

General description of the bathing water in non-technical language

Pätzer Vordersee is a lake situated around 7km south of Königs Wusterhausen in the Dahme Lake District, an area with many lakes, and is part of the urban agglomeration here. Together with Pätzer Hintersee located to the south and the adjoining Todnitzsee to the north, as well as Zeesener See, it is part of a chain. The outflow from the chain into the River Dahme is located near Königs Wusterhausen.

Pätzer Vordersee is approximately round in shape, but with numerous bays. The surface area of the lake is 165ha. The average depth is 6.3m and the deepest point (16.2m) is in the western part of the lake. During the summer the body of water forms stable temperature layering. The inflow from Hintersee flows in at the southern end. The outflow, the "Glunze", leaves the lake in the north.

The catchment area of Vordersee is around 23km², two thirds of which is forested. 11% of the area is used for agriculture and 8% is residential.

The entire Dahme Lake District was a popular recreation destination for Berliners as early as the 1920's. Weekend houses and also villas were built for wealthy people from the big city. In the north and west Bestensee borders onto Vordersee. Pätz is situated in the south. The "Pätzer Hintersee" Nature Protection Area borders onto the inflow and the subsequent bay borders onto Vordersee. Vordersee and its eastern shore belong to the Dahme Heathland Lakes Nature Park, the border of which is formed by the western shore of Vordersee.

Due to its depth and its very small catchment area, Pätzer Vordersee has a good set of natural conditions for having a tendentially nutrient-poor, clear water state. The lake, which is monitored by the Brandenburg State Office for Environment, Health and Consumer Protection as part of a long-term environmental programme, is still very nutrient-rich, despite extensive renovation of the waste water treatment facilities. Although the nutrient content has been considerably reduced since the start of the 1990's, they are still within a range which leads to periods of high plankton growth during the summer. The consequences are early acute oxygen deficiency in deep water and blue-green algae blooms, which are encouraged by the very nutrient-rich Hintersee situated above the lake. The water transparency levels in open water during the summer are between 0.5 and 2.0m (mean value: 1.1m).

The "Pätz" bathing area at Vordersee, which is tested every four weeks by the local Office for Health as per the Brandenburg Bathing Water Regulations, there were no exceedances of single values of the microbiological parameters e.coli and intestinal enterococci. Blooms of blue-green algae have not been observed.

Text: Kerstin Wöbbcke, enviteam office

Sources:

Arp, W. & B. Koppelmeyer (2009): Monitoring von Phytoplankton und chemischen Parametern zur Indikation des ökologischen Zustandes in ausgewählten Seen Südbrandenburgs im Jahr 2008. – research carried out on behalf of the Ministry for Rural Development, Environment and Consumer Protection.
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