



Nature trail

Welcome to the Soos National Nature Reserve (NPR), to a landscape of wetlands, peatlands, salt marshes and reed swamps. Visit places where you can smell gases released from the Earth's crust and the odours of mineral salts whose coloured crystals cover the ground. See bubbling mofettes, taste the warmest mineral spring in the Cheb Basin and listen to the singing of birds that live hidden away. Discover with all your senses an area which you won't find elsewhere in Europe.



Peat forest in the Soos National Nature Reserve

Just one hundred years ago, Soos looked quite differently. There were no trees and, in most of this area, also no vegetation. Peat was extracted here for use in spas, and diatomaceous earth for industrial use. The so-called diatomaceous earth shield was uncovered thanks to Heinrich Mattoni, whose company extracted peat here from the end of the 19<sup>th</sup> century. Diatomaceous earth is made up of shells of microscopic brown algae, diatoms.

The whole area is flat, with almost no drainage, and became water-bearing and re-inundated after the extraction had finished. Later it was colonised by specific vegetation that withstands extreme conditions. These consist of highly acidic soils and waters from the peat bogs, and soils on the loose diatomaceous rock highly salinated from mineral outflows. This natural stage is made even more interesting due to the

tectonic fault through which gases reach the surface, bubbling in the inundated mofettes.

This landscape, colonised by specific and rare species after the extraction had ended, was so unique that it was declared a protected area in 1964, and in 2010 it became an important geological site within the Egeria National Geopark.

Soos covers an area of 268 hectares today. Conservation is mainly targeted at gas seepages and a group of salt marshes, reed swamps, open peat bogs and peat forests, as well as plants and animals bound to these habitats. The rarest species include *Scorzonera parviflora* with its yellow blooms, softstem bulrush (*Schoenoplectus tabernaemontani*) with its noticeably tall stalks, the beautifully coloured bluethroat (*Luscinia svecica*) which nests in the reed swamps, and the majestic common crane (*Grus grus*).



## European Tree Frog, the symbol of the Soos NPR Information Centre

My beautiful shining green colour amazes everyone who sees me for the first time. I am actually a much more beautiful frog than I appear in pictures. But I can quickly change my colour depending on where I am. My great toe discs help me to be an excellent tree climber. In fact, I spend most of the summer in trees, bushes and reed swamps near wetlands. Only for a very short time, one or two days, do I travel to water to reproduce. This is when our grand frog concertos resound from dusk to dawn. But when people come to the water to see who is singing so well, we immediately become silent, as we are quite shy. The protected wetlands in Soos are a perfect refuge, and so hundreds of us live here.



The bluethroat



Scorzonera parviflora



Čísařský pramen (The Imperial Spring)

**The Information Centre of the Soos National Nature Reserve** is the gateway to this unique area and a popular educational trail. The wooden walkway allows visitors to easily visit the wettest parts of the reserve featuring salt marshes, mofettes, mineral springs and peat bogs. The information centre also features outdoor as well as indoor permanent exhibitions and sells tickets and promotional materials. Directly at the entrance to the educational trail is a geological park which places the reserve within the wider context of the Cheb Basin. Further interesting facts about the nature and history of the area can be found in the exhibitions in the buildings on the opposite side of the car park. The premises also include an animal rescue station which keeps permanently handicapped animals whose injuries do not allow them to return to the wild.

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The Soos National Nature Reserve Information Office is operated by the Municipal Museum of Františkovy Lázně, Dlouhá 194/4, 351 01 Františkovy Lázně, CZ.  
[www.muzeumfl.cz](http://www.muzeumfl.cz)

The Soos National Nature Reserve is managed and administered by the Nature Conservation Agency of the Czech Republic (AOPK), regional office for the Slavkovský les Protected Landscape Area, Hlavní 504, 353 01 Mariánské Lázně, CZ, e-mail: slavkovsky.les@nature.cz  
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### Did you know that ...

- the name Soos does not mean the emergency message? In German, this word used to mean barren marsh areas which only served as a refuge for animals.
- the Imperial Spring in Soos is the warmest spring in the Cheb Basin? This mineral spring has a temperature of 14–18 °C.
- the mofette, which looks like a puddle of boiling water, is in fact an escape of carbon dioxide? This gas originates in the earth's mantle and must travel more than 30 km to reach the surface.
- mineral waters are non-renewable natural sources? They are formed underground by rainwater saturated with carbon dioxide mixing with Tertiary saline waters.
- the soil here is so saline that plants that are otherwise seen only on the seashore grow here?

### Thank you for acting considerably towards our joint natural heritage, and for:

- keeping to marked pathways while in the national nature reserve
- driving and parking your cars only where permitted
- showing consideration to the natural sites around you as well as other visitors when cycling
- leaving animals and plants alone in their natural habitats
- not damaging geological features and remarkable monuments
- taking your rubbish home with you





Bublák and the Plesná Floodplain



### Tip for a trip: Bublák and the Plesná Floodplain

The Plesná brook still maintains its naturally winding course and inundates the surrounding land in the spring. It creates a long floodplain. The wild and inaccessible local nature is accompanied by volcanic phenomena of the tectonic fault. It is an area with a high occurrence of earthquake swarms, the most intense in the Czech Republic. Just like in Soos, these sites also feature gas leaks and bubbling mofettes. The Bublák and the Plesná Floodplain National Nature Monument is only 4 km east of Soos, between Mlýnek and Hartoušov.



View of Bad Neualbenreuth



### Tip for a trip: Via Komorní hůrka and Železná hůrka Hills to Bad Neualbenreuth Spa

Two of the youngest Czech volcanoes can be found in the Cheb Basin. Besides the well-known Komorní hůrka, near Františkovy Lázně, there is Železná hůrka, which lies just inside the state border. They are linked to Johann Wolfgang von Goethe, who helped to make them famous. The Železná hůrka National Nature Monument is best accessible from Bad Neualbenreuth, a romantic Bavarian town with timbered architecture which also offers spa treatment.



Vysoký kámen lookout point



### Tip for a trip: Vysoký kámen Hill

Soos is one of the many natural points of interest in the Cheb Basin. It is an area surrounded on every side by mountains that offer unique views of the landscape. At the boundary between the Krušné Mts. and the Elstergebirge (known as Halštrovské Mts. in Czech), most of which lies in Saxony, is the Vysoký kámen Nature Monument. This rock formation is interesting not only due to its geological origin but also its valuable natural habitats. Since the 19<sup>th</sup> century it has been primarily a popular natural lookout point and a trip destination in the charming landscape.



Castle Seeberg



### Tip for a trip: Castle Seeberg

The historical region around Cheb, also known as Egerland, isn't much larger than the Cheb Basin. The specific regional history is highlighted today by the seats of so-called ministerials from the time when the Cheb region was part of the Holy Roman Empire. Among them is a former ministerial castle called Seeberg. The exhibitions present the history of the place from Middle Ages to the 20<sup>th</sup> century as well as the Egerland rural architecture and culture.



Goethe's rock



### Tip for a trip: Smrčiny Nature Park and Halštrov Nature Park

The point where the Czech, Bavarian and Saxon borders meet, called Trojmezí, is where the Smrčiny Nature Park is located ([www.smrctiny.cz](http://www.smrctiny.cz)). It is a submontane landscape where forests, meadows and peat bogs abound. Several hiking and cycle trails run through the park and connect it with other nature monuments as well as the national heritage of the Ašský enclave. On the trip through the "Czech Vogtland", one should not miss the ruins of Neuberg castle in Podhradí, Bismarck's lookout point at Háj hill near Aš, or Goethe's rock near Hazlov, part of the Ašský quartz vein.



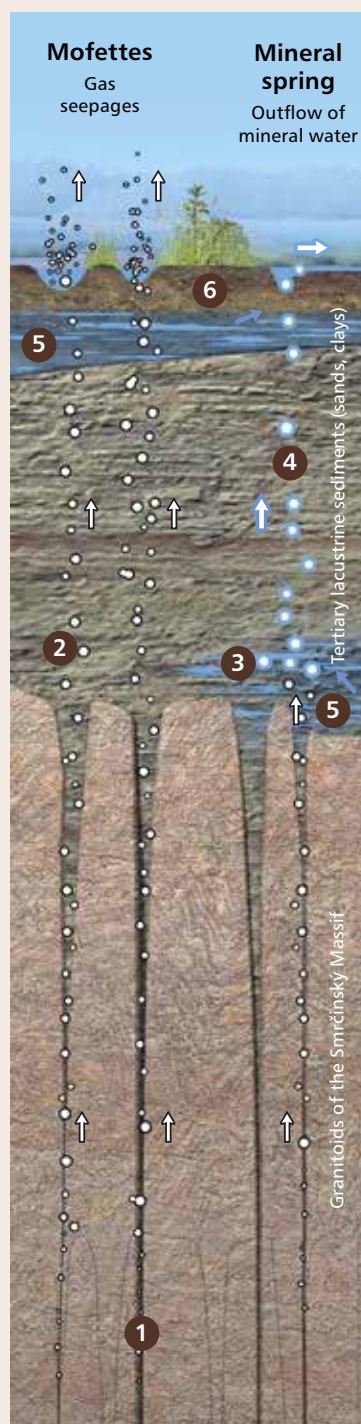
Museum of Geophysics in Skalná



### Tip for a trip: Museum of Geophysics in Skalná

At the centre of the most seismically active area of Bohemia, you can visit a unique museum of geophysics. Come and discover the secrets behind earthquakes through interactive exhibits, or follow online measurements of seismic events. The adventurous experience can be enhanced by a visit to a shaft with a measurement station that is part of the WEBNET network and monitors this area.

## How mofettes were formed?



- 1 Gases from from within the Earth are pushed through cracks in the tectonic fault up towards the surface
- 2 Released gases permeate through a layer of sediments
- 3 Underground water is mixed with released gases
- 4 Water is enriched with mineral salts from layers of sediments
- 5 Underground water
- 6 Diatomaceous earth, peat



A mofette in the Soos NPR

