



Organisation der Vereinten Nationen für Bildung, Wissenschaft und Kultur



Harz - Braunschweiger Land - Ostfalen UNESCO Global Geopark

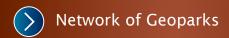
Landmark <mark>22</mark>

Ilsede Smelter













The Geopark Harz • Braunschweiger Land • Ostfalen was founded in 2002. The map above shows its present system of landmarks.

The Fissenberg hill is situated between Eddesse and Abbensen. Extensive heath was once formed here by grazing sheep, however, only idyllic remnants may still be found on the western side of the hill.

The Fissenberg is passed by an old highroad. It is known from written sources that all kinds of goods were transported along here by carriage before railways were constructed. This road was a straight connection between the towns of Celle and Peine which connected to Lüneburg and Hamburg and southward around the Harz Mountains towards Halle an der Saale and Frankfurt am Main.

Charming wayside treasure

You can hardly imagine the beauty of the area from the unpaved country road! You have to enter the narrow forest pathways in the former quarry to find yourself in kind of a mountainous wonderland. A strange world surprises



Historical photograph of a quarry in the Fissenberg hill

the hiker by steep cliffs with old trees on top and winding paths.

Basement of domestic architecture

For a long time, the Fissenberg was important for quarrying Wealden-facies sandstone which was brought to the surface by the salt-dome of Oedesse. Quarrying was done part-time as a complement to agriculture and ceased in the 1950ies.

Fissenberg stone is found in buildings everywhere around: in church towers of neighbouring villages, in the basement of numerous older houses, and even in the substructure of many of the country roads all over the region. Furthermore, the castle and its stables (the old "Reithaus") of Celle were built of Fissenberg stone.

Tar pits, saltwort, and rock salt Oil- and Salt Path Oelheim/Oedesse

So-called tar pits, places where oil was seeping to the surface, were known here at least since 1563. However, it was not before July, 21st, 1881 that oil at Oelheim reached public attention: The third well of Adolf M. Mohr became productive. This resulted in a pioneering spirit and some kind of gold-digging mood with disastrous consequences! Drilling rigs grew like mushrooms from the oil-prone ground, and each of them represented a public limited company of its own.

From blaze of glory to crash of stock markets

More sources of money were raised: Due to a public bath ("Waltersbad") which used the warm saltwater accompanying the oil, Oelheim's underground resources gained attraction and tourism started there. Busloads of people from Berlin went there for recreation. Oil was flowing like water as money did. Excessive speculation and a crash of the stock market terminated the era when the little village got into the focus of initial industrialization.



Unique nature preserve due to salt mining

Mining activities continued in Klein Oedesse since 1906 with the extraction of potassium salt which was needed for producing fertilizer. The shaft finally reached a depth of 905m and was connected underground to the ventilation shaft at Berkhöpen. Buildings made of sandstone with a characteristic hipped roof and a 60m-chimney formed the scenery. Mining became unprofitable and ceased at the end of 1925. The remaining galleries were suddenly flooded by groundwater on August 12th, 1936, and most, and most of the buildings were sold for demolition. The end of more than a century of mining history was finally marked by filling up and sealing the shaft in 2015. Nature reclaimed the area by forming a unique nature preserve with salt-loving plants around the remains of the spoil heap. Common plants that are otherwise extremely rare in Germany away from the North Sea are sea plantain, common glasswort and sea arrowgrass.

Pond at Meerdorf (dead ice-hole or "Soll") Reminding of Ice Age

During Quarternary glaciations the southern part of Lower Saxony was repeatedly buried by a thick cover of ice. A morphological relict of the glaciation is found at the side of the country road between Meerdorf and Rüper.

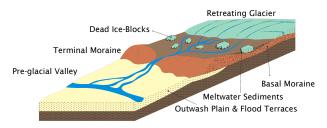
Glacial valley and histor(y)ies in gravel

Fragments of rock have been transported by dragging at the base of the glaciers and incorporation by the ice itself. They were finally deposited as basal and terminal moraines. A valley was carved out parallel to the ice margin by meltwater flowing towards the North Sea.

During the retreat of the glaciers large blocks of ice remained in place due to their rapid disintegration along preformed crevasses (dead ice).

From a dead ice-hole to a lively pond

The dead ice was surrounded and frequently even totally em-



Schematic drawing of a retreating ice body

bedded by meltwater-transported sand and gravel. Therefore it remained for a long time under a protective cover and melted away slowly, sometimes still when sedimentation had ceased.

When the dead ice had thawed away finally, distinct depressions remained at the surface. Such dead ice-holes are frequently circular and popularly called "Sölle" (singular "soll"). Typically they are filled by water and form characteristic ponds since they are sealed at the base by fine grained sediments.

Weichselian ice did not reach this far south, so the present pond most probably is a witness of the Saalian glaciation.

Nature has become strange to many people. We would like to counteract this and show the fascination, richness in potential experience and worth of protection even to younger children.

Fascination forest - Experience of environmental education The "Zweidorfer Holz" is a large patch of forest between the villages of Meerdorf, Wendeburg and Sophiental, A forest of over 25,000 m² of beech, oak and alder was available here for setting up a forest experience path in 2002 which is designed for experiencing natural environment, ecology, and social life. There is a special cooperation with the forestry office in Wolfenbüttel and a secondary school in Wendeburg (Aueschule).

Certainly phenomenal: 22 places for experience

These places are equipped with a funny logo-owl explaining phenomena of the forest, such as records of the animal king-





Class of school children in front of a tree house

dom, the forest itself and its changes, growth and sounds of wood. etc. .

We invite you for a funny and exciting time in the forest. Enjoy the forest: try the comfortable forest bed, descend underground in the forest, climb to the top of trees. Swing like Tarzan through the forest, travel through time, quess the voice of animals... The path offers countless possibilities for observing, reflecting, hearing, feeling and relaxing.

The path can only be reached by hiking or biking from three starting points: 1. behind the campground "Paradiessee" at Meerdorf, 2. at the edge of Sophiental, and 3. at the windmill in Zweidorf ("Zweidorfer Mühle"). For passing the 2.100 m to the forest by foot you will need about half an hour time.

"Experiencing forest in the region of Peine" - www.wald-erlebnis-pfad.de will provide you detailed information on the path itself, on the "Green Classroom" in the forest at Meerdorf, on guided tours (e.g. for school classes), on project-days, and on booking birthday parties in the forest for children.

Contact: Manfred Bonse, Tel.: 0176/92207285

A system of defensive dikes and ditches ("Landwehr") which is known as "Dreiherriger Grenzgraben" can still be recognized in the forest of the "Woltorfer Holz". Excavations by Thomas Budde in connection to recent improvements of county road 71 during the winter of 2015/16 added much to the knowledge of the structure.

Impressive wall, protected by spines

The fortification of the "Dreiherriger Grenzgraben" was 26 m wide and consisted of three ditches, two prominent inner walls and an additional subordinate wall on both sides. The slope of the 2.75 - 3.60 m deep ditch was steep. At least the northern ditch was additionally provided with a palisade composed of pointed stakes. The typical popular field name "Hinter den Dornen" (=behind the spines) for the area may indicate protective hedges on the walls and in the forefront. A former gap in the structure has been proven at the western side of the present



Defensive dike in the "Woltorfer Holz"

county road. It carried an old road covered by stone and bricks which crossed the northern ditch. A wooden construction has been discovered which should have prevented wall material from sliding into the gap.

How old is the construction?

Did a gap in the fortification exist in medieval times? Definitely not in the area of the excavations! The age of a wrought-iron axe which has been discovered in the lower part of the slope of the northern ditch is Late Middle Age. It was most probably left behind during construction and more precisely dated by Hans Tewes-Schadwinkel (11th to mid 13th century). The territories separated by the fortification were formed in 1235 and 1269, respectively, by the separation of the authorities of Brunswick and Lüneburg. In connection with the historic dates and the results of the excavations at the motte "Lumpenburg" which is situated 1.5km to the east, a construction of the defensive dike system in the 13th century is most probable.

Text by Thomas Budde



The Eco-Garden in Peine has been recognized as external student lab for education and sustainable development by the Ministry for Culture of Lower Saxony.

Environmental education meets encouragement of social competence

These are the most important goals which are followed here by people of all ages and from all levels of education. The motto: Communicate knowledge with fun, enjoy nature and animals peacefully

The goal is reached to a great extent by multifold projects in the garden and with specially trained animals. Threatened races of domestic animals may be experienced by using all senses: watching sheep shearing, colouring and processing wool, enjoying cute baby animals, learning about bees, mixing own tea, learning about herbs and medical plants





Exploring life in a pond

and their use... Have a look vourself!

The following projects and activities are offered here:

- · Project-weeks and -days for schools and preschools
- · Guided tours with direct contact to animals
- · Monthly open days on Sunday's focusing on different aspects
- · Public talks on medicine, molecular and microbiology
- · Advanced training on botanical and zoological subjects
- · Children birthday events and vacation programmes
- · Sale of own garden produce (wool, honey, tea...)

Competence of the institution is recognized by awards in different fields of education and cooperation with universities, research institutions, zoos as well as regional and supraregional working groups and federations. The importance of regional and worldwide biodiversity is shown by taking part in international programmes for breeding and regional monitoring.



365 Days of Culture - an Exciting Tour of the History of Peine

County Museum Peine - Museum for **Everyday Culture**

About 14.000 visitors annually are seeking information here on precious testimonials of history. There are special exhibitions offered on special issues of cultural history and contemporaneous art.

Living in Peine - today and in historical times!

The centerpiece: Showing everyday life of men and women on three floors and 1.000 m². Absolute highlight: the last chemist's shop of Peine, the old shop of Stederdorf ("Konsum"), some toy shops, fashion of the 1950ies, and the "Stahl::Zeit" ("steel-age"). The industrialization changed a dreamy rural city into a pulsating city of steel production. Iron ore mining in the area, the Ilsede smelter and the Peine roller mill which produced the famous "Peine Cantilever" ("Peiner Träger") are also featured in the exhibition.



Steel sculpture of Hans-Jürgen Breuste

Historical anecdotes and contemporary witnesses

Expect unique materials on the history of the city and its churches, including a section on Jews in Peine and their synagogue. Remarkably: a find of silver bars unique for Lower Saxony and the coin hoard of Mödesse, both from the 12th century.

Museum educates!

The museum is an interesting place for learning and education. They do guided tours for 80 school classes and 50 other groups annually. There is an old classroom where teacher Miss Künnemann is giving on request lectures in the style of 100 years ago (also for adults). Especially welcome are children for about 180 birthday parties creatively led as cheerful adventures by the museum educationist. The subject can be chosen from 15 different settings: knights & damsel of a castle, fashion, shoemaking, archaeological excavation, detective, pirates, puppet theatre, tiger-stories, murder in the museum (also offered for adults) and more...





8 Bastion, Drawbridge and Casemate Fortification of the Peine-Castle

If we go west from the market square in Peine towards the castle park ("Burgpark", finally completed in May 2000) we reach the restored parts of the historical fortification: casemate, bridge arch and ditch of the former castle. They were uncovered during reconfiguration of the Amtmann-Ziegler-Garden.

Yes, Peine once had a castle

The 6.000 m² of the Burgpark invite a relaxing walk on its pathways. There are many possibilities for interested visitors to inform themselves on display boards about the history of the castle, its fortification and excavation.

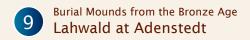
The Amtmann-Ziegler-Garden of the 1970ies at the edge of the castle hill in Peine has been studied by archaeological excavations in 1998. They uncovered the remains of buildings and walls of the post-medieval fortification.





Fate of the castle: built, destroyed, rebuilt

The castle was mentioned for the first time in 1193, however, it has been repeatedly altered or rebuilt after destruction by acts of war. The present accessible fortification goes back to a reconstruction after demolition due to Thirty Year's War destruction. This was done in 1659/60 by the order of the prince-bishop of Hildesheim. The formerly circular castle hill received a quadrangular outline with hook-like bastions at the corners which overtopped the castle's yard by several meters. The ditch became 15-20m wide. Parts of the casemates which were designed for protecting the drawbridge are situated out of the Burgpark beneath the residential house of the wine store Euling, the so-called "Zehnerhaus" from 1847. The Burgpark with the plateau of the corner-bastion allows visitors a nice view of the excavations and the old town of Peine.



One of the few groups of burial mounds on loess-covered areas in Lower Saxony is situated in the Lahwald forest at Adenstedt. They are preserved only in those areas which have been used for forestry since medieval times.

Rare in Lower Saxony: Grouped burial mounds

Originally there were about 80 burial mounds in the Lahwald forest. First excavations were made between 1929 and 1933 by teacher Schaper from Wipshausen who uncovered urns of the late Bronze Age and the early Iron Age. 30 more mounds have been excavated 1951-1955 by Dr. Rudolph Dehnke and Dr. Gernot Jacob-Friesen in expectation of the development of a large-scale gravel pit. Most of the existing 30 pots from that campaign are urns from the recent Bronze Age still carrying cover-plates.

A unique archaeological monument

The oldest graves known here date back to the middle part

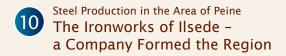


Burial mounds of Adenstedt

of the Bronze Age. Two burials of tree-coffins central to large mounds have been found in studied mounds. When a building area was developed east of the Lahwald forest in the 1990ies, burials of urns from the pre-Roman Iron Age were uncovered. This is evidence for a larger area which was for a long time continuously used for burials.

The burial mounds today form an impressive archaeological monument in the impressive Lahwald forest. A panel with explanations has been set up opposite to a pub called "Odinshain" which can be reached via a street which is called "Im Hügelfeld". Finds are on display in the local museum ("Heimatstube") of Adenstedt, Große Str. 68, which is open on the 3rd Sunday each month or on appointment.

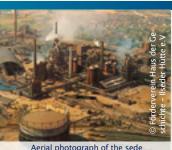
Contact: Hans-J. Wolff, Tel.: 05172/13811

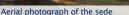


How would the area of Peine apear without steel production? How would the region have developed without the Ilsede Smelter?

Steel = Peine = Steel

Steel has formed us and made the town and county of Peine what they are today. The public limited company of the Ilsede Smelter ("Aktiengesellschaft der Ilseder Hütte") was founded in September, 6, 1858. It received permission to make use of iron ore from the opencast pit of Bülten-Adenstedt for smelting and trade. In 1860 the first blast furnace was fired. The young enterprise flourished in spite of unfavourable conditions for transporting the coal which was needed for the furnaces. Much effort was put into the transport of the raw iron to the railway in Peine where it was loaded for distant markets, such as e.g. Westphalia.







Transformer station and water tower

New horizons for the largest waste land of industrial origin in Lower Saxony

The ironworks at Peine survived the 2nd World War intact and continued to expand afterwards until an economic crisis started at the end of the 1960ies. The company therefore merged with the Salzgitter AG in 1970. Iron ore mining in the region finally ceased in 1977 and the furnaces fell out of use in 1983. The last remaining activities of the respective industrial complex at Peine came to an end in 1995 (among others coke and power production). Since then the largest waste land of industrial origin in Lower Saxony has been remediated by the "Planungsverband Gewerbepark Ilseder Hütte" (Development Union for Business Park Ilsede Smelter).

Few buildings of the former industrial complex remain: The blower house which is now used as a centre for cultural activities, the monument-protected spherical water tower, and the transformer station.

The association "House of History - Ilsede Smelter" has set up an exhibition about development and mode of operation of iron production in a large industrial complex.

If you leave the public swimming pool towards the forest in the east, you will suddenly find yourself in front of a rocky headwall, the quarry.

The Bolzberg at Gadenstedt

The limestone of the Bolzberg formed in Mesozoic times, an era comprising Triassic, Jurassic and Cretaceous. Here at the eastern flank of the salt dome of Groß Ilsede, Lower Muschelkalk of Triassic age is cropping out at the surface with an inclination of 70° towards southeast.

The limestone gained economic importance by making use of its 10m thick layers. They were quarried into cubes and ashlars suitable for the construction of houses. Silent witness of the time of quarrying is the 12th century tower of the St. Andreas Church, peculiarly characterized by coarse blocks which lead to a castle-like appearance of the structure. An irregular appearance is formed by the different size of individual blocks.



Plants and rock - perfect neighbours

More buildings constructed of limestone from the Bolzberg can still be found on the manor: the manor house itself and the barn in the Meier Street which is a wooden lattice construction filled in between by naked blocks of limestone. There are panels explaining two spots of geological interest at the western edge of the forest and south of the quarry, respectively. The chemical composition of the weathered limestone led to the establishment of a specialized community of plants. Before greening of the trees in springtime large "islands" of pink holewort, white wood anemone, yellow celandine and blue early dog-violet start blooming. Even more specialized plants should be mentioned, such as baneberry, ploughman's spikenard, jack-in-the-pulpit, and honeysuckle. A visit to the area is worthwhile all year round!

E-Mail: heimatgruppe-gadenstedt@t-online.de

Exhibition "ZeitRäume" Bodenstedt -Borough of Vechelde

The exhibition "ZeitRäume" can be found in the main building (constructed in 1878) of a three-sided farm building ("Drei-Seiten-Hof") in Bodenstedt, Borough of Vechelde. It was used as a pub with ballroom and skittle alley until 1934.

Changing history, vividly presented

The rooms are fully equipped with furniture and installations showing different styles of decoration which allow for insight into the conditions of life for normal people. Accordingly, the cultural and political developments from Wilhelminian time to about 1960 are communicated on steles especially designed for multimedia information by text and photos, sometimes also video screens and speakers. Some of the rooms have film projectors and all-around speakers in addition.





The dance hall is well known nationwide. There lived forced laborers during the war. Same accomodation were used for refugees in time after war.

LIVE experience of history

School classes may use the "ZeitRäume" as a place for a close-encounter education. A seminar room and a café in the former horse stable ("Hofcafé Pferdestall") offer a chance for groups of visitors to immerse themselves into their impressions.

Connection to Lengede: The Brunswick branch of the pilgrim's route Camino de Santiago leads through Vechelde and Bodenstedt and continues to Lengede.



Permanent exhibition in the town hall of Lengede: Geology, Fossils, Ice Age, Mining History and Mining Accidents

Memorial Place "Area of the Old Shaft"

The borough of Lengede is marked by its history of mining which started in 1872 with the purchase of the claim "Sophienglück" by the Ilsede Smelter.

86 million years before present...

...during the Santonian (Upper Cretaceous) the limonitic debris deposit of Lengede-Broistedt formed in a marine environment. The average iron concentration of the raw ore was about 27%.

Animals from the time of deposition have been found as fossils during extraction of the ore. There is a permanent exhibition in the town hall illustrating geology, fossils, ice age finds, mining history and mining accidents which is open to the public during regular opening times.





For booking guided tours contact the administration (Tel.: 05344/89-0 or info@lengede.de).

The "wonder of Lengede"

The iron ore was initially extracted in opencast pits. Mining was relocated underground starting with sinking of the shafts Anna (1912-1915) and Mathilde (1918-1921).

A severe mining accident happened in 1963. The successful rescue of 11 miners two weeks after flooding of the mine by the accident went into history as "Miracle of Lengede". However, 29 miners lost their lives.

Another mining accident happened in 1968 with 12 miners dying in an explosion. Both accidents are remembered at a memorial place. The economically mineable reserves of the deposit came to an end in 1977 and mining ceased. In total, 105 years of mining yielded 55.7 million tons of iron ore.

Ropeway Hill, Opencast Mines and Settling Ponds in Lengede

The ropeway hill (Seilbahnberg) is a symbol of Lengede and a reminder of 105 years of mining history. At 157m above mean sea level and 93m above ground, it represents the most prominent elevation in the county of Lengede. .

Naming a hill

When opencast mining started, the overburden of the iron ore had to go somewhere. In the beginning it was used for filling those parts of the pits where the ore had already been extracted. The available space turned out to be no longer sufficient in 1918. Therefore, a ropeway was constructed which was used for dumping the material and forming a hill. The ropeway ("Seilbahn") consequently gave its name to the hill ("Seilbahnberg").

Starting with 1927 there was again enough space for dumping the waste material. The ropeway was deconstructed and the slopes of the remaining hill were planted for stabilization.







Lake in a former opencast pit

Artificial nearby recreation with additional benefit

The hill today is surrounded by a mining park with children's playground, fitness path, and equipment for disc-golf. At fixed times, a children's railway is taking care of fun. The viewpoint on top of the hill provides a wonderful panoramic view in all directions, even towards the Brocken in the distant Harz Mountains

Furthermore there are remnants of opencast pits, settling ponds and some buildings on the area of the former mine. The pits and ponds today are declared as nature protection areas. The Brunswick branch of the pilgrim's route Camino de Santiago passes by the mining park, the ponds and pits towards the old village of Lengede and continues to Woltwiesche

Compilation: Christine Sehle



The "Servicestelle Kultur" provides information and advice on the cultural scene in the area of Peine, on financial support for culture, on advanced learning, and on many other issues.



Servicestelle Kultur Landkreis Peine Burgstr.1 31224 Peine

Tel.: 05171 - 401 2148

E-Mail: kultur@landkreis-peine.de www.kultur-peinerland.de

More detailed information on the Geopark can be received at the Tourist-Info Peiner Land which also informs about possibilities for exciting short trips, varied routes for cycling and possibilities for accomodation in the district of Peine.



Tourist-Info Peiner Land wito ambh

llseder Hütte 10 31241 Ilsede Tel. 05172 - 949 2610 E-Mail: mail@wito-gmbh.de

www.tourismus-peine.de

Opening Hours: Monday to Thursday 9 a.m. to 4 p.m. Friday 9-12 a.m.





The Geopark Information Center "Kreismuseum Peine" provides further information and flyers on the Geopark Harz. Braunschweiger Land. Ostfalen.

The museum for everyday life shows a large number of displays ranging from Stone Age to the 1950ies. There are different special exhibitions and events on a regular base.

Geopark Infozentrum: Kreismuseum Peine Museum für Alltagskultur Stederdorferstr.17 31224 Peine

Tel.: 05171 - 401 3408

Email: kreismuseum@landkreis-peine.de

www.kreismuseum-peine.de

Opening Hours: Tuesday to Sunday 11a.m. to 5p.m.

Entrance free!

Authors:

Editor: Geopark-Trägerverein Braunschweiger Land-Ostfalen e.V.

Niedernhof 6, 38154 Königslutter am Elm Tel.: 05353-3003, E-Mail: info@geop<u>ark-hblo.de</u>

www.geopark-hblo.de

Dr. Ulrika Evers, Dr. Ralf Holländer, Cord Helmke,

Werner Cleve, Britta Schwartz-Landeck, Joachim Hansmann, Manfred Bonse, Betina Gube, Thomas Budde, Hans-J. Wolff

Compilation: Anna-Lisa Bister. Dr. Ralf Holländer. Dr. Henning Zellmer.

Sina Riedel

Translation: Volker Wilde, Alan Lord Layout: Frank Gießelmann