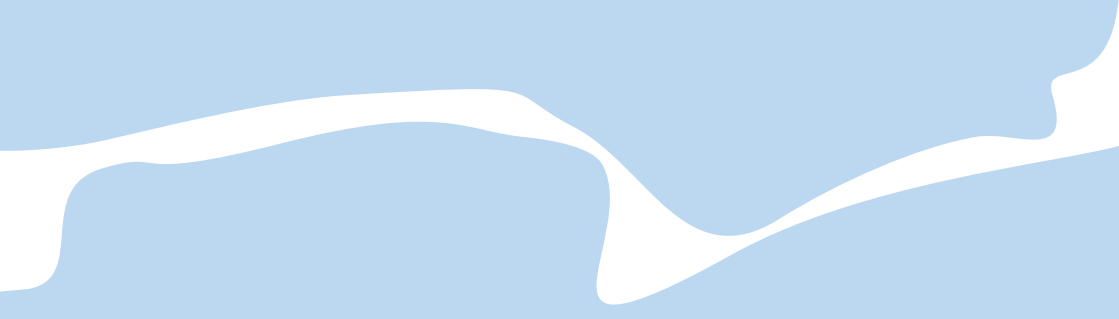
Mills

#### Hydrographic network around the 14<sup>th</sup> century.

Base map: BRUGIS, current cadastre.

© urban.brussels, after Bastendorff J. P., Laurent R. and Deligne C.

***A river is not just  
a blue line on the map.***

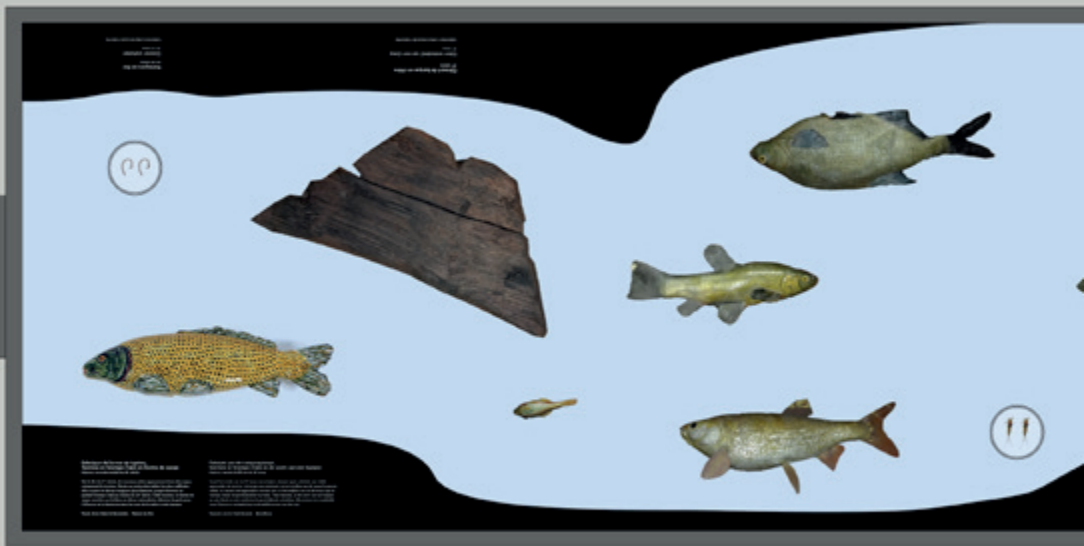


**15<sup>th</sup>-century market scene,  
sale of fish, frogs, and snails.  
Ulrich Richental, Chronik des  
Konstanzer Konzils, fol. 25  
© Rosgartenmuseum Konstanz**

## On the Brussels Menu

Fish was a key part of the daily diet, largely for religious reasons. Almost a third of the year was marked by fasting under the Christian calendar. People in the city relied on aquatic resources, including molluscs, amphibians and fish, to enrich their diet.





### Factory of the rue de Laeken

#### - Trompe-l'œil terrine shaped like a carp

Faïence, second half of the 18<sup>th</sup> Century

From the end of the 17<sup>th</sup> century onwards, new dishes appeared at the dining table, notably the terrine. Placed at the centre of the most refined tables, it was adorned with increasingly elaborate decorations, eventually becoming a perfect trompe-l'œil by the mid-18<sup>th</sup> century. This terrine, shaped like a carp lying on its side and featuring a naturalistic decoration, illustrates the taste for illusion and fantasy in the decorative arts of the table at that time.

© Museum of the City of Brussels – Maison du Roi



**The case of the caddisfly larva**

The protective case of a caddisfly larvae is a small clue, but one of great significance. Highly sensitive to pollution and environmental stress, its presence is a valuable indicator of good water quality.

15<sup>th</sup> Century.

urban.brussels collection

**Composite waterwheel paddle, beech paddle board and oak shaft fixed with oak pins.**

14<sup>th</sup>- 15<sup>th</sup> Century

urban.brussels collection





### Waterwheel oak paddle

late 10<sup>th</sup> Century

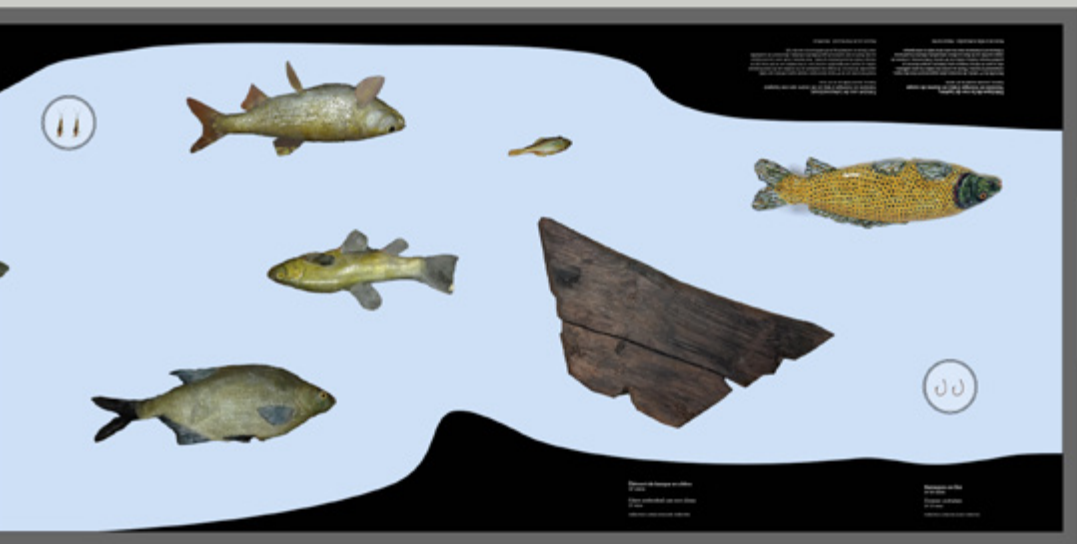
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### Fish

Archaeological excavations have uncovered an astonishing diversity of fish species in the sediments of the Senne riverbed from the Middle Ages. Were they part of the local ecosystem, or remains of fish brought in from other waters for consumption? In most cases, it's impossible to know. These six freshwater fish casts represent just a small fraction of that diversity.

Collection of the Royal Belgian Institute of Natural Sciences

1. Ruffe (*Gymnocephalus cernuus*)
2. Minnow (*Phoxinus phoxinus*)
3. Tench (*Tinca tinca*)
4. Ide (*Leuciscus idus*)
5. Common bream (*Abramis brama*)
6. Pike (*Esox lucius*)



**Oak boat part**  
 15<sup>th</sup> Century  
 urban.brussels collection

**Iron fish hooks**  
 14<sup>th</sup>- 15<sup>th</sup> Century  
 urban.brussels collection

*(object in showcase)*  
**Wicker fish trap**  
 late 15<sup>th</sup> Century  
 urban.brussels collection



# The Senne, a driver of urban development

The many mills established along the Senne contributed to the city's growth and its socio-economic organization. At the heart of the medieval urban area, upstream from the port, the presence of the mills went hand in hand with the development of a network of trenches, weirs and diversions, leaving a lasting impact on the Brussels landscape.

The unpredictable navigation conditions on the Senne, made difficult by frequent silting of the riverbed and its irregular flow, led to the creation of the Willebroek Canal in the 16<sup>th</sup> century, improving the connection to the North Sea. This new waterway resulted in the stopping of activities at the old river port.



**Luttrell Psalter, Psalm 103,**  
Watermill and eel traps, England, circa 1325–1335  
© British Library

# Fishing

The mill falls, where water is stirred up and oxygenated, create ideal habitats for aquatic fauna. Located downstream from the many mills along the Senne's branches, the archaeological site of the old port was a well-known fishing spot, which was revealed by the presence of at least seven fish traps. These funnel-shaped traps, pointed upstream, direct fish into a baited chamber from which they cannot escape. These traps are used for fish such as eels, carp and tench that move along the bottom of calm waters.



**Breviary Grimani, 1510-1520, detail. Lat. I, 99,**  
Calendar for the month of March  
© Biblioteca Nazionale Marciana

These three reproductions of paintings are part of the series *Fifteen Views of the Senne*, commissioned in 1872 by the City of Brussels from the Brussels painter Jean-Baptiste Van Moer. Following the first covering of the river (1867–1871), Mayor Jules Anspach tasked Van Moer with preserving the memory of the neighbourhoods demolished along the Senne. To do so, the artist relied on drawings and sketches made before and during the works. On 21 October 1874, the fifteen panels were installed in the antechamber of the Mayor's Office at the Brussels City Hall, where they remain today.



*View of the Senne  
from rue des Teinturiers,*  
oil on canvas, 1873

© Museums of the City of Brussels – City Hall



*View of the Senne branch  
from rue des Pierres,*  
oil on canvas, 1873

© Museums of the City of Brussels – City Hall



*Le moulin du Borgval,*  
oil on canvas, 1874

© Museums of the City of Brussels – City Hall

Even though it was forbidden to dispose of waste in the river, riverside residents often took the easier way, emptying their chamber pots or relieving themselves directly in the water. See if you can spot the scenes that show this rather unseemly habit.

*(object in showcase)*

**Chamber pot in red earthenware**

14<sup>th</sup>- 15<sup>th</sup> Century

urban.brussels collection



**Jean-Baptiste Van Moer, *Le moulin à papier ou Driesmolen*,  
Rue des Six-Jetons, 1873**

© Museums of the City of Brussels – City Hall

Use the magnifying glass to explore...



Pieter Bruegel the Elder, *The Flemish Proverbs*, 1559  
© Gemäldegalerie, Berlin



**Go downstairs  
to continue the tour**



# Post-mortem Awakening

I thought I was going to die: I found myself channelled, diverted and deprived of light for two thirds of my journey through the Brussels Region, all to satisfy human needs. In the 19<sup>th</sup> and 20<sup>th</sup> centuries, my condition deteriorated sharply. Life was leaving my waters, driven away by ever-increasing waste and discharges. In 1953, I was even classified as “a watercourse intended to meet the needs of industry”.

But all hope is not lost. In 1991, the adoption of the European Urban Wastewater Directive compels Member States to collect and treat wastewater before releasing it into my riverbed.

The construction of wastewater treatment plants in Brussels, in 2001 and 2007, has slowly restored my health. Yet even now, I still end up as a receptacle for untreated water that overflows from the sewers during heavy rainfall.

## Here begins the Senne

Urban waste, blown by the wind or washed by rain into street drains, along with chemicals poured down your pipes, ends up in the sewer system. When it rains heavily, the sewers overflow into the Senne, severely impacting water quality. Can you spot items from your own daily life in these layers of waste?



# Souterraines

An original creation by Romain Tardy (visual creation) and Coline Cornélis (soundscape).

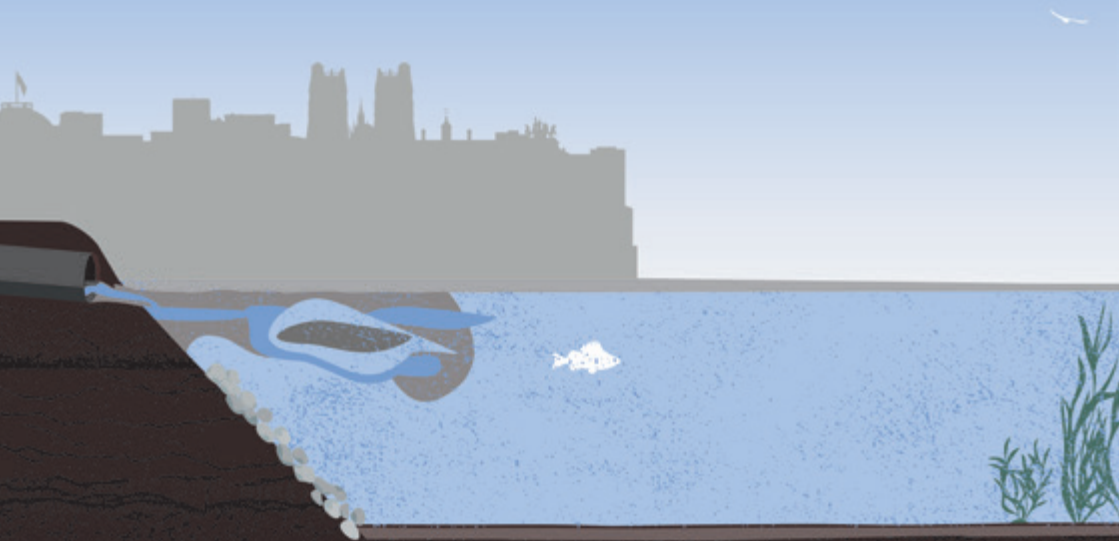
The digital installation you are about to explore responds in real time to the health markers recorded by the Flowbru probes. The installation's continuous motion reflects the intricate dance of my ecosystem, where living and non-living elements are continuously interacting.

The artists who visited me were inspired by the shifts in my physico-chemical parameters - temperature, dissolved oxygen, acidity, flow - and by the sounds of the fauna and flora I harbour along my rare open stretches: fish, beavers, water birds and aquatic plants. These elements come together to create an immersive and sensory installation that mirrors the state of my health and reveals the strength of my character.



This artwork features lighting effects that may affect photosensitive individuals. Feel free to ask our team for advice on adapting your visit.

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.brussels 



## River health assessment

My vital signs are continuously monitored by probes placed at various points along my route through Brussels. Despite the efforts made, my overall condition remains mediocre. Let me give you an overview of a few of these parameters that are essential to keeping my ecosystem healthy.

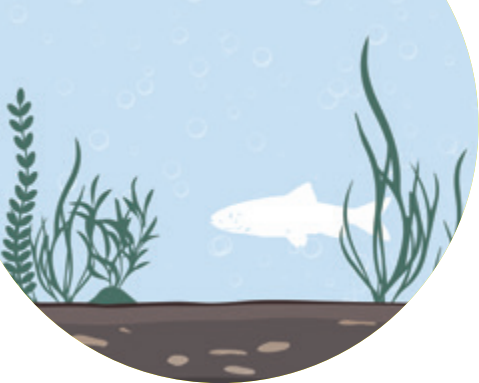
### Turbidity

When I turn cloudy, it's because my water is full of suspending particles. They block the light the aquatic plants need to grow and make hunting more difficult for predators, such as the pike.



## Flow rate

My flow rises and falls a little like an electrocardiogram, responding to rainfall and to the amount of wastewater we produce. After a good clean at the wastewater plant, the water finds its way back to me, the Senne. When I'm forced into the straight line of the tunnel I'm in, my flow speeds up and my banks begin to erode at a faster rate, which can cause flooding further downstream.

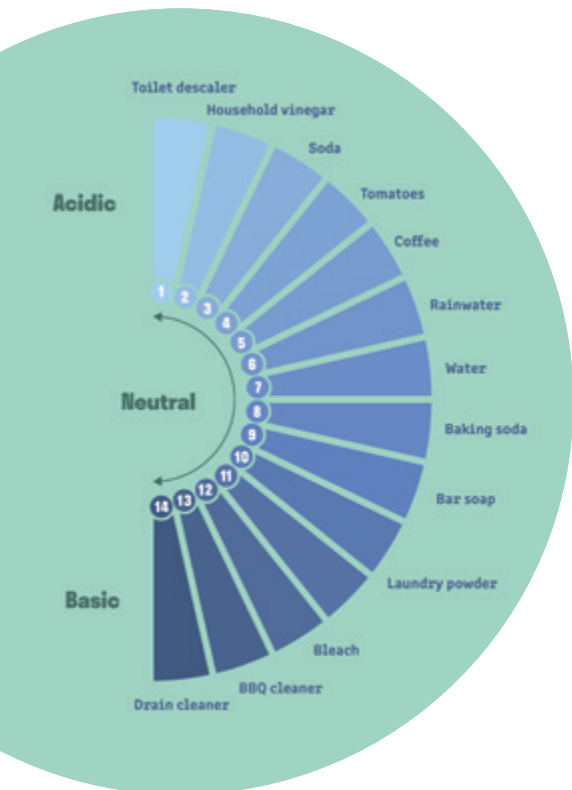
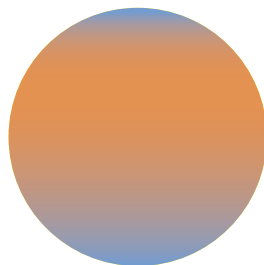


## Dissolved oxygen

Essential for most life forms, the oxygen in my waters drops when wastewater is discharged or when my flow is very low, leading to the suffocation of certain species.

## Temperature

Being mostly underground in Brussels, my waters seldom get dangerously hot. But when a heatwave hits, the open sections can warm enough to put many of my inhabitants under stress.



## Acid-base balance (pH)

Like your stomach, I do not tolerate excessive acidity or alkalinity. My water needs to stay close to neutral. The chemicals spilled into the sewers can disturb this delicate balance.



**Go upstairs  
to continue the tour**



# Bring the river back to life

I long to sparkle with the vitality I once had! Wouldn't it be lovely to feel my waters full of fish, and to see dragonflies sunbathing on yellow irises along my banks? Why not draw some inspiration from past and future projects?

Draw some inspiration ....



Perch  
*Perca fluviatilis*



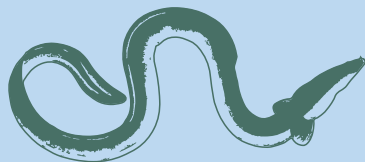
Pumpkinseed sunfish  
*Lepomis gibbosus*



Gudgeon  
*Gobio gobio*



White bream  
*Blicca bjoerkna*



European eel  
*Anguilla anguilla*



Stone loach  
*Barbatula barbatula*

## Fish

© CC P. Dunbar, Seotaro, CC Zsoldos Márton



Chub  
*Squalius cephalus*



Roach  
*Rutilus rutilus*



Rudd  
*Scardinius erythrophthalmus*

## In the spotlights in Brussels

The new renatured sections in the south, in Anderlecht, and the uncovered waters in the north, in Haren, show just how wonderfully the Senne can heal and grow again. Once considered biologically dead, it took the river just a few years to become a living ecosystem once again, welcoming back not less than seventeen fish species and also the beaver - a creature missing from our regions for over a century!

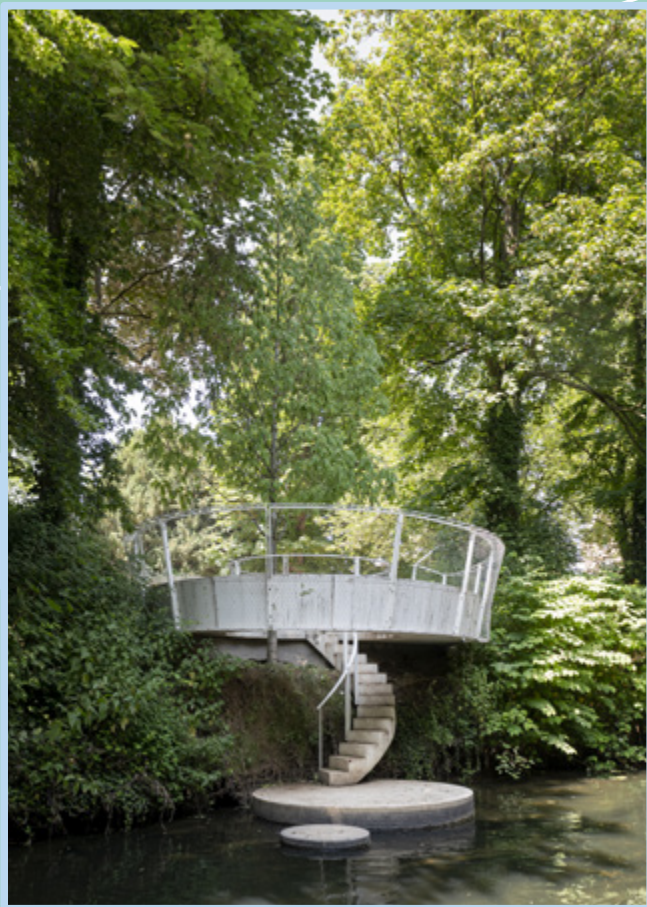
In Brussels, the environmental administration works to restore it to an open-air river wherever possible, together with the concerned municipalities. Projects of this kind make the city more resilient to climate change, while also inspiring ideas that strengthen social ties and residents' well-being. The riverbanks become places for walks or discovery areas for budding nature lovers. This sort of development is already common amongst our neighbours in Flanders.



**The Senne in Anderlecht**  
© Brussels Environment

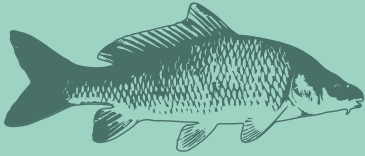
## Inspiration from upstream

Improved water quality of the Senne and the residents' desire to reconnect with the river led to the creation of these terraces in Halle. Created as spots to unwind, they invite families and friends to gather without disturbing the flora and fauna.



The “Senne Terraces” is a project led by the Flemish environmental administration, the city of Halle, and the strategic project “Zennevallei”.

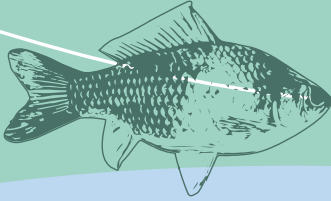
© Klaas Verdrú



Common carp  
*Cyprinus carpio*



Topmouth gudgeon  
*Pseudorasbora parva*



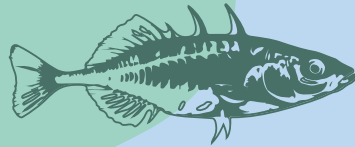
Prussian carp  
*Carassius gibelio*



Zander  
*Sander lucioperca*



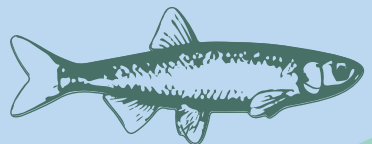
Ninespine stickleback  
*Pungitius laevis*



Three-spined stickleback  
*Gasterosteus gymnuris*



Bitterling  
*Rhodeus amarus*



Belica  
*Leucaspis delineatus*



Take a look at this beaver couple...

# Doctor Beaver

Less than five years after the reopening of the Senne north of Brussels, this nocturnal animal revealed its presence through tooth marks left on tree trunks. As a part of the rodent family, its ever-growing incisors need constant sharpening. An expert builder, the beaver has been shaping rivers for eight million years, creating secondary channels, meanders and wetlands.

But the beaver didn't just shape the past, it's also a useful partner for present times. Wherever it intervenes, water slows down and seeps into the soil, restoring it to life and creating a range of habitats. Its expertise encourages us to see rivers not as courses to control, but as spaces to share. By drawing inspiration from the beaver's approach, we could return water to the land, lessen flooding risks and pave the way for a fairer coexistence between people and nature, in which the living becomes an ally rather than an obstacle.

Take a look at this beaver couple and a few of their neighbours.

Picture © Camille Crucifix  
Video © Brussels Environment

*(object in showcase)*  
**European beaver and skull**  
***Castor fiber***

collection of the Royal Belgian Institute of Natural Sciences



# Small organisms, big indicators

Tiny creatures called macro-invertebrates live in my waters, visible only to those paying close attention. Perceptible to the naked eye and lacking a backbone, they include insect larvae, tiny crustaceans, molluscs and leeches. Some species, like mayflies and caddisflies, are especially sensitive to pollution, and their presence signals good water quality.

Although discreet, the diversity and abundance of macro-invertebrates are a valuable scientific tool for assessing the biological quality of water.

## Discover this small world...



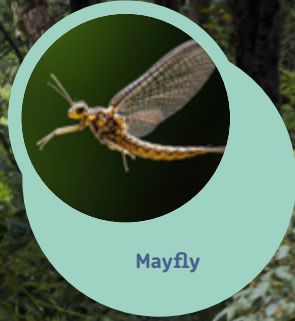
**Common pea clam**  
(small freshwater clam)



**Gammarus**  
(freshwater shrimp)



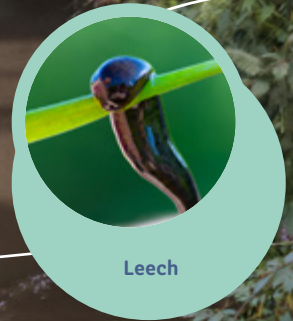
**Caddisfly**



**Mayfly**



**Chironomid  
larva**



**Leech**

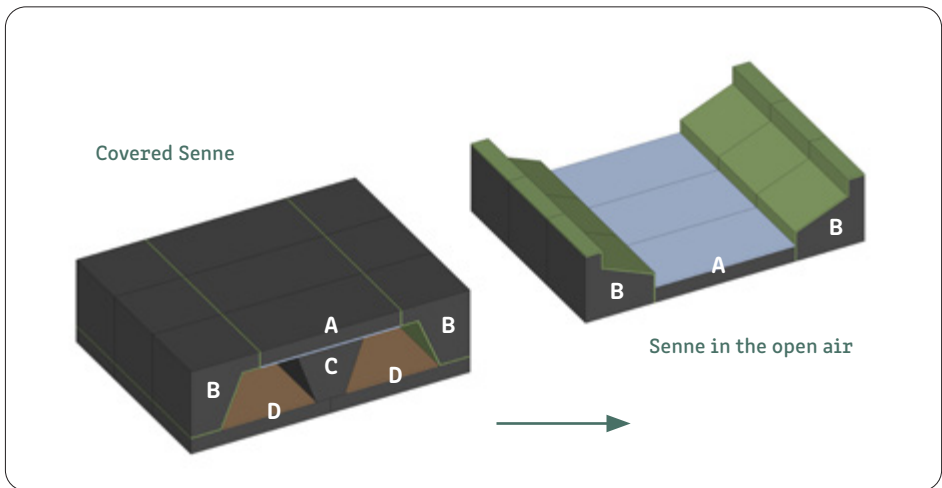


**Asellus  
(water louse)**

### Free the Senne

Take on the challenge faced by today's engineers by transforming the covered Senne into an open-air watercourse. Examine the drawings to see how it works. The tunnel structures become the river's new banks. Then, return the blocks to their original construction for the next participants.


Take on the challenge...





**The Senne in Haren, stages of the open-air construction project**  
© Brussels Environment

***The river is not a ruined cathedral; it is a living being capable of healing itself.***



These sketches from the Bas Smets design office suggest a major transformation of the area around the Sewer Museum, converting a heavily urbanized space into a more inviting riverside environment, or one visually connected to the river, providing it with the light it so desperately needs.

© ORG – BUREAU BAS SMETS





# Acknowledgments

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**GENERAL COORDINATION & CURATORSHIP**  
Aude Hendrick, Sophie Vanderschueren

**SOUTERRAINES : DIGITAL ARTWORK**  
Creation of the artwork and visual creation:  
Romain Tardy  
Soundscape: Coline Cornélis  
Production manager: Thibault Van Malderen  
Programming: Léo Huet  
Delegated production: LDA Productions

**REALIZATION AND EXECUTION**  
Scenography (appointed): Louis Luyten and Jean Lucas Cabrera  
Graphic design: Denis Decaluwe  
Production and execution: OKTO  
Graphic production: TAVU

**LIGHTING**  
Licht

**COMMUNICATION**  
Luna Klaps, Vinciane Godfrind

**GRAPHIC DESIGN OF THE COMMUNICATION**  
Design by Jules: Clémence Cassells

**TRANSLATIONS**  
Accolade

**PROOFREADING**  
Luna Klaps, Huguette Tas

## SCIENTIFIC AND TECHNICAL PARTNERSHIPS

- ▶ **Brussels Environment:** Benjamin Thiébaux, Audrey Marescaux, Camille Gaulier, Martin Ohsé and Michaël Antoine
- ▶ **Urban.brussels:** Valérie Ghesquière, Julie Timmermans, Jef Pinceel and Ann Degraeve
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