

General description of the bathing water in non-technical language

Köthener See is a lake situated around 25km northwest of Lübben on the northern edge of the Spree Forest Biosphere Reserve. It is situated in an ice-age channel, the origin of which is in the channel formation of the Elster ice age and which was re-shaped in both subsequent ice ages. Köthener See naturally belongs to the catchment area of the River Spree. Due to the construction of the Dahme Flood Relief Canal, water from the Spree is fed into the lake and which then drains out again into the River Dahme. The Dahme Flood Relief Canal came into operation in 1911. On the one hand it protected the Spree Forest from flooding and on the other has made the Dahme more easily navigable. Köthener See also receives an inflow from the Wasserburger Spree via the Randgraben channel. The entire catchment area of Köthener See is 52km². 64% it is forest, 11% is arable land, and 14% is grassland.

The elongated basin has an east-west alignment and a surface area of 149ha. In the middle there is a large island. With an average depth of just 1.9m, the lake is very flat. It was not always this way: after the last ice age the lake had a depth of around 18m. Gradually the basin filled up with a layer of thick sediment. The deepest point today is just 5.2m. It is situated north of the island.

The northern shore of Köthener See is predominantly forested. Neuköthen is located here with its bungalow estate. Köthen is situated opposite, south of which is the "Heathland Lakes" Nature Protection Area. The silted up area on the eastern shore has numerous bays. Here, the Dahme Flood Relief Canal enters the lake and it is also designated as a nature protection area. On the eastern shore there is camping site.

Due to its shallow depth and its relatively large catchment area, Köthener See should naturally be a tendentially nutrient-rich lake. However, its current wealth of nutrients goes far beyond this natural amount. Although due to the renovation of the waste water treatment facilities in the catchment area its state has improved in recent years, it is still very nutrient rich. Water transparency levels during the summer mean value are only around 0.7m in open water. During periods where the wind is still, oxygen deficiency quickly occurs above the lake bed.

As with the Dahme Flood Relief Canal, Köthener See is a State Waterway, but can only be reached from the Dahme by smaller boats, as in Märkisch Buchholz the boats have to be lifted using two boat hoists. The lake is popular with water tourists due to the youth hostel in Köthen with its jetties and bathing area.

The "Jugendherberge Köthen" bathing area, 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. Often blue-green algae can be observed. People who are sensitive to the algae should refrain from bathing.

Text: Kerstin Wöbbbecke, enviteam office

Sources

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