

DISCOVER THE UNESCO WORLD HERITAGE IN THE HARZ

WORLD HERITAGE GUIDE

English



Organisation • Bergwerk Rammelsberg, der Vereinten Nationen • Altstadt von Goslar und für Bildung, Wissenschaft • Oberharzer Wasserwirtschaft



The **UNESCO** World Heritage in the Harz at a glance

MUSEUMS, LOCATIONS AND ARCHAEOLOGICAL LANDSCAPE FEATURES

- World Heritage Information Centre Walkenried
- Rammelsberg Mine
- Historic Town of Goslar
- 3 Imperial Palace (Kaiserpfalz)
- 4 Goslar Museum
- 5 Tin Figure Museum
- 6) Upper Harz Water Management System
 - Cistercian Museum Walkenried Monastery
- 8 Grube Samson Mining Museum (Sankt Andreasberg)
- 19-Lachter-Stollen Mining Museum (Wildemann)
- Knesebeck Shaft Mining Museum (Bad Grund)
- Upper Harz Mining Museum (Clausthal-Zellerfeld)
- Ottiliae Shaft (Clausthal-Zellerfeld)
- Bosenhof Wheel Chambers (Clausthal-Zellerfeld)
- Kaiser Wilhelm II Shaft (Clausthal-Zellerfeld)

WORLD HERITAGE

- I Ideas and innovations
 - Pumps and water storage
- \amalg Traces of the past in the Clausthal valley

HIKES AND WALKS

- a Oderteich pond and Rehberger Graben
- b Buntenbock ponds
- C Huttaler Widerwaage
- Cultural landscape Rammelsberg

GUIDED TOURS UPPER HARZ WATER MANAGEMENT SYSTEM

- A Hirschler-Pfauenteich cascade
 B Zellerfelder Kunstgraben
 C Auerhahn cascade in the Bockswiese mining area
 D Oderteich and Rehberger Graben
 E Polsterberger Hubhaus and Dammgraben
 F Pond landscape around Buntenbock
 G The Huttaler Widerwaage
 H Legends of the Harz
 - Sperberhaier Damm and Großer Kolk

UNDERGROUND

GUIDED TOURS UPPER HARZ WATER MANAGEMENT SYSTEM

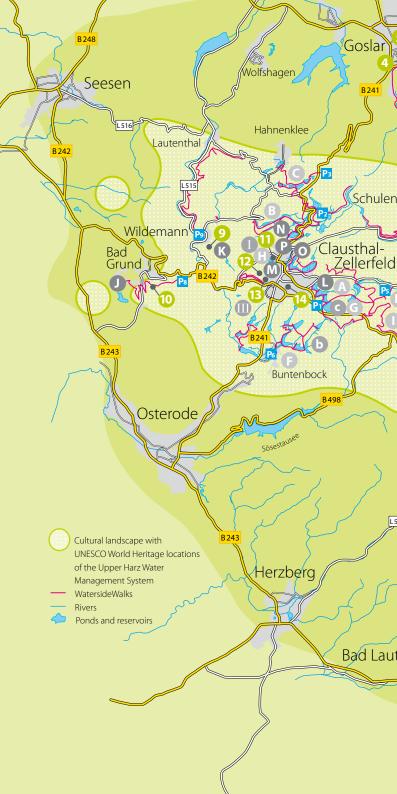
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Underground through the Eichelberg

- 19-Lachter- and 13-Lachter-Stollen Wildemann
- Dorotheer Rösche and Caroline Ventilation Shaft
- Mining railway and water tunnel
 - Tour of discovery Altensegener Rösche
 - Traces of the past in the Clausthal valley
- P Big water transport tunnel tour





"Glückauf" and welcome to the UNESCO World Heritage in the Harz!

The Harz has a very special treasure of human achievement for you to explore. It originally developed through the mining activities of the region and is so valuable that it has been declared as World Heritage by UNESCO. At the UNESCO World Heritage Site "Mines of Rammelsberg, Historic Town of Goslar and Upper Harz Water Management System", in short: UNESCO World Heritage in the Harz, you will find traces and monuments from 3000 years of mining, spread over an area of more than 200 km².

Mining in the Harz began around 3000 years ago at the Rammelsberg (P. 10/11). The mining activities had a significant influence on the surrounding landscape and also on the town of Goslar (P. 12/13). They were the basis for the wealth and the political importance of the mining town, which is reflected, for example, in Goslar's Imperial Palace (P. 14) – a centre of power for emperors and kings for more than 200 years in the Middle Ages. In addition to the Imperial Palace, evidence of the influence of mining on the town is provided by the historic Town Hall, the churches, the town defences, houses of wealthy individuals and guilds as well as more than 1500 half-timbered buildings.

The Upper Harz Water Management System (P. 18/19) was also created to serve the mining activities and is a today regarded as the world's most important pre-industrial energy supply system. It consists of a unique and complex system of water storage ponds and transport ditches on the surface, underground tunnels and water wheels. It was created from the 16th to the 19th centuries and provided water power for hoisting ore to the

surface, for water pumps and later for transporting miners deep underground. Today, 310 kilometres of ditches and 30 kilometres of water tunnels are part of the World Heritage in the Harz.

As part of the World Heritage Site, the Upper Harz Water Management System also includes other important historic buildings and installations both above and below ground such as the Grube Samson mine (St. Andreasberg, P. 21), the 19-Lachter-Stollen water drainage gallery (Wildemann, P. 22), the installations at the Knesebeck Shaft (Bad Grund, P. 23) and Walkenried Monastery (P. 20). In Walkenried you can also get an overview of the entire World Heritage Site at the World Heritage Information Centre (P. 8/9).

Whether above or below ground, on your own or with a guide – in the cultural landscape of the Harz you can experience a lot of

European history condensed into a small area. Here you will find cultural diversity in the middle of stunning landscapes and you will learn more about this exceptional mining region.

"We wish you an inspiring journey of discovery through the UNESCO World Heritage in the Harz!"





Content	Page
THE UNESCO WORLD HERITAGE	nside cover
WORLD HERITAGE INFORMATION CENTRE WALKENRIED	8 - 9
MUSEUMS, LOCATIONS AND ARCHAEOLOGICAL LANDSCAPE FEATURES	10 - 27
ON THE MOVE IN THE WORLD HERITAGE	28 – 63
World Heritage Insight Walks	28 – 33
Hikes and walks	34 – 39
Cycling tours	40
Motorized tours	41
Guided tours	
Rammelsberg Mine	42 - 43
Historic Town of Goslar	44 – 45
Upper Harz Water Management Syste	em 46 – 63
FOUNDATION FOR WORLD HERITAGE	
IN THE HARZ	64

WORLD HERITAGE INFORMATION CENTRE WALKENRIED

The Information Centre for the UNESCO World Heritage "Mines of Rammelsberg, Historic Town of Goslar and Upper Harz Water Management System" presents the more than 200 square kilometre UNESCO World Heritage in the Harz with its 3000 years of cultural history. In addition, the importance of World Heritage Sites for the world community is explained.



World Heritage Information Centre in Walkenried Steinweg 4 | 37445 Walkenried Tel. 05525 9599064 E-mail: info@kloster-walkenried.de www.welterbeimharz.de Two further World Heritage Information Centres for the UNESCO World Heritage in the Harz will open soon: in Goslar by spring of 2021 and in Clausthal-Zellerfeld in 2022.





The World Heritage Information Centre is free of charge and offers you an overview of the locations of all the World Heritage elements. Their diversity is presented by a 3D landscape model. Large-format pictures, audio terminals and interactive stations invite you to get to know the World Heritage. You can put together your own personal World Heritage tour of discovery including offers for tourists and notes on events and then store it digitally on your Smartphone or take it with you on paper.



RAMMELSBERG MINE

Goslar

Mining in the Harz started on the Rammelsberg. Operations at the mine stopped in 1988 after over 1000 years of almost uninterrupted mining and in 1992 it was declared UNESCO World Heritage together with the Historic Town of Goslar. Today the installations above and below ground provide you with a unique insight into 1000 years of uninterrupted mining.



World Heritage Rammelsberg Museum & Visitor Mine Bergtal 19 | 38640 Goslar Tel. 05321 7500 | E-mail: info@rammelsberg.de www.rammelsberg.de Venture into the depths of the mountain on a walking tour of the mine or on the mine railway. Above ground the imposing ore processing plant and the museum buildings await you. Here you can discover more about the lives and work of the miners from the Middle Ages right up to the closure of the Rammelsberg Ore Mine.



Discover the Rammelsberg Mine on a guided tour. More information can be found under "On the move in the World Heritage" on pages 42/43.

HISTORIC TOWN OF GOSLAR

Goslar's thousand years of history have been shaped by mining. Still today, evidence of its economic and political importance can be seen everywhere in the historic town centre: the Imperial Palace (Kaiserpfalz), the historic Town Hall, the churches, the town defences, houses of wealthy individuals and guilds as well as more than 1500 half-timbered buildings from the 15th to 19th centuries await your visit. In 1992 the Historic Town of Goslar was declared a UNESCO World Heritage Site.



Tourist Information of GOSLAR marketing GmbH Markt 7 | 38640 Goslar Tel. 05321 780621 and 05321 780630 E-mail: stadtfuehrungen@goslar.de www.goslar.de









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Discover the Historic Town of Goslar on a guided tour. More information can be found under "On the move in the World Heritage" on pages 44/45.

3

IMPERIAL PALACE (KAISERPFALZ)

Goslar

The Imperial Palace is representative of the political importance of the mining town that resulted from the mining activities. Erected between 1040 and 1050 under Heinrich III, it is the largest and also best-preserved secular building from the 11th century north of the Alps. For more than 200 years, German and European history was written here during numerous meetings of the imperial and royal court.

Visit the exhibition on the history of the mediaeval rulers and be amazed by the 11th century emperor's throne made from Rammelsberg copper and the monumental wall paintings from the 19th century.



Kaiserpfalz Kaiserbleek 6 | 38640 Goslar Tel. 05321 704437 | E-mail: kaiserpfalz@goslar.de www.goslar.de



The extensive collection at the Goslar Museum provides you with fascinating insights into the thousand-year history of the town as well as the geology and mineralogy of the region. In addition to outstanding objects such as the bronze Krodo altar (12th century), the Goslar Evangeliary (13th century), the Goslar "Bergkanne" (1477) and the original eagle from the Goslar marketplace (14th century), the exhibition in the 16th century building focuses on the everyday lives of the people of Goslar.



Goslar Museum Königstraße 1 | 38640 Goslar Tel. 05321 43394 | E-mail: goslarer-museum@goslar.de www.goslar.de

TIN FIGURE MUSEUM GOSLAR

In an 18th-century watermill in the middle of the Historic Town of Goslar you will encounter many tin figures – emperors, bishops, miners etc. – and they will all tell you their stories of history. They will show you their day-to-day and working lives, which traditions they have and how they celebrate. Here, you can discover the influential history of Goslar and the Harz region, shaped by mining, and experience the World Heritage Site Mines of Rammelsberg, Historic Town of Goslar and Upper Harz Water Management System in miniature.

You can also visit exciting special exhibitions and can cast your own tin figure to take home with you.



Tin Figure Museum Goslar Klapperhagen 1 | 38640 Goslar Tel. 05321 25 88 9 E-mail: zinnfigurenmuseum.goslar@t-online.de www.zinnfigurenmuseum-goslar.de



UPPER HARZ WATER MANAGEMENT SYSTEM

Ponds, ditches and water tunnels are spread across the picturesque landscape of the Upper Harz. They are the visible components of the Upper Harz Water Management System, which was created between the 16th and 19th centuries. The ponds once served as energy storage and supplied the water to drive the water wheels that once hoisted the ore from the ground and powered the pumps in the mines, and which was later also used for transporting people underground.

The Upper Harz Water Management System, part of the World Heritage in the Harz, today includes 310 kilometres of water transport ditches and 30 kilometres of water tunnels. Of the 107 ponds that



Upper Harz Mining Museum Bornhardtstraße 16 | 38678 Clausthal-Zellerfeld Tel. 05323 98950 E-mail: touren@welterbeimharz.de www.bergwerksmuseum.de



still exist, 63 are still in use for energy supply, as flood protection, as drinking water storage or for recreational bathing.

The Upper Harz Water Management System also includes other important historic buildings and installations both above and below ground such as the mediaeval Walkenried Monastery, whose monks were skilled water engineers and from the second half of the 12th century were part-owners of the mining operations on the Rammelsberg, the Grube Samson mine in St. Andreasberg, the 19-Lachter-Stollen water drainage gallery in Wildemann, the installations at the Knesebeck Shaft in Bad Grund as well as those of the Ottiliae and Kaiser Wilhelm II Shafts in Clausthal-Zellerfeld.





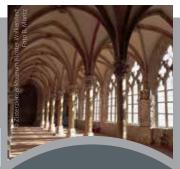
Discover the Upper Harz Water Management System on a walk or guided tour. More information can be found under "On the move in the World Heritage" on pages 46/47.

CISTERCIAN MUSEUM WALKENRIED MONASTERY

The Cistercian monastery founded in the 12th century in Walkenried developed into a powerful and important business in the Harz. The monks were active in agriculture and played an important role in mining in the region; they built water management installations to provide energy and smelted ore from the Rammelsberg and the Upper Harz. Their pond and ditch system constructed around 1225 in the Pandelbach Valley near Seesen-Münchehof is considered to be the oldest part of the Upper Harz Water Management System.

The 13th century enclosure and the imposing monastery church, which was destroyed in the German Peasant War, demonstrate the prosperity of the former monastic community. The creative and stimulating design of the CistercianMuseum within the Gothic monastery buildings makes the Middle Ages come to life with its acoustic and visual interpretations.

CistercianMuseum Walkenried Monastery Steinweg 4a | 37455 Walkenried Tel. 05525 959 90 64 E-mail: info@kloster-walkenried.de www.kloster-walkenried.de





Also visit the World Heritage Information Centre directly opposite the monastery, which will provide you with an initial overview of the UNESCO World Heritage in the Harz and also provides information on what is offered for tourists.



GRUBE SAMSON MINING MUSEUM

Sankt Andreasberg

By visiting today's ensemble of buildings at the Grube Samson mine in Sankt Andreasberg you can experience the last completely preserved mine of the historic Upper Harz mining. Here, primarily silver ore was mined from 1521 to 1910. The "Samson" was one of the deepest mines in the world for many years.

The focus of the exhibition is the theme of "energy", which is presented using the example of water power for driving pumps and the famous man engine. This machine, which today is an internationally recognized historic industrial monument, is the only man engine in the world that is still in working order. Last but not least, you will be impressed by the original nine-metre-high, bi-directional waterwheel and the twelve-metre-high, mono-directional water wheel.



Grube Samson Mining Museum Am Samson 2 | 37444 St. Andreasberg Tel. 05582 1249 | E-mail: info@grube-samson.de www.grube-samson.de

9

19-LACHTER-STOLLEN MINING MUSEUM

Wildemann

The 19-Lachter-Stollen in Wildemann is the only water drainage gallery in the Harz that is accessible for visitors and will take you 500 metres into the hillside. Its construction was started in the 16th century. The drainage gallery was used to drain water out of the mines higher up in Zellerfeld and Clausthal. The focal theme of "depth" can be experienced with all the senses here: an impressive bi-directional waterwheel with a diameter of nine metres turns as you stand on a bridge and look down more than 260 metres into the atmospherically lit Ernst August Shaft from the 19th century.



19-Lachter-Stollen Mining Museum Im Sonnenglanz 18 | 38709 Wildemann Tel. 05323 66 28 | E-mail: besucherbergwerk@t-online.de www.19-lachter-stollen.de



KNESEBECK SHAFT MINING MUSEUM Bad Grund

At the Knesebeck Shaft in Bad Grund the theme of "pressure" is the main focus. Compressed air laid the foundation for modern, technology-based mining. The installations at the Knesebeck Shaft are excellent representatives of this era. Here, with the help of water power, air was compressed and then used to drive machines and take care of the ventilation underground. Symbolic of these technical innovations as well as the close connection between water management and mining is the 47-metre-high hydrocompressor tower, built in 1912. It is the last of its type worldwide.



Knesebeck Shaft Mining Museum Knesebeck 1 | 37539 Bad Grund Tel. 05327 2858 | E-mail: knesebeckschacht@t-online.de www.knesebeckschacht.de

UPPER HARZ MINING MUSEUM

Clausthal-Zellerfeld

The Upper Harz Mining Museum in Clausthal-Zellerfeld, founded in 1892, is one of the oldest technical museums in Germany and displays the development of metal ore mining in the Upper Harz from the Middle Ages to its end in 1930. The comprehensive museum collection includes historic technical models and films, valuable coins as well as the first steel cable in the world. The highlights of your visit to the museum will also include the 200-year-old shaft building with an authentically reconstructed mine tunnel that you can visit as well as other original mining installations on the open-air site.

Book your tour of the Upper Harz Water Management System with a specially trained World Heritage Guide here at the Upper Harz Mining Museum.



Upper Harz Mining Museum Bornhardtstraße 16 | 38678 Clausthal-Zellerfeld Tel. 05323 98950 | E-mail: info@bergwerksmuseum.de www.bergwerksmuseum.de



OTTILIAE SHAFT Clausthal-Zellerfeld

From 1878 to 1930 the Ottiliae Shaft was the central hoisting shaft for silver, lead and zinc ore in Clausthal-Zellerfeld. The iron head frame from 1876 is the oldest remaining example of its type in Europe. In order to create further electrical energy using the Upper Harz Water Management System, a cavern power station was installed 365 metres underground in the Ernst August Gallery.

Until 1980 its turbines produced electric power for the PREUSSAG works in Bad Grund, Oker and at the Rammelsberg. Since 1985 the historic monument Ottiliae Shaft has been part of the Upper Harz Mining Museum, including the mining railway on the surface, which was reconstructed in 1990.



Ottiliae Shaft Ottiliae-Schacht | 38678 Clausthal-Zellerfeld Info: Upper Harz Mining Museum Tel. 05323 98950 | E-mail: info@bergwerksmuseum.de www.bergwerksmuseum.de

ROSENHOF WHEEL CHAMBERS

Clausthal-Zellerfeld

The Thurm Rosenhof Mine was one of the oldest mines in Clausthal and one of the longest in operation. Here you can discover two outstanding components of the Upper Harz Water Management System that have been preserved – hidden under the earth: the Rosenhof Wheel Chambers. Like the inside of a mighty tower, the Round Wheel Chamber from the late 17th century descends 24 metres into the ground. The neighbouring Oval Wheel Chamber from the early 19th century, which contemporaries described as the "most beautiful in the whole of the Harz", is 15 metres high. A little adventure that will take you into the depths via ladders and stairways awaits you here.

13





KAISER WILHELM II SHAFT

Clausthal-Zellerfeld

In addition to the Ottiliae Shaft, from the end of the 19th century the Kaiser Wilhelm II Shaft was one of the main hoisting shafts of the Clausthal and Zellerfeld mining areas. From here, the ore was transported underground in barges to the Ottiliae Shaft. Inform yourself in an exhibition about the technology and history of the Upper Harz Water Management System on the freely accessible premises of the company Harzwasserwerke GmbH.



Kaiser Wilhelm II Shaft with World Heritage exhibition Water Management Premises of Harzwasserwerke GmbH Erzstraße 24 | 38678 Clausthal-Zellerfeld Info: Upper Harz Mining Museum Tel. 05323 98950 | E-mail: info@bergwerksmuseum.de www.bergwerksmuseum.de

World Heritage Insight Walks

IDEAS AND INNOVATIONS

This World Heritage Insight Walk starting in Zellerfeld will take you on an easy circular tour of twelve selected locations in the Upper Harz Water Management System that are connected with the activities of the scholar Gottfried Wilhelm Leibniz (*1646 – †1716). He was active in the Upper Harz from 1680 – 1686 and 1693 – 1696. In various experiments the researcher attempted to replace and save the energy source water. Leibniz's letters are today part of the immaterial cultural heritage of UNESCO. Like the World Heritage in the Harz, they are witnesses of the power of innovation and the creativity of mankind.

Our tip: visit the Upper Harz Mining Museum – it is located right next to the last station on this Insight Walk.

On this World Heritage Insight Walk there are information stations about the activities of Leibniz.



START

ZELLERFELD MINT Corner of Bornhardtstrasse/ Schützenstraße Clausthal-Zellerfeld

Duration: around 1:30 h Difficulty: easy Length: 3.6 km Ascent: 43 m Descent: 33 m

END

UPPER HARZ MINING MUSEUM Bornhardtstrasse Clausthal Zellerfeld

Detailed directions and further information can be found at <u>www.welterbeimharz.de/</u> <u>en/on-the-move/</u> <u>world-heritage-insight-walks</u>

World Heritage Insight Walks

PUMPS AND WATER STORAGE

The Polsterberger Hubhaus is the starting point for an Insight Walk through a cultural landscape embedded in the forest of the Harz. Today a restaurant, the building was once a pump house and thereby an important part of the Upper Harz Water Management System. In the area around the restaurant there is important evidence of many technical installations within a small area, which are part of the UNESCO World Heritage. They once served to pump and store water as a source of energy for the water wheels at the Dorothea and Caroline mines.



Discover the energy resource water on this World Heritage Insight Walk



START / END (circular walk) POLSTERBERGER HUBHAUS, Polsterberg 1, Clausthal-Zellerfeld

Duration: around 2:00 h Difficulty: easy Length: 3.3 km Ascent: 94 m Descent: 94 m Detailed directions and further information can be found at <u>www.welterbeimharz.de/</u> <u>en/on-the-move/</u> <u>world-heritage-insight-walks</u>

World Heritage Insight Walks

TRACES OF THE PAST IN THE CLAUSTHAL VALLEY

This World Heritage Insight Walk will take you on a circular tour on the edge of Clausthal-Zellerfeld from the Ottiliae Shaft to the Rosenhof Wheel Chambers. The ridge "Bremerhöhe", on which the Ottiliae Shaft is located and the valley below it, the "Große Clausthal", were once a huge industrial area. Over the centuries since the town was founded the surrounding landscape has been heavily influenced by mining activities. On this Insight Walk you will find impressive views of a diverse cultural landscape and – via QR codes next to the path – you will obtain interesting insights into their history.



This walk will take you to the Ottiliae Shaft with its iron head frame – it is the oldest of its type surviving in Europe.



START / END (circular walk) CAR PARK AT THE ROSENHOF WHEEL CHAMBERS Junction Berliner Straße/Reinhard-Roseneck-Weg, Clausthal-Zellerfeld

Duration: around 2:00 h Difficulty: easy Length: 3.4 km Ascent: 99 m Descent: 99 m Detailed directions and further information can be found at <u>www.welterbeimharz.de/</u> <u>en/on-the-move/</u> <u>world-heritage-insight-walks</u>



A special experience: travel with the historic mining railway at the Ottiliae Shaft. More information can be obtained from the Upper Harz Mining Museum.

Hikes and walks

ODERTEICH POND AND REHBERGER GRABEN

The high-point of hydraulic engineering in the Upper Harz and the largest of all the ponds in the area is the Oderteich to the north of St. Andreasberg. At the beginning of the 18th century the Rehberger Graben water transport ditch became the main source of energy for silver mining in St. Andreasberg. For almost 300 years it has been transporting water from the Oderteich to the Grube Samson mine. The path along the ditch passes the geologically interesting Goetheplatz and the Rehberger Grabenhaus restaurant. At the Geseher Wasserlauf tunnel the Rehberger Graben disappears underground. The path around the Oderteich and the bathing area are also very popular.

BUNTENBOCK PONDS

The many water storage ponds built by the miners on the Clausthal Plateau have turned it into an unusual water-filled landscape. Chains of underground tunnels transport the water over a long distance from the mountain meadows to the former ore mines of the Rosenhof area in Clausthal. The start and end point of this interesting walk is the Große Sumpfteich pond next to Buntenbock village. Along the way there are numerous water transport ditches and tunnel entrances as well as the Ziegenberger, Bärenbrucher, Pixhaier and Schwarzenbacher ponds. Swimming, cycling or angling are possible and in winter cross-country skiing.

We recommend the following selection from the many signposted WatersideWalks:



Signposted WatersideWalks 17 | 20

Difficulty easy Length circuit of the dam 800 m, circuit of the Oderteich around 4 km, path along ditch to restaurant 7.1 km (2 h) Combinable with Grube Samson Refreshments Rehberger Grabenhaus Car park B 242 Oderteich Bus stops Oderbrück - Bus 820 or International House Sonnenberg, Jordanshöhe - Bus 840, Bus 850 (also stops at the Oderteich)

Signposted WatersideWalks 4 | 9

Difficulty easy Length circuit 5.7 km (1:40 h) Combinable with Rosenhof Wheel Chambers Refreshments Pixhaier Mühle and var. in Buntenbock Car parks Pixhaier Mühle, Buntenbock village Bus stops Flambacher Mühle, Buntenbock Fuhrherrnstraße - Bus 440



HIKES AND WALKS

HUTTALER WIDERWAAGE COUNTERBALANCE POND

This easy circular walk offers an impressive overview of the Upper Harz Water Management System. The Huttaler Widerwaage is an artistically walled counterbalance pond with an impressive arched bridge. From there, the ditch proceeds along the contour of the hillside through the sunny upper Huttal valley and across an aqueduct that is a disused pond dam. After crossing the B 242 the path follows the Dammgraben ditch to the Polsterberger Hubhaus restaurant and continues through the forest to the Jägersbleeker Teich pond and back to the Hirschler Teich.





Signposted WatersideWalk 12

Difficulty easy Length circuit 6.9 km (2 h) Combinable with Hirschler-Pfauenteich cascade of ponds Refreshments Polsterberger Hubhaus Car parks B 242 Entensumpf, Polsterberg Bus stops Polsterberg, Prahljust - Bus 840

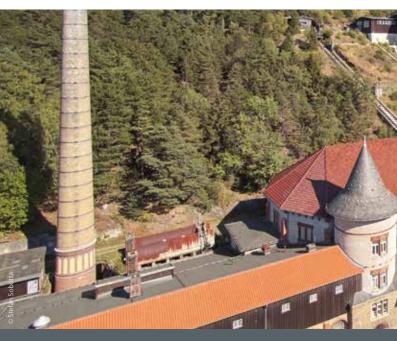


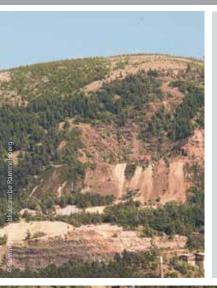
HIKES AND WALKS

CULTURAL LANDSCAPE RAMMELSBERG

This walk connects the oldest parts of the World Heritage Site: the Rammelsberg Ore Mine and the Historic Town of Goslar. Here you will experience a landscape that has been heavily influenced by mining activities since ore was first found on the Rammelsberg, probably around three millennia ago. Since mining stopped in 1988 the signs of this activity have gradually been covered up by the flora that is characteristic of landscapes in disused mining areas. On this walk you can experience nature in an age-old cultural landscape.

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World Heritage Walk

Difficulty easy Length circuit 6.2 km (2:45 h) Combinable with Rammelsberg Mine and/or Historic Town of Goslar with Imperial Palace Refreshments Maltermeister Turm, Casino Rammelsberg, Da Antonio Car parks Kaiserpfalz, Rammelsberg Bus stops Kaiserpfalz, Rammelsberg - Bus 803

More detailed information can be found at: <u>www.welterbeimharz.de/</u> en/on-the-move/hikes-and-walks

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Cycling tours

Discover the UNESCO World Heritage in the Harz on two wheels! We have put together five selected cycle tours for E-bikes and mountain bikes for you. Biking fun in the midst of wonderful nature and culture.

Life-support for the mining industry

Circular tour, 52 km: along the Dammgraben ditch between Torfhaus and Clausthal-Zellerfeld.

Water in the depths

Circular tour, 43 km: following the route of old water drainage galleries between Clausthal-Zellerfeld and Gittelde.

Renewable energy from water power

Circular tour, 33 km: around the Oderteich pond near Sankt Andreasberg.

Mining culture in the Harz - Parts 1 & 2

Tour in stages, total of 100 km: Over the Harz from Goslar to Walkenried.

Energy storage for mining

Circular tour, 37 km: through the landscape of ponds around Clausthal-Zellerfeld.







You can find detailed tour descriptions with maps at <u>www.welterbeimharz.de/</u> <u>en/on-the-move/</u> <u>cycling-tours</u>

Motorized tours

You can also explore the treasures of this unique mining region by motorcycle, car or bus. We recommend the following example tours:

World Heritage circular tour

Around 65 km: Historic town of Goslar/Rammelsberg Mine • Auerhahn cascade of ponds • Kaiser Wilhelm II Shaft • Hirschler-Pfauenteich cascade of ponds • Ottiliae Shaft • 19-Lachter-Stollen • Historic town of Goslar/ Rammelsberg Mine

From north to south – Between the centres of power

Around 77 km: Historic town of Goslar/Rammelsberg Mine • Kaiser Wilhelm II Shaft • Hirschler-Pfauenteich cascade of ponds • Sperberhaier Damm • Oderteich • Grube Samson • Cistercian Monastery Walkenried

From west to east - The way of the water

Around 50 km: Torfhaus/Abbegraben • Sperberhaier Damm • Polsterberger Hubhaus • Hirschler-Pfauenteich cascade of ponds • Kaiser Wilhelm II Shaft • Ottiliae Shaft • 19-Lachter-Stollen • Knesebeck Shaft • Portal Ernst August Gallery

guided tours Rammelsberg Mine





Information and booking: World Heritage Rammelsberg Museum & Visitor Mine Bergtal 19, 38640 Goslar, Tel. 05321 7500 E-mail info@rammelsberg.de www.rammelsberg.de

With the mine railway into the mine

Ring, Ring, Ring! A bell gives a loud warning when the mine train is coming. Get in and travel just like the Rammelsberg miners once did to their place of work "at the face".

Fire and water – The Roeder Stollen gallery

Together with your guide, follow the path of the water under the ground to the giant water wheels that were used to hoist the ore for more than 100 years. Discover the unique world of mining above and below ground on various guided tours.

From pieces of ore to concentrate

Those who like to get up high will really enjoy a ride on the inclined lift. Originally it transported the ore to the highest point of the ore-processing plant. Huge machines were needed to extract the valuable content from the ore.

Small becomes big!

Searching for clues in the mine

On this family tour, children are the centre of attention because here you can be really curious, ask questions and get to know the exciting world of mining.





guided tours Historic Town of Goslar

A thousand steps through the

historic town centre

Experience a guided tour around Goslar's historic centre. Be enchanted by romantic half-timbered buildings and imperial architecture in the UNESCO World Heritage Site.





The legacy of mining in Goslar's alleys

Guided tour through the 500-year-old former residential quarter of Goslar's miners. Find out interesting facts about the lives of the miners and tradesmen.



Numerous tours of discovery with expert guides lead you through the Historic Town of Goslar. Here is a small selection:



Of water and ore – Goslar in flux

Along the waterways of the Gose and Abzucht you will find out about their interesting connections with mining and their influence on the development of the town. Drinking water supply and the use of water power are two important factors. You can take a look into the Lohmühle bark mill, where there is old and impressive technology to marvel at.



Imperial Town & Imperial Palace

A guided tour in the town with a visit to the inside of the monumental Imperial Palace. This exceptional example of secular architecture contains an extensive exhibition about itinerant courts as well as the history of the emperors and the palace.

Information and booking:

Tourist Information of GOSLAR marketing GmbH Markt 7, 38640 Goslar, Tel. 05321 780621 and 05321 780630 E-mail stadtfuehrungen@goslar.de www.goslar.de

ABOVE GROUND

Upper Harz Water Management System

WATER ON A HIGH LEVEL

HIRSCHLER-PFAUENTEICH CASCADE

The Hirschler-Pfauenteich cascade, with its four ponds and the associated network of water transport ditches, is an impressive feature of the unique cultural heritage of the Upper Harz Water Management System and its sustainable utilization. On this circular tour you will find out about the connection, starting in the 17th century, between this impressive system of storage ponds and the bi-directional waterwheels in the nearby Caroline and Dorothea mines, which were especially rich in ore. You will also see how human activity changed the landscape of the Upper Harz.

OF EMPERORS, MINERS AND MACHINES

ZELLERFELDER KUNSTGRABEN

Romantic babbling brooks run through the tranquil landscape of open mountain meadows next to Clausthal-Zellerfeld. Artistic dry stone walling, small bridges and stone arches, however, tell a different story about the mines in Zellerfeld. They are evidence of the enormous achievements of the miners and their complex efforts to utilize the valuable water for mining. This easy circular tour offers you an ideal introduction to the Upper Harz Water Management System. Specially trained World Heritage Guides are also available to guide you through the Upper Harz Water Management System. With clothing to suit the weather conditions and sturdy shoes you are ideally equipped for a diversity of tours above ground:

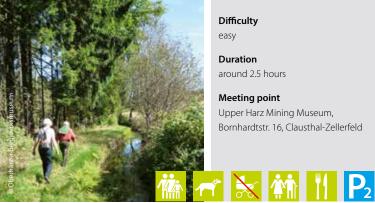


Difficulty easy to medium

Duration around 2 hours

Meeting point car park Am Pulverhaus 1, Clausthal-Zellerfeld





Difficulty easy

Duration around 2.5 hours

Meeting point Upper Harz Mining Museum, Bornhardtstr. 16, Clausthal-Zellerfeld

ABOVE GROUND

GUIDED TOURS

THE LARGEST POND CASCADE IN THE WORLD HERITAGE SITE

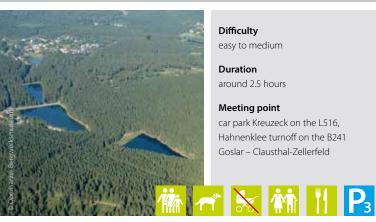
AUERHAHN CASCADE IN THE BOCKSWIESE MINING AREA

Discover this masterpiece of water engineering in the old mining area of Bockswiese. Six ponds arranged one above the other look as though they have been carved out of the forest. Together they can store around half a million cubic metres of water and in 1680 they already supplied numerous mines in Bockswiese with water power. On this circular tour between the six Auerhahn, Grumbacher and Flöß ponds you will learn about the function of a "Striegelhäuschen" (a small hut on the dam), the "Striegelzapfen" and the overflow.

300 YEARS OF REGENERATIVE ENERGY

ODERTEICH AND REHBERGER GRABEN

The largest of all the storage ponds in the Upper Harz is very unusual. With its 20-metre-high dam constructed from huge blocks of granite, the Oderteich was Germany's largest and highest reservoir for almost 170 years. Idyllically located in the middle of the Harz National Park, it still supplies water via the Rehberger Graben ditch for the generation of electricity. The Oderteich is thereby a very special example of the use of sustainable energy sources in the UNESCO World Heritage. Find out where the water was directed during dry periods, what the purpose of the granite obelisks was and when the impressive Oderfall waterfall was created. This circular tour offers you an insight into the construction and the function of this unusual architectural feature.



Difficulty easy to medium

Duration around 2.5 hours

Meeting point car park Kreuzeck on the L516, Hahnenklee turnoff on the B241 Goslar – Clausthal-Zellerfeld



Difficulty easy to medium

Duration around 2 hours

Meeting point car park at the Oderteich on the B242 between Clausthal-Zellerfeld and Braunlage



ABOVE GROUND

UPPER HARZ WATER MANAGEMENT SYSTEM

PUMPS AND WATER STORAGE

POLSTERBERGER HUBHAUS AND DAMMGRABEN

The Dammgraben ditch brings water from the distant upland moors around the Brocken and on the Bruchberg to the plateau around Clausthal-Zellerfeld. In the Polsterberger Hubhaus, now a restaurant, pumps driven by water wheels lifted the water 18 metres into the Hirschler and Jägersbleeker storage ponds. The ore-rich mines Dorothea and Caroline needed a lot of water to hoist the silver ore from the depths. On this easy circular tour you will investigate some "distribution nodes" in the Upper Harz Water Management energy supply system. At the pump house, the old water wheel chambers, the Polstertaler Teich pond and the numerous water transport ditches you will find out how water wheels provided the silver mines with energy for centuries.

WATER AND COLOURFUL MEADOWS

POND LANDSCAPE AROUND BUNTENBOCK

This easy circular tour will take you past mining ponds, many of which are dotted around the Clausthal plateau, turning it into a wonderful landscape filled with water and meadows. A network of ditches and tunnels carried the water from the area around Buntenbock to the ore mines far away in the Rosenhof mining area. Immerse yourself in the history of this cultural landscape and its importance for mining in the Upper Harz.



Difficulty easy

Duration around 2 hours

Meeting point car park directly at the Polsterberger Hubhaus, turn off the B242 Clausthal-Zellerfeld in the direction of Braunlage

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Difficulty easy

Duration around 2 hours

Meeting point

Pixhaier Mühle car park, An der Pixhaier Mühle 1, Clausthal-Zellerfeld (In Clausthal-Zellerfeld turn off the road B241 Am Schlagbaum into Schwarzenbacher Straße and continue to Pixhaier Mühle car park)

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ABOVE GROUND

GUIDED TOURS //

EBB AND FLOW

THE HUTTALER WIDERWAAGE

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The Huttaler Widerwaage is a water counterbalance pond artistically constructed with natural stone walls and also has an arched stone bridge. It serves the important principle of keeping the water as high as possible and enables the water in the attached Huttaler Graben ditch and the Huttaler Wasserlauf tunnel to flow in both directions. The circular tour takes you past the Hirschler-Pfauenteich cascade of ponds as well as numerous water transport ditches that are part of the Upper Harz Water Management System.

THE CRYSTAL PALACE OF AQUARIUS

LEGENDS OF THE HARZ

Does Aquarius still live in one of the ponds near Zellerfeld? Can you still see the walls of his Crystal Palace shimmering in the water? Walk with one of our expert World Heritage Guides on an exciting journey of discovery through the world of the Upper Harz legends and of course also on an exploratory tour through the Upper Harz Water Management System. Based on the old Harz legend of Aquarius you will also get to know the World Heritage, its method of function, its creators and the uses of this unique energy system.



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Difficulty easy

Duration around 3.5 hours

Meeting point car park Am Pulverhaus 1, Clausthal-Zellerfeld



Duration around 1.5 - 2 hours

Meeting point Upper Harz Mining Museum, Bornhardtstr. 16. Clausthal-Zellerfeld



ABOVE GROUND

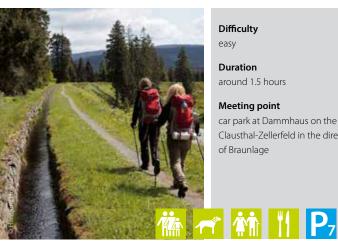
GUIDED TOURS / UPPER HARZ WATER MANAGEMENT SYSTEM

THE MONUMENTAL HARZ AQUEDUCT

SPERBERHAIER DAMM AND GROSSER KOLK

With a height of 16 metres and a length of 950 metres the Sperberhaier Damm, which was built between 1732 and 1734, is one of the most monumental constructions in the Upper Harz Water Management System. Find out on this tour about the reasons for building this aqueduct, despite the enormous difficulties, the function of the "Großer Kolk" and why the Dammgraben and Morgenbrodtstaler Graben ditches flow together at exactly this point.





Difficulty easy

Duration around 1.5 hours

Meeting point car park at Dammhaus on the B242 Clausthal-Zellerfeld in the direction of Braunlage



Information and booking:

Oberharzer Bergwerksmuseum, Bornhardtstraße 16 38678 Clausthal-Zellerfeld Tel. 05323 98950 E-mail: touren@welterbeimharz.de www.bergwerksmuseum.de

All tours can also be booked as individual group tours in German, English or Dutch.



Detailed tour descriptions with prices and dates can be found at www.bergwerksmuseum.de

UNDERGROUND

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GUIDED TOURS

COMPRESSED AIR FOR THE HILFE GOTTES MINE

UNDERGROUND THROUGH THE EICHELBERG

The Knesebeck Shaft was a part of the "Hilfe Gottes" mine that was closed in 1992, the last ore mine in the Harz. This excursion will take you to the mono- and bi-directional water wheel chambers in the Mining Museum in Bad Grund as well as the hydrocompressor tower, which produced compressed air. Underground, you will explore the water transport tunnel in the Eichelberg, guided by an experienced miner. The sophisticated system served to provide the mine with water power and compressed air energy.

A JOURNEY INTO THE DEPTHS OF THE EARTH

19-LACHTER- AND 13-LACHTER-STOLLEN WILDEMANN

The deep water drainage galleries that emerge in the mining town of Wildemann were some of the most important installations for Upper Harz silver mining. For centuries they drained water out of the mines higher up and without them mining operations in Zellerfeld and Clausthal would not have been possible. The miners' journey into the depths of the earth began in 1525. The tour follows the path of the water above and below ground. Away from the usual guided tour route, discover the visitor mine and its highlights. Experience the historic mining town of Wildemann on the Halbe-Höhen-Weg. Continue above ground to the mouth of the 13-Lachter-Stollen gallery. The Upper Harz Water Management System can also be explored underground with a World Heritage Guide. Please put on warm clothes that you don't mind getting dirty. We will provide you with a helmet and boots.



Difficulty medium

Duration around 2.5 hours

Meeting point Knesebeck Shaft Mining Museum, Knesebeck 1, Bad Grund Please note: The minimum age for this tour is 12 years.





Difficulty medium

Duration around 2.5 hours

Meeting point 19-Lachter-Stollen Visitor Mine, Im Sonnenglanz 18, Wildemann

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UNDERGROUND

GUIDED TOURS

UNDERGROUND TO THE RICH CAROLINE

DOROTHEER RÖSCHE AND CAROLINE VENTILATION SHAFT

Already in the 18th and 19th centuries more than 20,000 visitors, including the writers Goethe and Heine, visited the Dorothea and Caroline Mines in Clausthal. They were the highest yielding mines in the upper Harz. On this tour you will explore part of the former energy supply system for the two mines – the Dorotheer Rösche drainage adit. It transported the used water out of the hillside and to the next water wheels lying below. You will explore the mine equipped with a helmet, protective jacket, boots and a lamp. At the end you will climb the 20 metre Caroline Ventilation Shaft (Caroline Wetterschacht) on ladders, back to the light of day.

BREMERHÖHE FROM ABOVE AND BELOW

MINING RAILWAY AND WATER TUNNEL

Experience the ridge "Bremerhöhe" above and below ground. The trip with the mining railway takes you along a former water transport ditch, which was dug to bring water to the ore mines in the Rosenhof area. Here, lead, copper and silver ore were mined from the 16th century until 1930. Following the railway journey, an impressive tour through the "Bremerhöher Wasserlauf" water transport tunnel will bring you to the Round Rosenhof Wheel Chamber, returning above ground to the Ottiliae Shaft. Equipped with a helmet, protective jacket, boots and a lamp, you will explore the tunnel and the wheel chamber.



Difficulty medium

Duration around 2.5 hours

Meeting point car park Am Pulverhaus 1, Clausthal-Zellerfeld Please note: The minimum age for this tour is 12 years.





Difficulty medium

Duration around 3 hours

Meeting point Ottiliae Schacht, Clausthal-Zellerfeld Please note: The minimum age for this tour is 12 years.

UNDERGROUND

GUIDED TOURS

ROSENHOF WHEEL CHAMBERS

TOUR OF DISCOVERY ALTENSEGENER RÖSCHE

On this tour of discovery you will follow the "Wet Gallery" through the Rosenhof mining area to the Round Wheel Chamber, which descends 24 m into the ground like the inside of a gigantic tower. The destination of the tour is the neighbouring, 15-metre-high, underground Oval Wheel Chamber. In 1822, contemporaries described it as the "most beautiful wheel chamber in the whole of the Harz". With a helmet, protective jacket, boots and a lamp, you will explore the underground installations.

ROSENHOF MINING AREA AND ROUND WHEEL CHAMBER

TRACES OF THE PAST IN THE CLAUSTHAL VALLEY

Start at the World Heritage Ottiliae Shaft on the Bremerhöhe ridge at the western edge of Clausthal-Zellerfeld. On this easy tour you will discover the "sunken" Great Clausthal Valley. Huge industrial plants – the most modern of their time – once shaped the landscape. You can still see their ruins today. Together with an expert World Heritage Guide, travel through time in an industrial world that is no longer with us, hear about the function of a "pochgraben" ditch and take a look at the entrance of the Altensegener Rösche. You will visit the Round Wheel Chamber below ground before returning to the starting point along the Bremerhöher Graben ditch.



Difficulty difficult

Duration around 3.5 hours

Meeting point Ottiliae Schacht, Clausthal-Zellerfeld

Please note: You need to be physically fit enough to be able to climb vertical ladders and to crawl on all fours through an 80-metre-long tunnel that is only 80 centimetres high in places. The minimum age for this tour is 14 years.



Difficulty easy

Duration around 2 hours

Meeting point Ottiliae Schacht, Clausthal-Zellerfeld

UNDERGROUND

GUIDED TOURS

UPPER HARZ WATER MANAGEMENT SYSTEM

FOR INTREPID EXPLORERS THROUGH TUNNELS AND WILDERNESS

BIG WATER TRANSPORT TUNNEL TOUR

The Rosenhof Wheel Chambers are some of the most spectacular in mining – and not only in the Harz! Underground water tunnels, ditches and historic ore mines in the Rosenhof mining area coupled with sections of forest wilderness in the upper Innerste Valley make this long expedition a special experience. Equipped with a helmet, protective jacket, boots and a lamp, you will explore the underground installations.





Difficulty difficult

Duration around 7 hours

Meeting point Ottiliae Schacht, Clausthal-Zellerfeld Please note: You need to be physically

fit enough to be able to climb vertical ladders and to crawl through an 80-metrelong tunnel that is only 80 centimetres high in places on all fours. The minimum age for this tour is 14 years.

Information and booking:

Oberharzer Bergwerksmuseum, Bornhardtstraße 16 38678 Clausthal-Zellerfeld Tel. 05323 98950 E-mail: touren@welterbeimharz.de www.bergwerksmuseum.de

Detailed tour descriptions with prices and dates can be found at www.bergwerksmuseum.de

FOUNDATION FOR UNESCO WORLD HERITAGE IN THE HARZ Did you know?

The Foundation Mines of Rammelsberg, Historic Town of Goslar and Upper Harz Water Management System, in short: Foundation for UNESCO World Heritage in the Harz, works to support the preservation and presentation of the World Heritage Site of the same name. Because of the many museums, locations and archaeological landscape features spread over a huge area, this task is a big challenge for a non-profit-making foundation.

According to the World Heritage Convention, cultural heritage is the priceless and irreplaceable property of the whole of humanity. In this spirit, we would like to thank all those who support the UNESCO World Heritage in the Harz – also financially.

Bank account for donations:

Sparkasse Hildesheim Goslar Peine IBAN: DE85 2595 0130 0051 0031 19 | BIC: NOLADE21HIK

As a non-profit-making foundation we can give you a receipt for your donation that you may be able to set against tax.



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Imprint:

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www.welterbeimharz.de