

Selected overnight accommodations



Hotel „Katharina“
Sangerhausen
www.hotelkatharina.de
☎ +49(0)3464-24290



Hotel „Am Rosarium“
Sangerhausen
Finkenstraße 24
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GEO PARK[®] Harz . Braunschweiger Land . Ostfalen

The Geopark Harz.Braunschweiger Land.Ostfalen was founded in 2002. The Regionalverband Harz incorporated society is responsible for the part area Harz. The association FEMO based in Königslutter is responsible for the adjacent northern region. In the map you can see the position of the Landmarks. Other brochures like this can help you planning your next visit in the Nature and Geopark Harz.

★ European Geoparks ★



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Spengler-Museum, Thomae, Ziebell

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Embedded in the deep breakthrough valley of the Nasse set in a unique landscape we can find the site Questenberg, marked by the Queste.

The so-called Queste is a sun symbol erected on top of the Questenberg. The saga says that the daughter of the castle lord lost her way when picking flowers in the forest. Inhabitants of



Alabaster balls

the surrounding villages searched the child for the worried parents. The child was finally found on the grassland near Rotha at the third day of Pentecost sitting there with a crest, which had two tassels. The castle lord gave an opulent reward to the inhabitants. Since that day the green Queste has been set up on the 3 day of Pentecost every year. The so-called Questenfest takes some days and has been celebrated since centuries. Gypsum with alabaster balls is outcropping at the rock face at the eastern slope of the Questenberg. Alabaster balls are formed out of calcium sulfate, gathered at single places within the mother rocks before hardening and then later indurated forming the so-called alabaster balls. If you go on the road coming from Hainrode you will have the best sight on it. The glacial pans at the bottom of the Questenberg northern of the village are also interesting. A showboard right at the place explains the geology to visitors. Remarkable geology can also be found at the breakthrough of the Nasse through the Wippra Zone, about 1 kilometre above the Questenberg. Slates of the Palaeozoic (Ordovician and Silurian) form impressive rock faces. Starting your walk in Questenberg you can reach this area in a 15 minutes walk.

Not far away from the village on the Schlossberg the ruin of



The "Queste"

the Questenburg is dated back to 13th century. It was occupied by military during the 30 year war (1618 - 1648). Rocks of the surrounding area formed the construction material for it. Among these you can find Zechstein limestone, slates, bunter and anhydrite. The wooden Roland, a symbol of the village, and the neck iron at the outer wall of the church are symbols of lower jurisdiction.

Heimkehle near Uftrungen

Today's border between the federal states Thuringia and Saxony-Anhalt is in the area of the Alte Stolberg marked by one of the largest karst caves in Germany, the Heimkehle. The visitor's entrance of the Heimkehle is western to the road between Rottleberode and Berga in Saxony-Anhalt (N51°29.833'; E010°57.283'). Visitors can see 750 m of the cave with a total size of about 2 km. The way around leads to corridors and halls among them the Große Dom, 22 m high. The Heimkehle was first mentioned in a border document, dated back to 1735, first attempts for opening up were made in 20th century. During World War II a production plant of the Junkers Werke was installed and the Heimkehle became an external camp of the concentration camp Mittelbau-Dora (Landmark [7](#)). Artificial accesses were destroyed by blasting in 1946. Opening for visitors was not before 1954. The large Heimkehle owes its formation the meeting and rock solution force of the small rivers Thyra with the Krebsbach and the Krummschlachtbach.



Opening hours:

November – April Tuesday – Sunday 10.00 am – 4.00 pm
May – October Tuesday – Sunday 10.00 am – 5.00 pm
 ☎ +49(0)34653-305

The Krebsbachwand near Rottleberode

South west of Rottleberode the Alte Stolberg peaks the Aue from the Thyra and the Krebsbach with an area level up to 100 m high. The Krebsbachwand is a significant part of the soluble wall of the Alte Stolberg marked by gypsum quarrying. In that area of the wall the gypsuming rate of the anhydrite was higher than the solution rate of gypsum, thus forming a 10 – 30 m



Krebsbachwand

strong gypsum crust at the surface over the lower laying anhydrite till the beginning of gypsum quarrying. This gypsum crust was exploited between 1950 and 1990. However, the precipice of the Krebsbachwand remained. Recultivation measures of the company Knauf bound the Krebsbachwand into the surrounding karst landscape aiming to rebuild stable forests. However, a big part of poor rock area, keeping visibly the geologic ground, forms a biotope for rare species. Due to ongoing surface mining operations in border areas of the Krebsbachwand the exposures are unfortunately not accessible.

At the Geopoint visitors can find the most typical rock types of the deposit. You can reach the Geopoint from the lake Schlossteich in Rottleberode, driving through the Schlossstraße. Passing the cemetery you will find the Geopoint directly at the right roadside.

Neue Morungsburg

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The ruins of the two fortresses Alt and Neu Morungen are not far away from Morungen. Alt Morungen was given up after erecting Neu Morungen around 1200. We can find bunter, Zechstein limestone and slates of the surrounding area in the walls of the fortresses. The region around Morungen can offer many various geologic multiforms. Beside the Wippra Zone stretching northern along the site with its metamorphic rocks we can also see conglomerates, catching the eye with a significant red. Close to the Wippra Zone an ore vein goes along the area with barite and yellow copper ore. We can easily see that ore vein in an exposure below the Neue Morungsburg close to the forest way in the valley northern the valley border (N51°31.136';E011°13.744').



Open air museum

Königspfalz Tilleda

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The Königspfalz set on the hill Pfingstberg is close to the northern slope of the Kyffhäuser mountains. Erected in 972 the Kyffhäuser was a wedding present from emperor OTTO II (955 – 983) for his Byzantine wife THEOPHANO (about 955 – 991). Tilleda belonged to the most famous palatinates of the empire till the late medieval times. Fundaments and parts of the buildings were exposed and partly reconstructed by substantial excavations. Today the whole facility forms a unique open air museum showing an insight into people's life in the medieval time. The constructions are built from sandstone and dolomite, which were quarried in the surrounding area. Millstone was broken not far away from Tilleda in Thuringia. Witnesses can be seen along the 4.5 km stretching walking way "Auf den Spuren der Mühlsteine" (On the trails of millstones) starting at the Streuobstzentrum in Tilleda.



Opening hours: April to October 10.00 am–6.00 pm
November & March 10.00 am–4.00 pm

Guided tours on request: ☎ +49(0)34651-2923

Reservoir Helme

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At the end of Kelbra towards Sondershausen there is the Helmestausee, over 600 hectares in size. Parts of the reservoir (emptied in winter) is Ramsar wetland of international importance and European bird protection area. More than 20,000 cranes regularly roost here in autumn. Beginning at the parking place we follow our way towards west to the Numburg through the riparial wood. Not far behind the Numburg, close to the shore line a salt spring comes to the surface, eluviating embedded rocksalt and potassiferous salt layers of the Zechstein and smelling like sulphur. Beside it you can find the ruins of a small quarry with bunter.

Sangerhausen with Spengler Museum

In the Spengler Museum you can adventure 6000 years of human settlement in the region of Sangerhausen. About 2000 exhibits are shown in six different sections (geology, nature study, palaeontology, prehistory, town history,

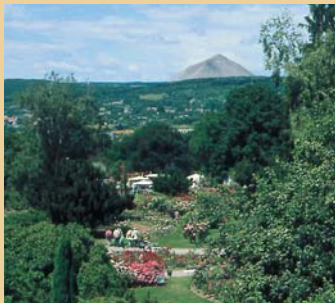


Mammoth skeleton in the Spengler Museum

mining). The biggest attraction is the complete skeleton of the old mammoth. The first parts of the animal were discovered in the ice-aged layers of the gravel pit near Edersleben in September 1930. The local researcher ADOLF SPENGLER (1869 – 1961) saved the skeleton in the years 1932 and 1933. Spengler's home in the old town of Sangerhausen was opened as an external museum in 2001. Walking from the museum you can reach it by foot in about 15 minutes.

The museum's administration offers guided tours and project days as special programmes.

Sangerhausen is mentioned in a document from the 10th century. Around 1249 Sangerhausen got the town right and thus the permission to erect a town wall. The old town with its widely renovated buildings is worth visiting. The church St. Ulrici is dated back to the first half of the 12th century showing a treasure of Romanesque architecture. The gothic church St. Jacobi is also lovely to see with its rich interior design and decoration. Sangerhausen's history has been connected with the Saxonian dynasty of the Wettiner since 1246. In 1815 Sangerhausen became Prussian and developed to an important industrial area within the second half of 19th century. Town development has been formed by copper ore mining and metallurgy since 14th century.



View from the Rosarium to the Point cone mine dump

The remarkable Rosarium, built in 1903, shows the most famous rose collection of the world.

Opening hours of the Spengler Museum:

Tuesday to Sunday 1.00 pm – 5.00 pm

(Spengler's home in the Hospitalstraße 56 only Sundays 1.00 pm – 5.00 pm).

Further information: ☎ +49(0)3464-573048



Landmark 12

Point Cone Mine Dump Hohe Linde



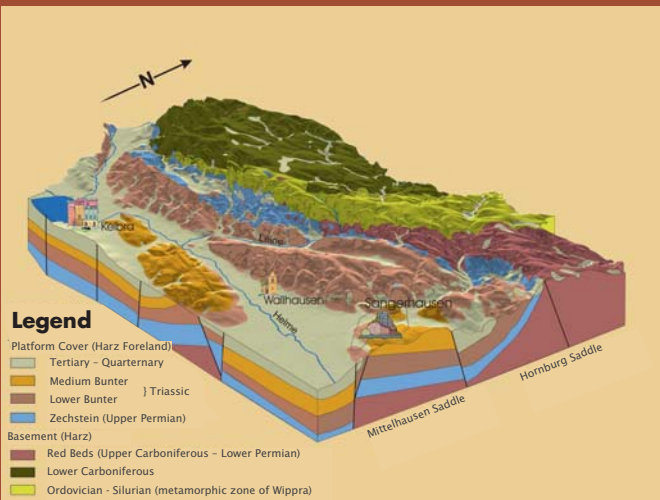
Geology of the area

Between Sangerhausen and Wallhausen there is the lowland of the river Helme. Most of the clays, silts, sands and gravel are up to 2 million years old and more than 590 m in depth, with which the Helme filled its lowland in the Pleistocene.

They form together with the rocks of the Tertiary the unconsolidated sediment level. The 250 million years old clay, silt and sandstones of the Triassic are deposited in the subjacent table mountains (platform cover). Limestone, anhydrite and salt rocks of the Zechstein belong to the sediments of the platform cover, too.

Due to tectonic processes about 80 – 50 million years ago the original flat deposits sediments changed their position. Today rock formations of different aged rocks from different sedimentation areas are laying beside and proving vertical movements, stretching partly several hundred metres. These tectonically caused fracturing is called "Saxonian fault block tectonics".

Soluble processes caused by water begin as soon as the rocks of the Zechstein come near the surface due to their chemical contents. The process is known as karstification. This anhydrite karst can be found in the whole southern Harz showing romantic caves, bizarre morphologic shapes and a rare flora seen along the karst walking paths. The roughly consolidated gravel (conglomerates) and the red sandstone of the red beds are older than the chemical sediments of the Zechstein. These are erosion results of the old Variscan mountain building. They come to the surface in the area of the Hornburg Sattel (anticline). The Basement with the rocks of the Wippra Zone begins in the north. Caused by metamorphosis (rock changing) during the formation of the Variscan mountain building 350 – 330 million years ago argillite and clay slates were formed out of clay and sandy sea deposits of the Ordovician and Silurian. To the west, sediments of the Lower Carboniferous follow.



Point Cone Mine Dump Hohe Linde

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This mine dump can be seen far across the landscape thus forming the name of landmark 12. The artificial hill north of Sangerhausen is a visible monument of mining history, especially copper mining closed down in 1990.

The basis for 1000 years of mining in the area of Sangerhausen was a rock layer about 30 cm in size – the copper ore/copper shale.

Mining in that area was first mentioned on 25 January 1006 in the deed of donation of the emperor Heinrich II (died in 1024).

Mainly gold and silver composed in a rare volume in the ore beside other metals were mined. A copper mine was first mentioned near Sangerhausen in 1388. The technological development of mining can be seen impressively in the size and composition of mine dumps and reaches from small family mine dumps from the very beginning of mining to huge point cone mine dumps from the recent past. In 1944 a new mine was sunk in a depth of 52 m below surface north of Sangerhausen. After the standstill during the war work could be continued and in 1947 the sink work could start again. Till 1953 the depth reached 686 m.

The first large copper mine in the mining area of Sangerhausen received the name of Thomas Müntzer. Thomas Müntzer had in his retinue not only farmers but also miners. Production in the Thomas Müntzer mine came to a standstill in 1990.

About 20 million tons of deadrock are deposited in the Hohe Linde forming a nearly 150 m high dump.



The Wippra zone stretches in one line along north-eastern direction from Breitungten via the Kohlestraße (coal street) to Gorenzen consisting of metamorphic rocks. Driving along the street from Grillenberg to Wippra we cross the Kohlestraße. Its name dates back to the time then charcoal was transported out of the forest to the metallurgical works.



In the quarry

Right at the crossing is a car park. Walking from there we reach the former quarry in 5 minutes (N51°33.153', E 011°18.144').

Greenschist can be found in the quarry. It was already excavated before 1945. An Eisleben based company began to quarry the rocks in 1951 again thus enlarging the outcrop area by about 50%. Different rocks for street construction were won.

In 1960 the quarry was shut down. We pass a geodetic point on our way to the quarry. That is one out of five points set at different places in the Harz in the 1960's for watching the potential Harz-raising effect.



Grillenburg

The ruins of the Grillenburg can be found above the site Grillenberg (N51°32.067'; E011°18.870'). We follow the signs of the walking path starting at a small parking place at the bottom of the Schloßberge on the site. The fortress was mainly erected using conglomerates and sandstones of the red beds - the rocks of the surrounding area. Remarkable is the use of bricks as construction material for the superstructure.



Ruins of the masonry

In 1217 the Grollenberch was first mentioned in a document. Partly inhabited in 1483, the fortress was a ruin 100 years later. The village is a lot older and is mentioned in the so-called Hersfelder Zehntregister at the end of 9th century. We can find other witnesses of the past in the area of Grillenberg, for example the deserted medieval village Wüstung Hohenrode. Excavations have already been made there since 1930's.

Mining museum Röhrigschacht Wettelrode

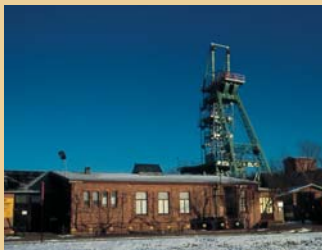
4

The museum in Wettelrode is embedded in the historic mining landscape of the south-eastern Harz foreland. Copper mining history in the region – once the largest copper ore mining area in Europe – can clearly be seen here.

The museum above surface informs about the formation of the deposit, geology and mineralogy as well as mining.

The marking landmark can be seen far across the country – the steel made winding apparatus. It is one of the oldest remaining mine hoists of Europe. In the area of the mine dump an exhibition about mine hoisting technology and machinery can be visited, among it a rack railway only used in copper mining below surface. A small exhibition informs visitors about the Biosphere Reserve Karst Landscape South Harz. The mining museum was opened in 1991. As miners would say we can go down 283 m deep into the earth with an original winding apparatus.

Then the mine train takes you 1000 m to a mining area of the 19th century. Exhibits from the very beginning till the modern times show the development of the mining techniques and are also explained and demonstrated there. The trip below surface for up to 31 people takes 75 minutes. Special guided tours can be booked half a day or as a day trip in the museum. The way to the museum is easy to find. An interesting mining trail begins at the mining museum leading through the old mining area of a length of 4 km. The two ways witness copper mining from 14th to 19th century among it geologic outcrops, water facilities, costeaning ditches, mine dumps and a ventilation oven. The mining trail passes the lake Kunstteich built in 1728 and used for mining purposes till 1880. Here we can have a romantic rest in the Waldcafe at the Kunstteich. If the sun is shining the self-baked cake is also served at the terrace. Guided tours can be booked on request at the mining museum Wettelrode.



Mining museum Wettelrode



Entrance of the gallery

Opening hours:

June – August Tuesday – Sunday 9.30 am – 5.00 pm
September – May Wednesday – Sunday 9.30 am – 5.00 pm
man-ridings 10.00 am, 11.15 am, 12.30 pm,
1.45 pm, 3.00 pm

+49(0)3464-587816

www.roehrigschacht.de

The Schlösschenkopf raises between Sangerhausen and Lengfeld, crowned by the Moltkewarte – a look out built in 1903 at its highest point (N 51°29.573', E011°16.245'). Following the signs you can easily find the walking path from Lengfeld to the Moltkewarte.

Roestone was mainly used as construction material. It was exploited from several small quarries in the surrounding area of the Moltkewarte. Near these sites we can often see houses, churches and walls built with Roestone. This lime comes from the lower bunter. About 240 million years ago this area was covered by a plane, warm, oversalted sea. Very small sandy lime pearls (so-called *ooides*) were formed in the moving water looking like roe and therefore called like that.



Moltkewarte



Roestone

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Karst walking path

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The map helps you planning your own geological tour around the Point Cone Mine Dump Hohe Linde. Guided tours on request: Biosphere Reserve Karst Landscape South Harz

+49(0)34651-298890 www.bioreskarstsuedharz.de



The Regionalverband Harz e. V. wishes you a pleasant stay and interesting insights into the geology and history of the shown parts of the Nature and Geopark Harz.

Karst

Karst walking path South Harz

The karst walking path was built in 1982 and opens up the mountain range of the anhydrite karst with its geologic features. Some of the geologic points are set right at the Karst walking path. Stretching along 200 km the walking path connects the karst landscape of the south Harz across the borders of the federal states Saxony Anhalt, Thuringia and Lower Saxony. This path follows mostly historic ways and is marked in the Landmark 12 white – red – white. Showboards give more information on karst features at certain points. Numerous trails show witnesses of historic mining, mainly copper mining, the bed of which (Flöz) goes from Pölsfeld in the east to Ilfeld in the west. The villages along the karst walking path have kept their typical unique feature and fit harmonic into the surroundings. The village Hainrode was even awarded with the silver medal in the federal competition “Our village shall be nicer” in 2004.

www.karstwanderweg.de



Dinsterbachschwinde near Questenberg

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About one kilometre east of Questenberg not far away from the road to Hainrode lays the Dinsterbachschwinde as the biggest swallow hole in the area of the karst walking path. It is the place where the creek Dinsterbach continues its way below the surface. At this place you will find an information board. Walking along the grassland we reach the next board after five minutes which informs about the swallow hole right at its place. A further swallow hole, the Ankenbergschwinde, is at the bottom of the Ankenberg between Hainrode and Großleinungen.



Dinsterbachschwinde

Bauerngraben

7

West of Questenberg we find the Bauerngraben, a sink in the valley of the Glasebach, which disappears at this place in a swallow hole of a small river under a steep high karst mountain range. The sink itself fills from time to time with water and then often forms a lake – at other times it gets very dry again. The car park at the road from Roßla to Agnesdorf is a favourable start for a walk to the Bauerngraben. You can follow the signs and showboards explaining the geological background.



Bauerngraben