

## **P44: The recent history of a protected soft-water site in north-eastern Belgium**

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Northern Belgium is still among the areas with the highest atmospheric nitrogen deposition in Europe. High deposition coincides with intensive livestock farming, adding to the problem. As in the neighbouring Netherlands, the Flemish Regional Government set out a Nitrogen Reduction Plan to alleviate this pressure on sensitive protected habitats, with mid-term goals in 2030 and 2045. Alongside, nature restoration is implemented in the most impacted areas, focussing, among others, on heathlands and the remaining shallow soft-water bodies situated within them.

The 'Zwart Water' (5.3 ha, Zmax. c. 2 m; Turnhout) lies within one of the most strongly debated Special Areas of Conservation in the north-eastern cover-sand area. Until recently one of the few sites with *Lobelia dortmanna* in Belgium, and still recognized as an important site for the conservation of 'Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae*' and *Luronium natans*, it is a focal site within a large-scale restoration project continuing already for several decades. Using diatom, macrophyte and water-chemistry data we tracked its environmental history over the last ninety years, documenting its least-impacted condition and subsequent acidification, as well as its response to restoration measures and partial recovery.