

General description of the bathing water in non-technical language

Horstteich is a lake near Bornsdorf, situated around 8km south of Luckau on the ground moraine plateau of the Luckau-Calau Basin. Here in the early moraine area, which was untouched by the last ice age, there are hardly any lakes which were formed naturally, as in the late moraine areas in north Brandenburg.

The Horstteich gets its name from a fish pond which used to be in the same place. However, today's lake is a body of water left over from opencast lignite mining. It has its origins in the "Victoria Pit", from which lignite was extracted between 1917 and 1927, and is also named the "Alte Grube" ("Old Pit"), as opposed to the nearby "Neue Grube" ("New Pit"), which was exploited between 1947 and 1952. The extraction of lignite from the Victoria Pit continued to be tried until 1936, until the extraction of sump water was finally discontinued. By 1940 the pit had completely filled up with groundwater.

In 2000, Horstteich, which with a surface area of 8.6ha and an average depth of around 8m is actually a small lake rather than a pond, suddenly showed signs of drastic acidification. Acidic groundwater (pH 2.5) streamed into Horstteich from the area of a boggy lowland, which had initially been drained due to the Schlabendorf-Süd opencast mine. The acidification in Horstteich led to fish dying and to the desolation of the water vegetation. Decontamination was carried out by the LMBV in 2005/2006, whereby on the one hand the water flowing in was intercepted and diverted around Horstteich and on the other hand a neutralisation was carried out, in which 400t of sodium hydroxide solution and 55t of dolomitic lime were sprayed onto the lake.

The pH value is now back in the neutral or slightly alkaline range (pH 7.0 – 7.9) and the outlook is that this will be a permanent success. With water transparency levels which are over 2m during the entire bathing season, Horstteich is once again a popular bathing lake.

The fish population has also regenerated. Carp, tench, pike, zander, bass, and different species of white fish are now able to be caught again.

The "Bornsdorf" bathing area at Horstteich, 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.

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Sources

Helmut Donath, head of the Niederlausitzer Landrücken Nature Park
www.lmbv.de, decontamination report 2005