

## Leuven region

### TODAY

The Flemish Environment Agency gives the Dijle valley back to the watercourse wherever possible. To restore natural dynamics, they let riverside plants grow and fallen trees lie. At high tide, dispersed floods then occur in the valley, where they cause little damage. This could avoid floods downstream near Leuven, where they would cause more damage.

The Dijle outside Leuven has recently been allowed to overflow again and to deposit sediments as in the distant past. It is the only place in Flanders where the river's course is left completely free. Everywhere else, river banks are being reinforced to prevent the river from moving slightly every year.

As in former times, a wetlands area with a wide variety of fauna and flora is therefore created here. Its natural character and large number of meanders have created a varied habitat for many animal and plant species. With some luck, you can spot kingfishers, a beaver, dragonflies and remarkable fish.

On the river banks, one finds, among others, whorlweed, glossy oats, tubercle broom and comfrey. On the moister grounds, reedbeds, alder bogs and sedge vegetation can be found. In May, yellow iris blooms there. Between embankment and bowl ground, marsh grasslands occur. In spring, these are completely yellow with marsh marigolds, buttercups and large rattlers.

Together with the improved water quality of the river, the fish population has been increasing significantly. About 21 fish species can be found, including: ten-spined stickleback, three-spined stickleback, perch, brown trout, roach, bleak, gudgeon, carp, chub, eel, rainbow trout, rudd, pike, dace, tench and sunfish.

The natural areas above Leuven are ideal breeding grounds for water birds. They are therefore abundant here. A bird-watching trip is certainly worthwhile in this region. You will meet egrets, Canada geese, Nile geese, swans, cormorants, dozens of species of ducks, buzzards, kingfishers and many others on, around and next to the Dijle. Sand martins also prefer the banks of the Dijle. Other bird species that breed there include the bluethroat and the spotted crane. And in the sky one can often notice the kestrel.

Leuven University is mapping all animal species living on its domains. This action is part of an international project involving 17 European universities. Currently, their research is focusing on the aquatic animals of the Dijle.

### Recreation

A canoe trip on the Dijle takes you from the border of the nature reserve, the "Doode Beemde" (the dead meadow), south of Leuven, along nature and forest all the way to the majestic Arenberg castle, where you can take a

break. After this, you can paddle through the wooded castle park , before cruising along the old Leuven ramparts, to the centre of Leuven.

## FUTURE

The Dijle still leads a hidden existence in the city in many places today. There are several plans to revitalise the Dijle and open it up wherever possible. This will restore the historical connection between the inhabitants of Leuven and their river.

With every urban renewal project in the city centre, a new stretch of river is opened up and unlocked. Slowly but surely, the Dijle is once again becoming the blue backbone of the city. With the demolition of many buildings, there is room to make the Dijle visible in the streetscape.

There will be a Dijle path along the Dijle for pedestrians and cyclists. The shores will be green and ecological.

**Aquathermy** uses heat from water. Examples are lakes, rivers or canals. The heat extracted from water with a heat pump can be used to heat homes via a heat network. As a heat source, warm water is thus an alternative to natural gas.

The University of Leuven will use water from the river Dijle to heat buildings. For example, part of an apartment building and a new campus will be heated via aquathermy.

At the Janseniushof in Leuven, a residential project was recently proposed in which both aqua and geothermal energy will be used for heating. With aquathermy, heat is extracted from surface water such as rivers, while with geothermy the heat comes from the underground. A Leuven engineering firm is one of the pioneers in this story.

Research has now shown that aquathermy can cover 41 per cent of the heat demand of the new campus of the Faculty of Psychology and Educational Sciences that the University of Leuven wants to build in the neighbouring Dijle mills. In addition to aquathermy, they also want to use **geothermal and riothermal** (sustainable heat from waste water) here. While the pilot project at the Dijlemolens would normally start effectively at the end of this year. We hope, the university will decide on heating the new faculty with this innovative technique.