

NATURA Tip 4

Bode Valley and Broadleaf Forests on the edge of the Harz Mountains near Thale

Harz



Organisation
der Vereinten Nationen
für Bildung, Wissenschaft
und Kultur



Harz - Braunschweiger
Land - Ostfalen
UNESCO
Global Geopark





Hirschhörner rock formation



Treasure Trove Harz

It was mineral resources like silver, lead and iron ores as well as copper shale that first drew people to settle on the edges of the Harz Mountains and, later, in the mountain range itself. All other available natural resources quickly grew in value. Water power was required. Man-made ponds and ingeniously constructed ditch systems bear witness to this. Wood was used until the supply was almost exhausted. It was required for building houses and constructing mine tunnels, but above all it was an important source of energy. Charcoal piles burned throughout the Harz Mountains, producing the charcoal that was much sought after by the metallurgical industry. The margins of the Harz Mountains have been settled since the Neolithic. The "family waste heaps" found there are evidence of the exploitation of surface deposits of copper shale. Beginning in the 10th century people began to penetrate deeper into the mountains. For more than a century during the Middle Ages the



Train at Thale railway station



Charcoal pile

Harz region was the centre of power within the Holy Roman Empire. The mineral resources found here ensured that the Ottonian dynasty of Saxon nobility remained in power. A quick look at a German Reich Railways' timetable a thousand years later further illustrates the importance of the Harz Mountains. The map of the route network presents an interesting picture: resembling a spider's web, all the important rail links converge on the Harz! The Harz Mountains were long a centre of industrialisation. Iron ore had become immensely important. The Association of German Engineers was founded here. The downside of all this: heavy metal pollution, air pollution and overused – in some places completely destroyed – forests. The government of the Free State of Anhalt was the first to recognise that forests are treasure troves not only because of their wood reserves! On 14 June 1923 it declared a forest area in the Gernrode forest district a nature reserve for the first time. Today the Spaltenmoor Nature Reserve is part of the Europe-wide Natura 2000 network of protected areas.





Money Can't Buy Happiness

We must be able to buy something with it, though! What about, for example, a weekend in a nature park? Since 2012 virtually the entire Harz Mountains has been a nature park. With the Southern Harz Karst Landscape, 10 % of the nature park is also a biosphere reserve. Only a smaller area around the Brocken is a National Park. There nature takes precedence – there are by-laws which only allow certain paths to be used. Hide and seek among the trees, swimming or gathering mushrooms: all of these are only allowed in the Nature Park, outside the National Park and outside the majority of nature reserves. In Saxony-Anhalt, 3 % of the biosphere reserve is under strictest protection, as is around 11 % of the total area of nature parks in the Harz. These are frequently EU Sites of Community Importance (SCIs), also known as FFH protected areas. FFH stands for **F**auna (animals), **F**lora (plants) and **H**abitats. Together with EU Special Protection Areas (SPAs) for birds, these comprise the Natura 2000 network of protected areas. The



Boreal owl



Bode Gorge near Thale

four SPAs and 43 SCIs in the Harz/Saxony-Anhalt Nature Park and the Harz/Saxony-Anhalt (Mansfelder Land) Nature Park are a treasure trove of biological diversity. Their riches include more than 2,000 species of ferns and flowering plants and innumerable animal species, ranging from the tiniest creatures in the soil or beneath the bark of trees to the lynx. Among the animals is the boreal owl, which spreads its wings protectively over the mountains and forests of the Harz region in the nature park's logo.

The organisation responsible for the nature park is the Regionalverband Harz, an association formed by the administrative districts in the Harz region. Among well-over one hundred sustaining members are towns and local authorities, other associations and groups and, above all, businesses and entrepreneurs. They all share an awareness that conservation of the treasures found in the Harz region is, in the long-term, worthwhile. Naturally, residents and guests of the nature park must also feel involved in conservation efforts. The following maxim applies: we can only successfully protect what we know!





Going On a Treasure Hunt

Searching for treasure is once more worthwhile in the Harz Nature Park and Geopark! These days it is the above-ground treasures that draw people to the Harz Mountains: the forests, mountain meadows and crystal-clear streams. Mining activity has come to a standstill. Rare species of bat now use the abandoned tunnels as their winter quarters. Show mines near Elbingerode, Strassberg or Wettelrode and museums like the Metallurgical Museum in Thale preserve mining history and memories of the mostly privation-filled lives of the miners and metalworks employees. The forests have regenerated. "Köhlerliesel" is still sung today. Traditional charcoal burning is preserved by the Harz Charcoal Burners Association and the Stemberghaus Charcoal Burning Centre, near Hasselfelde. The water in the streams and rivers is clear once more. Shimmering like gemstones, kingfishers seek their prey



Stolberg Castle



Black Stork

in them. Water drops, as clear as mountain crystal, sparkle on the feathers of white-throated dippers. Black storks and peregrine falcons fly above mature broadleaf forests. The narrow gauge railways of the Harz Mountains, which once transported coal and wood, or carried people to work, today carry tourists through the Selke and Bere Valleys, or from the Holtemme up to the Brocken's peak. Also remaining, naturally, are the many places in the nature park where miners once lived or, in some cases, royalty resided. We begin our treasure hunt at the castle of the Counts of Stolberg-Stolberg. Here, in the Natura 2000 – Harz Information Centre, we find other brochures about selected Natura 2000 protected areas in the Harz/Saxony-Anhalt and Harz/Saxony-Anhalt (Mansfelder Land) Nature Parks, along with the "Seeking Beeches!" brochure. Nineteen brochures provide fundamental information about the Natura 2000 network of protected areas and point the way to pearls of nature in selected SCIs and SPAs.

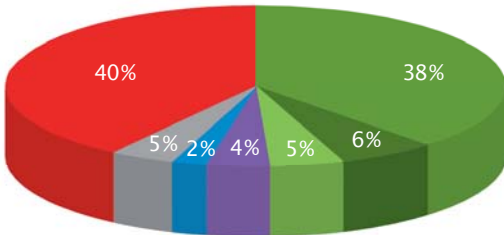


The Area

Name	Bode Valley and Broadleaf Forests on the edge of the Harz Mountains near Thale
Code	FFH 0161 LSA, DE 4231-303
Location	Between Thale, Friedrichsbrunn, Stiege and the Rappbode Valley dam in the Central Harz Mountains, along the Bode River
Characteristics	Bode Gorge, Luppbode and Rappbode Valleys, including bordering forests
Area	5.776 ha
Altitude	170 – 517 m ASL, average 400 m ASL



Bode River near Thale



Distribution of habitat types protected under the Habitats Directive in the area

- FFH-LRT 9130: Asperulo-Fagetum beech forest
- FFH-LRT 9110: Luzulo-Fagetum beech forest
- FFH-LRT 9170: Galio-Carpinetum Oak-Hornbeam Forest
- FFH-LRT 9180*: Forests of Slopes, Screens and Ravines
- FFH-LRT 91E0*: Alluvial Forests with *Alnus glutinosa* and *Fraxinus excelsior*
- Other habitat types
- Non-habitat types



Asperulo-Fagetum beech forest

The European beech is the most competitive species of tree across large areas of the Harz Mountains. It dominates in natural and semi-natural forests from lower altitudes up to areas in the Upper Harz Mountains. Only at altitudes of more than 700 to 800 metres ASL does spruce gradually gain the upper hand. What makes the European beech so successful? In the shade cast by its dense, multi-layered leaf canopy its competitors are completely deprived of direct sunlight. Even beech saplings only have a chance when thick forest is thinned out. Only early in spring, before the leaf canopy has closed, does lush life unfold on the forest floor. Species like wood anemone, sweet woodruff, helleborus and spring pea cover the forest floor. The black woodpecker, Germany's largest woodpecker, feels particularly at home in these forests. They construct their nesting holes in the trunks of mature beeches.



Wood anemone



Luzulo-Fagetum beech forest in Bode Gorge



Luzulo-Fagetum beech forest

As is typical for mountainous areas, the Harz has a highly varied relief. Loess deposited during the Ice Age has been, in part, redeposited or eroded. Erosion processes have resulted in solid rock being exposed at the surface, upon which only thin, nutrient-poor soils could be formed. Most of this stone, such as the greywacke and granite which are widely distributed in the Harz Mountains, contains low levels of carbonate. This favours soil acidification. Where water supply is adequate, Luzulo-Fagetum beech forests typically develop. The majority of typical tree species, such as sessile oak, rowan or sycamore, have light-permeated crowns, which allows the formation of a species-poor herbaceous layer. This allows white wood-rush (*Luzula luzuloides*, order Poales), which lends its name to the habitat type, to grow here.

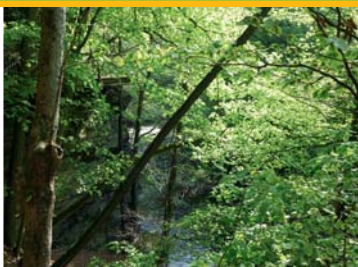


Galio-Carpinetum Oak-Hornbeam Forest

The Lower Harz receives relatively low levels of precipitation. It lies in the rain shadow of the Brocken massif. Therefore, tree species that rely on a good supply of water have difficulties in locations with poor access to groundwater. This provides opportunities for tree species with a high tolerance for aridity. In most cases, the winners are sessile oak and hornbeam. Both species like warmth and therefore occur at lower altitudes in mountainous terrain. Also characteristic of Galio-Carpinetum oak-hornbeam forests are soils with ample nutrients. A light-permeable canopy allows a species-rich herbaceous layer and understorey to prosper, including Scotch mist, lily of the valley and mezeleon. The coarse bark of the oak is home to a multitude of insects. The rare middle spotted woodpecker specialises in prising these insects out.



Oaks at the Sonnenklippe cliffs



Forested ravine



Forests of Slopes, Screes and Ravines

Over millions of years flowing water has cut deep into the stone and created awe-inspiring ravines and valleys. Slips and landslides are not uncommon. Here the European beech relinquishes its predominance. Due to the extreme conditions here a very particular kind of mixed broadleaf forest has developed. Mixed forests occurring in out of the ordinary locations, such as ravines, escarpments and scree slopes, are classified in the Tilio-Acerion slope/scree/ravines forest habitat type. Due to its rarity and special importance for species conservation, protection of this habitat type has a high priority. Characteristic tree species include sycamore, European ash, Scotch elm and small-leaved lime. Mosses and ferns, like the rare hart's-tongue fern, dominate the ground vegetation.



Alluvial Forests with *Alnus glutinosa* and *Fraxinus excelsior*

Particularly along streams and rivers in the Harz Mountains and the surrounding forelands we find a very special kind of alluvial forest: alder and ash forest. A high water table and regular flooding present no problem for the characteristic tree species. Their ability to regenerate from root stock and trunk segments ensures rapid reforestation after severe high-water episodes. Alluvial forests also help protect against flood waves reaching the lower reaches of waterways because they lower flow velocity. In winter and spring the alders occasionally attract huge flocks of Eurasian siskins. The majority of seeds are not, however, eaten. They fall to the snow and are spread by meltwater. In spring the yellow-flowering lesser celandine lights up the forest floor. Those in the know value the leaves of the ground elder as a seasonal wild edible.



Rocky habitats



Floating sweet-grass



Other Natura 2000 Habitat Types

Other protected habitat types only occur on a small scale in this area. Between Treseburg and Thale there are impressive occurrences of **siliceous rocky slopes with chasmophytic vegetation**. Rare mosses, lichens and ferns, like the brittle bladder-fern, grow here, as do isolated rowans and pines. The Bode River and its tributaries, such as the Luppode and the Dambach, belong to the habitat type of semi-natural **watercourses of the plain to montane levels**. Many aquatic plants, including river water-crowfoot and floating sweet-grass, occur here. Along the watercourses **hydrophilous tall herb fringe communities of plains and montane to alpine levels** – with, for example, meadowsweet and butterbur – form the transition zone to the bordering forest. At higher altitudes, around the villages of Allrode and Altenbrak, red fescue, heath bedstraw and baldmoney thrive in rare mountain **hay meadows**.



Into the Nature Reserve

We begin our loop hike through the Natura 2000 area not far from the cable-car station in Thale. Those arriving by bus or train alight at the central bus station or at Thale central railway station. Those arriving by car can always find parking on the grounds of the former ironworks, not far from the central railway station, or there is free parking in the vicinity of the cable-car station. The ironworks and the relatively recently-settled town of Thale were constructed where the Bode River flows out of the Harz Mountains. In 1862, a rail connection to Magdeburg via Halberstadt was completed. Just one year later the Hotel Zehnpfund (120 rooms) opened, opposite the central railway station. Over time it became the most renowned hotel in the Harz Mountains. With it, the town became a tourist destination. THEODOR FONTANE (1819 – 1898) stayed in Hotel Zehnpfund on a number of occasions and his novel "Cécile" is chiefly set there.



Cable-car and Berghotel Rosstrappe

In the park in front of the erstwhile hotel we start our hike to Treseburg and begin by following the Harzer Hexenstieg trail. To the right of the Bode River in the direction we are hiking is the valley station of the Bode Gorge cable-car. From here cable-cars go to the Hexentanzplatz ("Witches dance floor"), while a chairlift runs to the Rosstrappe massif. Passing the Thale Cable-Car Experience Centre, a major tourist attraction in the region, we head into the Bode Gorge Nature Reserve. In 1928 the Prussian government passed a by-law protecting the Bode Gorge "in its natural state". The present-day borders of the nature reserve have remained fundamentally unchanged since 1937. The forest in the valley is excluded from commercial use. As a result particularly good examples of **forests of slopes, screes and ravines**, which have priority protection under the Habitats Directive, have developed. We continue to follow the Harzer Hexenstieg trail for the moment until we reach Hirschgrund and the Königsruhe Guesthouse (checkpoint and stamp no. 178, Harz Hiking Badge System).

Bodetal-Information Thale

Bahnhofstraße 1, 06502 Thale

☎ 0049 3947 - 776800 www.bodetal.de

Opening hours: Mon – Fri 8 am–5 pm, Sat & Sun 9 am–1 pm



In the Gorge

We now find ourselves between the Hexentanzplatz and the Rosstrappe massif, far below them both in the "Grand Canyon" of the Harz Mountains. Passing the guesthouse, where the Prussian King FRIEDRICH WILHELM IV. stayed in 1834, we continue on towards the Teufelsbrücke ("Devil's Bridge") in Bode Gorge. It only became possible to hike on to Treseburg from there in 1865. The steep gorge and the sharply meandering course of the river made the opening of this route quite difficult. It is still a challenging, but extremely rewarding, hike following the left bank of the Bode and allowing hikers to experience the entirety of Bode Gorge Nature Reserve. Both the peregrine falcon and the rare white-throated dipper have found an important refugium here in the reserve. One of the last white-throated dipper populations in the region was able to survive here when, for decades, the



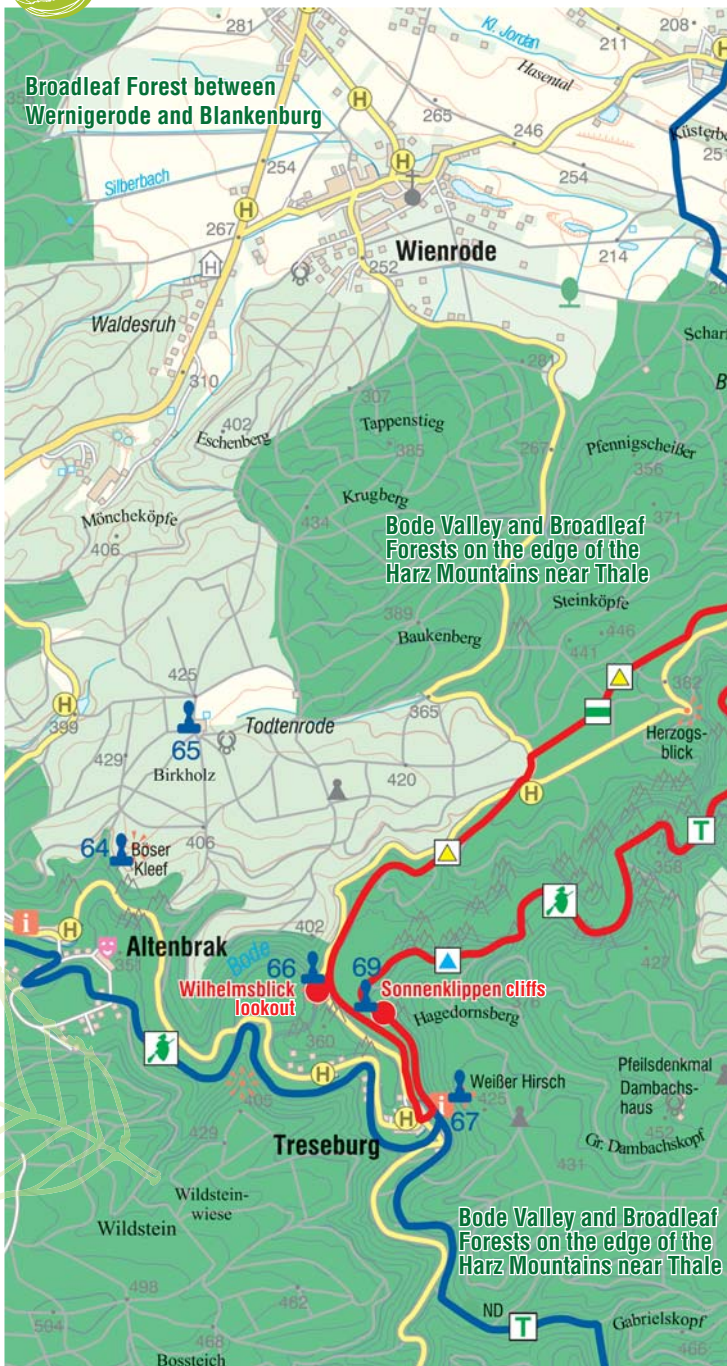
Königsruhe Guesthouse in Hirschgrund

ironworks turned the waters of the Bode River downstream from Thale into a brown sludge. From the Teufelsbrücke we get a good sense of the power of the Bode River. In the narrow gorge the water has formed a colk, or scour hole. Until 1785 there was a waterfall here. It was cleared in order to make the Bode River accessible for log rafting. Subsequently, an energetic climb leads us up to our first spectacular view. The deeply-cut, rocky gorge is laid out before us, with the Rosstrappe massif opposite. Take a moment to look more closely at the habitat of **siliceous rocky slopes with chasmophytic vegetation**. Isolated pines cling to narrow rock ledges. In autumn rowans create a spectacular display of colour. Maidenhair spleenwort and common polypody grow in small niches in the rock. On the other side of the valley, along with xerophytic oak forest, we can admire **Galio-Carpinetum oak-hornbeam forest**. Wild service trees and common hazel also grow there. A population of tree-nesting common swifts lives in this undisturbed forest.



Route suggestion

Broadleaf Forest between Wernigerode and Blankenburg



Bode Valley and Broadleaf Forests on the edge of the Harz Mountains near Thale

Bode Valley and Broadleaf Forests on the edge of the Harz Mountains near Thale



The themed trail "Along Historical Borders" is described in the Regionalverband Harz publication "Germany's Green Belt – Harz Without Borders".

Order from: www.harzregion.de



To Treseburg

It will not have escaped the attentive observer that the kind of stone forming the rock walls along the trail has changed. A little earlier, at the Langen Hals rock formation, a thick layer of diabase forced the Bode River to alter its course; shortly thereafter we come to a shale scree pile. The **Norway maple-lime boulder-scree forest** to the left of the trail transitions to an **ash-sycamore ravine forest** on the downhill side of the trail. Between Grosser and Kleiner Taschengrund a section of light and dark banded strata within the shale catches the eye. This is the result of alternating clay and sand deposition during the Upper Devonian (ca. 370 MYA). Further upstream we come to the Gewitterklippen rock formation. On the Blaue Klippe outcrop grow a small number of pines – relics of the Ice Age – growing in, for them, an extreme location in the middle of the Lower Harz, which is now better-suited to broadleaf forest. The second spe-



Shale scree pile



Sonnenklippe cliffs

cies of conifer which occurs naturally in Bode Gorge is the yew. A side valley of Bode Gorge is named after it. It is called the Kästen Valley: "Käste" means yew in Old High German. Even the naturalist ALEXANDER VON HUMBOLDT (1769 – 1859) marvelled at the natural occurrence of yew here.

Our path through the Bode Gorge comes back toward the river once more. The valley floor widens and there are small islands in the river. The river gravel is held in place by butterbur roots. This is a classic example of the protected habitat of a **watercourse of the plain to montane levels**. At the confluence of the Dambach and Bode Rivers we find a shelter surrounded by **Asperulo-Fagetum beech forest**. The beguiling smell of wild garlic pervades the air here in spring. In the area near the Sonnenklippe outcrop (checkpoint and stamp no. 69, Harz Hiking Badge System) the Bode River is densely lined by lofty alder trees, part of an **alluvial forest with *Alnus glutinosa* and *Fraxinus excelsior* habitat**.



Back via Rosstrappe

In Treseburg we cross the Bode River. River trout can be observed from the bridge. Remaining hidden from view are European bullhead and brook lamprey, two species of fish protected in Europe, which also live in watercourses of the plain to montane levels. Up until the second half of the 18th century log rafts were assembled in Treseburg to be floated downriver to the ironworks in Thale. We can take the chance here to reinvigorate ourselves for the return journey. The trail, marked with yellow triangles, leads us in the direction of Rosstrappe. It branches to the right from the L 93 road to Wienrode, following the road on the downhill side. We climb a set of steps to road level and cross over. Through a tunnel on the opposite side of the road we reach a rewarding lookout point, the Wilhelmsblick (checkpoint and stamp no. 66, Harz Hiking Badge System). From here we have a fantastic view of the Bode River between Treseburg and Altenbrak



Wilhelmsblick lookout



Shelter at Tresenstein

and can admire one of its huge meander curves. Back on the trail we continue to climb to a T-junction of the L 93 and the K 1350 road in the direction of Thale. Signs of commercial forestry are more obvious here. Having put the climb behind us, a shelter awaits at the junction, as does a bus stop. We have to cross the K 1350 and follow the L 93 for just over 100 m further where, on the right, we find a signposted trail to the Rosstrappe. The trail runs more or less parallel to the road, through managed **Asperulo-Fagetum beech forest**. At the end of the trail we cross the K 1350 once again at the point where it meets the access road to the Berghotel Rosstrappe. To the right of the access road is a trail leading through the ruins of the ramparts of Winzenburg Castle to the mountain station of the chairlift. A side trip to the storied Rosstrappe (checkpoint and stamp no. 71, Harz Hiking Badge System) is a must! Those who still have enough energy can take the Präsidentenweg trail down to Thale, otherwise the chairlift can carry you gently down into the valley.

The Natura 2000 protected area is located wholly within the Geopark Harz · Braunschweiger Land · Ostfalen, which was created in 2002. More precisely, it is in parts of the areas defined as Landmarks 8, 9 and 13 of the Geopark. Europe's second largest Geopark is characterised by its remarkable geological diversity and its rich mining history. Natural and man-made rocky outcrops, cliffs and show mines open windows into the history of the Earth. As one of the organisations responsible for the Geopark, the Regionalverband Harz oversees the southern section of the Geopark. Together with other Geoparks in the European and Global Geopark network, under the auspices of UNESCO, it pursues collective goals, including the protection of geological heritage, the promotion of regional development through supporting sustainable tourism and the provision of contemporary environmental education. Brochures about the various Landmarks provide a comprehensive depiction of the Geopark.



Contact zone: dark hornfels above light granite



"Grand Canyon" of the Harz Mountains

The most outstanding gorge north of the Alps has fiery magma and the power of its river to thank for its form. Ca. 290 MYA molten granite intruded into shale that was ca. 100 million years older. The enormous heat metamorphosed the shale into dense, dark hornfels. At the end of the climb, after crossing the Teufelsbrücke, dark hornfels overlying light-coloured granite is clearly visible. Earlier, between Thale and Hirschgrund, only Ramberg granite could be seen. The canyon-like profile of Bode Gorge was formed by the upheaval of the Harz massif during the Tertiary period and the degradation that accompanied it. In areas of softer shale, the Bode flows more peacefully along a broad valley floor. In granite areas it forces its way through a steep, narrow gorge.



Large-leaved Lime

Tilia platyphyllos

Otherwise rarely found growing in the wild, the large-leaved lime is able to prevail over other tree species on stony slopes, in ravines and on boulder scree piles in the mid-levels of the Harz Mountains. The reason for this is its ability to regenerate after landslides using stump sprouts. The large-leaved lime, which is sensitive to late frosts, benefits from the fact that cold air flows down the slope and, therefore, has little effect on them. Together with other tree species the large-leaved lime forms high conservation-priority **Tilio-Acerion forests of slopes, screes and ravines**. Heart-shaped leaves are a defining characteristic of all limes. The leaves of the large-leaved lime are uniformly coloured and feel particularly soft due to the white, downy hair on their undersides. In contrast, the small-leaved lime, which also occurs here, has smooth leaves in which the underside is lighter-coloured.



Fruit and leaves of the large-leaved lime



Fruiting yew



Common Yew

Taxus baccata

Natural occurrences of the common yew in the Harz Mountains can be counted on one hand. They are principally to be found on poorly accessible, steep, rugged cliffs. While this evergreen tree was once widespread, today there are only small natural populations remaining. Yew can live to ages of up to 1,000 years. Yew wood is very hard and was used for bows, lances and arrows. It was used so intensively that its stocks were severely depleted. "Ötzi the Iceman" had tools made of yew wood. Beginning in autumn their red arils shine like pearls, hence the Latin species name *baccata*, meaning: "set with pearls". The common yew has highly poisonous substances in its bark, needles and seeds. Only the red aril is not poisonous. Birds eat these, pass the poisonous seeds and thereby aid in seed dispersal.



Perennial Honesty

Lunaria rediviva

This herbaceous plant, growing up to 140 cm high, is characteristic of shady **mixed forests of slopes, screes and ravines** with humid conditions. It rarely grows singly as it is able to asexually reproduce using runners. From May to June perennial honesty produces delicate, lavender flowers which put out an aromatic, lilac-like scent, chiefly at night. Along with bees, their pollinators include other insects and moths. Like many other members of the family Brassicaceae the seeds ripen in a seed capsule. In August the outer walls of these begin to be discarded. The silvery partition remains attached, however. These are still visible in winter and function to catch breezes and assist in seed dispersal. The genus name *Lunaria*, meaning "belonging to the moon", refers to the characteristic, silvery remains of the seed capsule.



Perennial Honesty



Butterbur



Butterbur

Petasites hybridus

In spring, on the banks of the Bode and on small islands in the river, the butterbur, a member of the Asteraceae family, produces tall, white- to lilac-coloured inflorescences. A single inflorescence comprises up to 80 individual flowers. The large leaves don't unfold until later in the summer. Its roots help consolidate banks and islands. Butterbur is a medicinal plant. In the Middle Ages an extract made from the plant was used to treat plague victims, although its efficacy was questionable. The botanist VALERIUS CORDUS (1515 – 1544) ascribed nine healing powers to the plant and gave it the name "Neunkraut" ("nine-herb"). Today extracts from the roots of butterbur cultivated in controlled conditions are still used in phytopharmacology, but not in Germany. Such medicines are used to treat migraines or as antiallergics.



Mountain Tobacco

Arnica montana

This member of the family Asteraceae with sunshine-yellow flowers prospers in the Upper Harz Mountains on calcium carbonate-free, nutrient-poor, somewhat acidic soils. The strongly aromatic, perennial plant can reach heights of up to 60 cm and forms a rosette of leaves at ground level. Mountain tobacco is typical in both **species-rich montane Nardus grassland on siliceous substrate** and **mountain hay meadow habitats**. The plant once occurred widely in the Harz Mountains, but today it is a protected rarity, as suitable habitat has become scarce. Meadows have been overused, over-fertilised or have been taken over by forest. Mountain tobacco is well-known for its medicinal properties. Its German folk name of "Bergwohlverleih" ("mountain-healthgiving") is, therefore, unsurprising. It provides relief when used in ointments for wounds and for joint and muscular pain. Today it is industrially cultivated for medicinal use. In the past in the Harz Mountains it was also gathered for use as snuff.



Mountain Tobacco



Jersey Tiger



Jersey Tiger

Euplagia quadripunctaria

The Jersey tiger's German name of "Spanische Flagge" ("Spanish flag") derives from its colouration. In the Harz region this species of moth is mainly found in Saxony-Anhalt. Here, the Jersey tiger can be seen during the summer months along waterways, above stony slopes and meadows or at forest edges and in forest clearings. Strictly protected under Annex II of the Habitats Directive, this moth is also diurnally active. Its characteristic wing shape and striking colours make it unmistakable. Its highly contrasting colours are intended to warn off predators, as, in the animal world, garish colours generally indicate non-palatability. Hemp agrimony, with its lavender-coloured flowers, is the moth's preferred food source. They also take nectar from the flowers of the dead-nettle.



Peregrine Falcon

Falco peregrinus

The peregrine falcon, found virtually throughout the world, once again calls the Harz Mountains home. In the 1960s the species disappeared completely from northern Germany. The reason for this regional extirpation was widespread use of the insecticide dichlorodiphenyltrichloroethane (DDT). As a predator of birds, the peregrine falcon sits atop the food chain and the organochlorines in DDT caused their eggshells to be thinner, with fewer eggs surviving to hatch. The last clutch for many years was laid in Bode Gorge in 1970. The use of DDT was banned in the 1970s and, in 1977, a scheme of releasing peregrine falcons bred in captivity back into the wild was begun in the federal states of West Germany and in West Berlin. The first new nesting pair of peregrine falcons in East Germany nested in the Bode Gorge Nature Reserve. The falcons continue to breed on the cliffs here.



Peregrine Falcon



Dipper



Dipper

Cinclus cinclus

The white-throated dipper is at home along clear, fast-flowing mountain streams and rivers. Due to its colouration and behaviour, this starling-sized bird is unmistakable. The white throat and upper breast contrast with their otherwise dark feathers. As it searches for food, the bird climbs agilely over stones, swims and dives in the water. Their wings propel them through the water. The shape of their wings, their compact bone structure and their thick plumage are all optimally adapted to life in and around water. The white-throated dipper feeds mainly on water-dwelling insect larvae, small crustaceans, snails and small fish. The bird is a seal of quality for a watercourse as they only live along clean, almost natural rivers and streams, where they usually produce two broods per year.



Brook Lamprey

Lampetra planeri

The brook lamprey, which is protected under Annex II of the Habitats Directive, lives in the trout zone of semi-natural rivers and streams in the Harz Mountains. Its life-cycle is fascinating: the blind larvae, called ammocoetes, live for a few years buried in sediment. They filter feed on the smallest of creatures. After metamorphosis the adults live only to reproduce: they develop eyes and a suction disk while, at the same time, their intestinal tract degenerates. They now begin their migration upstream to their spawning ground. There, many lampreys lay their eggs at the same time amongst gravel in shallow water. The species was once found throughout Germany, but today only a few stable populations remain, like those in the Bode, Selke and Wipper Rivers and their tributaries. Stream straightening, transverse constructions and pollution have robbed the brook lamprey of its habitats elsewhere.



Brook Lamprey



Daubenton's Bat



Daubenton's Bat

Myotis daubentonii

The Bode Gorge, with its extensive broadleaf forests, complexly-structured open landscapes and bodies of water, offers optimal prey and habitats for 16 species of bat. Crevice habitats, caves and abandoned mining infrastructure, like tunnels, make the Harz region a nationally important overwintering area. All the species found here are protected under the Habitats Directive, including Daubenton's bat. The German name "Wasserfledermaus" ("water bat") betrays its need for water. Along watercourses and at lakes and ponds it uses its acrobatic flight skills to prey on insects above and on the water. It uses its large feet and its tail membrane as "scoop nets" as it does so. They sleep beneath uplifted tree bark, in tree holes and in cracks in building walls. In summer, groups of females will use abandoned woodpecker nesting holes and other cavities as nursery roosts.



Overview map



Special Protection Areas (SPA) and Sites of Community Importance (SCI)

External borders of the Harz/Saxony Anhalt and Harz/Saxony-Anhalt (Mansfelder Land) Nature Parks

Site of Community Importance

Special Protection Area

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| <p>1 SPA and SCI area
Beech Forests around Stolberg
NATURA Tip 1</p> <p>2 SPA and SCI area
Broadleaf Forest between Wernigerode and Blankenburg
NATURA Tip 2</p> <p>3 SCI area
Selke Valley and Mountain Meadows near Stiege
NATURA Tip 3</p> <p>4 SCI area
Bode Valley and Broadleaf Forests on the edge of the Harz Mountains near Thale
NATURA Tip 4</p> <p>5 SCI area
Spaltenmoor, east of Friedrichsbrunn
NATURA Tip 5</p> | <p>6 SCI area
Burgestroth and Broadleaf Forests near Ballenstedt
NATURA Tip 6</p> <p>7 SPA and SCI area
Upper Harz
NATURA Tip 7</p> <p>8 SCI area
Poelsfeld Gypsum Karst Landscape and Breiter Fleck in South Harz
NATURA Tip 8</p> <p>9 SCI area
Brumm Valley near Quenstedt
NATURA Tip 9</p> <p>10 SCI area
Gegensteine and Schierberge near Ballenstedt
NATURA Tip 10</p> <p>11 and further
NATURA Tips in Lower Saxony</p> |
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Founded in 1995 and with its headquarters in Quedlinburg, the Regionalverband Harz is a non-profit association. Its full members include the administrative districts of Goslar, Göttingen, Harz, Mansfeld-Südharz and Nordhausen, as well as the World Heritage-listed city of Quedlinburg. In addition, it is supported by well over 100 sustaining members, including local authorities, clubs and other associations, as well as businesses and entrepreneurs. The Regionalverband Harz is committed to the protection and development of natural and cultural treasures in the Harz Mountains region, spanning the borders of Lower-Saxony, Saxony-Anhalt and Thuringia. The publications of the Regionalverband Harz encourage the public in learning to read the landscape. The Regionalverband Harz is the trustee of the nature parks in the Harz Mountains and, together with its partner association in Königslutter, responsible for the UNESCO Global Geopark Harz • Braunschweiger Land • Ostfalen.



NATURA 2000 in the Harz Nature Park

In this project the Regionalverband Harz pursues the aim of spreading awareness of the Sites of Community Importance and the Special Protection Areas (Natura 2000 areas) in the Harz region. Along with the series of brochures, the Natura 2000 Harz Information Centre, located

in Stolberg Castle, also informs the public about Natura 2000 in the Harz Mountains region. In addition there are information boards located throughout the Natura 2000 areas.

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