



**A journey in pursuit
of natural beauties
of the Glacensis Euroregion**



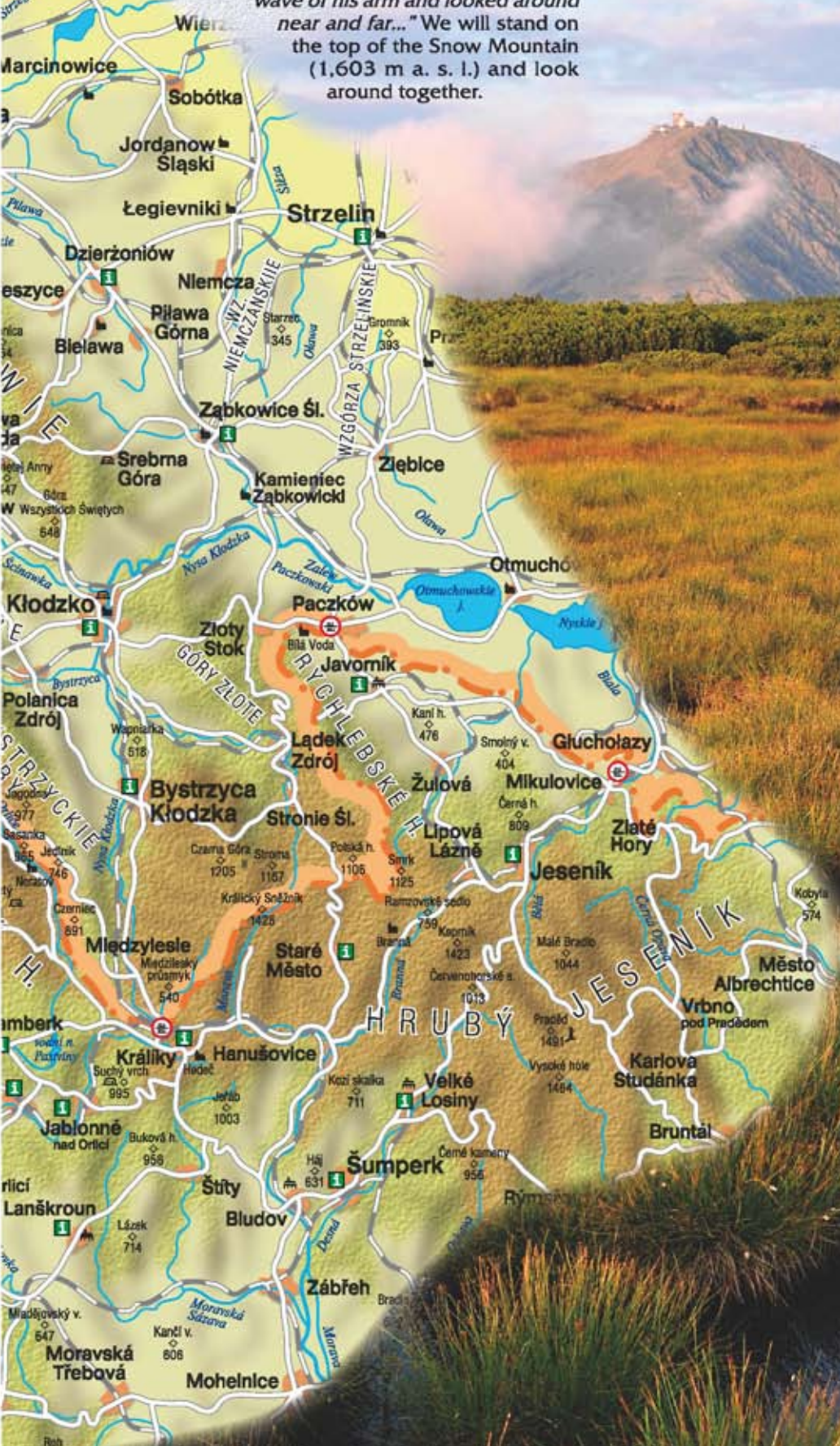
In search of natural beauties of the Glacensis Euroregion

Dear readers,

we are inviting you to a short journey in pursuit of natural beauties of the **Glacensis Euroregion** situated on the territory of northeastern Bohemia and the Lower Silesian duchy. What is characteristic for its geography is its diversity. From the sky touching the mountains and solitary rocks, over picturesque foothills up to the lowlands interwoven with romantic winding streams. The entire region is full of fascinating places. Many of them are fairly well known and become a frequent destination for visitors from all over Europe, other localities are less known. However, to describe all of them would mean to write an extensive scholarly treatise. A mere survey of the natural beauties of the Královéhradecký Region represents a comparatively extensive publication. Therefore we are going to try to draw your attention to at least a few interesting places that are worth a visit.



To cover the whole area at least a little, let us try to look at it for example like the ruler of the Giant Mountains, Růbezah! (Krkonoš), who once: *"stood on the peak of the Snow Mountain, scattered the clouds with a single wave of his arm and looked around near and far..."* We will stand on the top of the Snow Mountain (1,603 m a. s. l.) and look around together.



Eastern Giant Mountains and its foothills

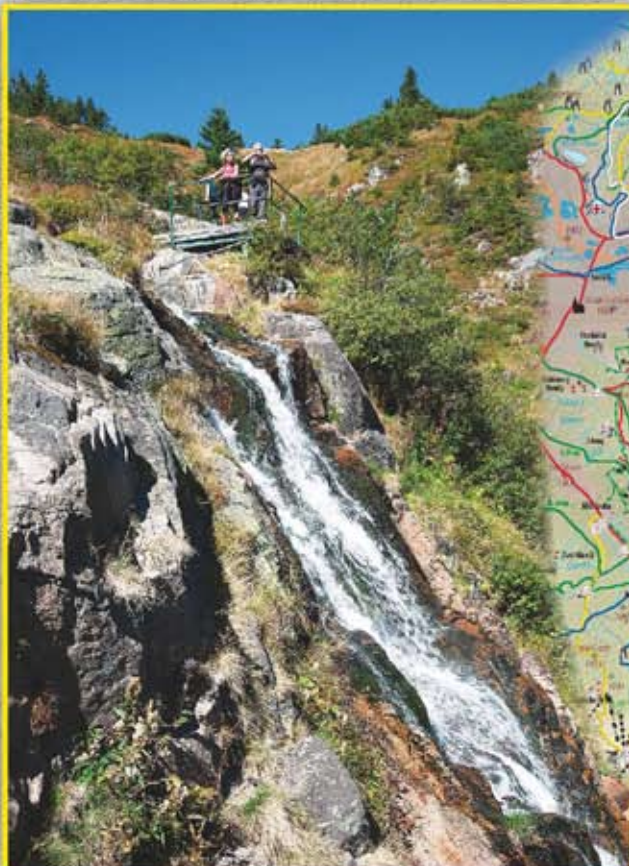


A view from the top of the Snow Mountain into the Obří důl Valley and of the Giant Mountains Range in the northwestern direction

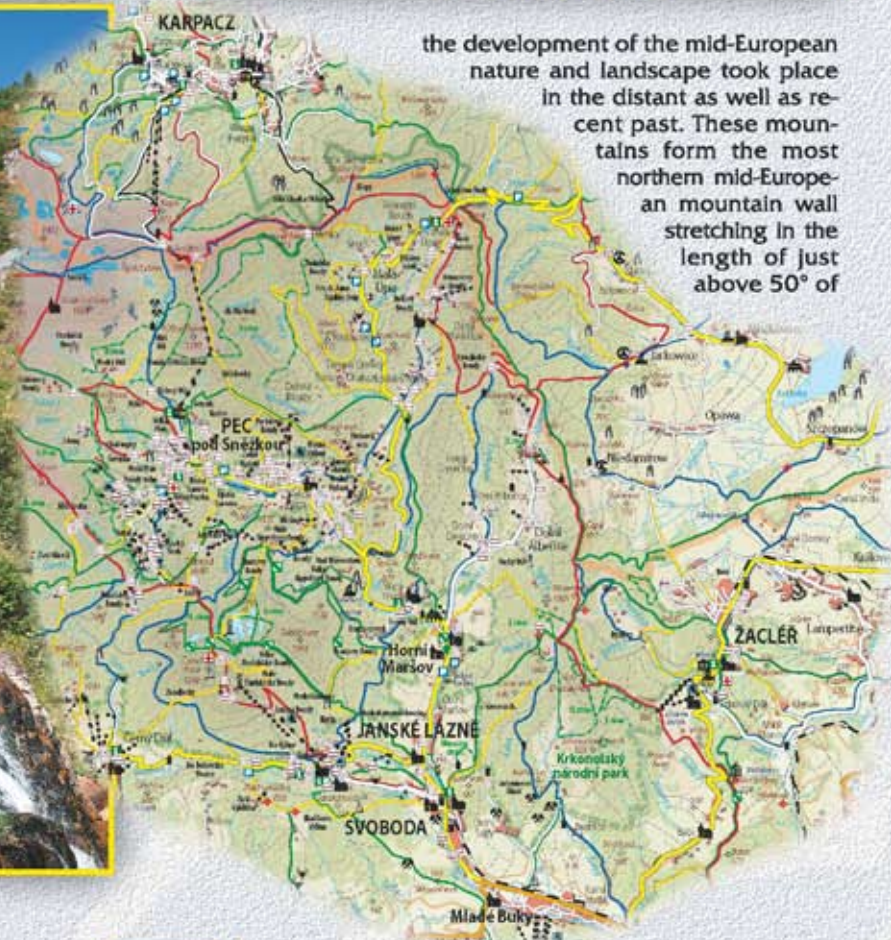
Right at our feet we have the Giant Mountains (Krkonoše), one of the most attractive tourist spots. They are the highest mountains not only in the Czech Republic, but also in Mid-Europe north of the Alps. Despite their small area and not a very high altitude, they abound in extraordinary variety of countryside, flora and fauna, which distinctly exceed the natural diversity of the surrounding European mid-mountains. It is due to their exceptional geographic position in the middle of Europe, where events shaping

Do you know that:

*the highest peak is the Snow Mountain 1,603 m a. s. l. (the highest point is on the Polish side of the peak)?
Here spring/flow: the Elbe (the Main Elbe), the White Elbe, Úpa, the Small Elbe, Jizerka, Mumiava, Kamienka, Łomniczka, Bobr
What you should see: the spring of the Elbe, Giant Mountain waterfalls the underground secret of the Snow Mountain and the surroundings of the Černý Důl Valley*



The Elbe Waterfall

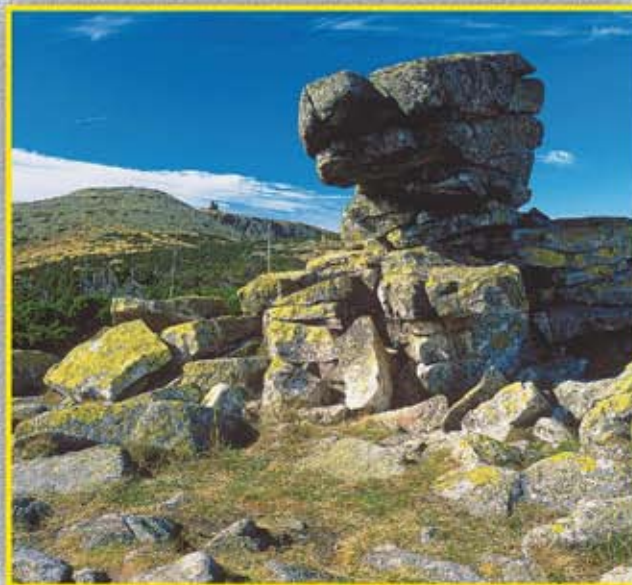


the development of the mid-European nature and landscape took place in the distant as well as recent past. These mountains form the most northern mid-European mountain wall stretching in the length of just above 50° of

northern latitude. Their slopes protrude above the Alpine forest border and thus represent a massive natural mound on the edge of the extensive lowlands of Germany and Poland. Their length is approximately 35 km and their main ranges and valleys are arranged in the northeast - south-east direction. This significantly influences all geographic, climatic and biological qualities of these European mid-mountains and their surroundings.

They have been a very often sought-after tourist destination since the 19th century, which has surely contributed to the development of tourist enterprise, but on the other hand the high number of tourists has started to endanger the nature itself. For its protection, the Giant Mountains National Park was established in 1959 on the Polish side (Karkonoski Park Narodowy) and in the year 1963 on the Czech side as the so-called Krkonošský národní park (KRNAP). Today both the parks belong to the bilateral Karkonosze / Krkonoše Biosphere Reserve formed in 1992 and comprising the area of over 60,000 ha. Who gets to know the Giant Mountains in their whole wildness and beauty, he will fall in love with them forever. And the mountains have plenty to offer. Splendid mountain ranges, steep valleys, gorges and pits as wild as their ruler Růbezahel. We can find here rocks of fantastic shapes, debris, blockfields, fierce mountain torrents as well as lakes. In many places we can find traces of Pleistocene glaciation. The most attractive ones include the glacial valleys (cirques) called on the Polish side the basins of the Wielki Staw and Maly Staw (meaning ponds, even though these are glacial lakes, and we should admit that they are on the territory of the neighbouring Euroregion Nysa), the basin of Lomničky, the Obří důl (Giant Pit) Valley, the Kotelní jámy (Basin Pits) or Sněžné jámy (Snow Pits) with numerous moraines, in the shadow of which we often find the fields of eternal snow. Unique beauty distinguishes also the range granite rock gardens. To name just a few, these are for example the Harrachov Stones, the Male Stones (Czeskie Kamienie in Polish), the Maiden Stones (Slaşkie Kamienie) or the Swine Stones (Trzy Swinki). The Giant Mountains waterfalls are utterly ravishing, especially at the time of spring thaw: the Elbe Waterfall (40 m), the Pančava Waterfall (130 m), the Mumlava Waterfall,

The Wielki Staw glacial lake



The twin peak "Male Stones" (Mužské kameny, Czeskie Kamienie)

and on the Polish side the Szklarki Waterfall, the Lomniczki cascades or the Kamieńczyk Waterfall (27 m).

Nevertheless, nature is formed by flora as well as fauna. Who is occupied in a rather more detailed way with botany or biology, he discovers in the nature of the Giant Mountains evidence of division into altitudinal zones. The zone of pine groves merges into the zone of dwarf-pines, moreover enriched with the downy willow and the Silesian willow, or the Carpathian birch or the bird cherry. The vegetation in the highest places resembles peat and lichen tundras. Some species grow only in these places (so-called endemics), such as for example the mossy saxifrage, the Bohemian bellflower, Sudeten rowan and others. Let us mention some animals too, at least the Alpine shrew or the Eurasian dotterel. However, it is necessary to point out again that the nature of the Giant Mountains is **strictly protected**.





The Vraní Mountains seen from the village of Zlatá Olešnice

Vraní Mountains, in Polish Góry Krucze

Not a very big, approximately 8 km-long massif of the Vraní Mountains (Crow Mountains) catches everybody's eye with its very steep slopes and its distinct superelevation over the surrounding terrain (about 400 m). It is situated in the Trutnov region east of Žacléř and with its lower, but more extensive part it continues into Poland under the name Góry Krucze. The Vraní Mountains are an independent geomorphological district of the Broumov Highlands, which closely borders on the Giant Mountains. Polish geographers include this mountainous country in the western part of the Stone Mountains (Góry Kamienne), a part of Central Sudetes (Sudety Środkowe). At the first sight, The Vraní Mountains have a typical character of a flat mountainous country. From the west we can see steep slopes, which reach here the greatest height, whereas the mountains gradually become lower towards the east. The highest mountain is Královecký Špičák (880.6 m a. s. l.), the summit of which offers a view of Rýchory on the opposite side and the western part of the Žacléř Highlands. As far as waters are concerned, it lies on the line of the European water divide. The southern streams are located in the catchment of the Úpa River and flow off to the North Sea, whereas the northern streams flow into the Bobr (Beaver) River and their waters further head for the Baltic Sea.

The flora of the Vraní Mountains depends on their geological structure. Volcanic rocks rich in quartz, very close to granites

In their chemical composition, form nearly the whole mountain range.

On the foundation poor in nutrients we can find just poor vegetation;

a somewhat richer abundance occurs only on the banks of streamlets and in deciduous forests - beechwoods and talus maple groves.

Perhaps the only botanical oasis is the remarkable Kruczy Kamień Nature Reserve with the adjacent valley near the town Lubawka in Poland. The blue tourist mark leads from here towards the Kruczy Kamień Nature Reserve with rare plants and animals, which also includes a system of rock formations.



Kruczy Kamień

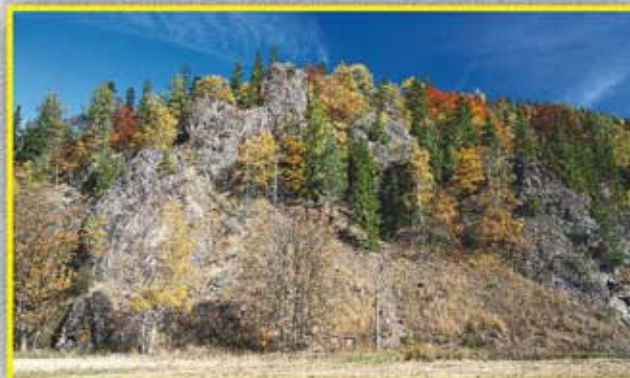
(Raven Stone): a nature reserve of a geological and landscape character comprising the area of 10.2 ha, declared already in the year 1954. Subject to protection are porphyry rocks with up to 30-metre-tall sides, richly overgrown with plants, especially in the debris at the foothills. We can find here rock and thermophilic species (e.g. white stonecrop, common houseleek, swallow-wort, three kinds of maiden-hair spleenwort and others). As a rarity we can mention the current attempt at the reintroduction (deliberate release into the wild) of the beautiful mountain apollo butterfly, which had become extinct here almost a hundred years ago. On the rocky Krucza Skala promontory (Raven Rock; 681 m a. s. l.) there is an outlook tower offering a view of an unusually shaped landscape of the Vraní Mountains.

Some interesting places are situated aside from any tourist marks, too. Lovely is for example the Devil's Gorge above the village of Bečkov, decorated with rhyolite cliffs. What deserves the greatest attention among them is the rock needle in the left slope (rhyolite tor). In a rock side under the Bečkov hill, there is an unusually strong spring, reminding of a karst seep in a limestone cave area, which dashes over a series of cascades and then forms the 2.5 metre-tall Bečkov Waterfall.

Do you know that:

the Vraní Mountains represent modest remnants of a once mighty Paleozoic volcano?

What you should see: **Kruczy Kamień Reserve**
Devil's Gorge



The Kruczy Kamień Nature Reserve



The landscape of the Jestřebí Mountains by Dolní Vernéřovice



The forested range of the Jestřebí Mountains seen from Odolov

Jestřebí Mountains

South of the Vraní Mountains there are situated the Jestřebí Mountains, forming an approximately 20 km-long, mostly forested mountain range, stretching between the valleys of the Petřkovice Brook and the Metuje River near Hronov. The highest peak is Žaltman (739 m), earlier called Hexenstein (Stone of Witches). On the peak rock there has stood since 1967 the 14-metre-high iron lookout tower with a panoramic view of the Giant Mountains, Rýchory, the Owl and the Javoří Mountains, the Teplice-Adršpach Rocks, the Broumov Walls, and if we are lucky, then we can also behold the Orlické Mountains, Králický Sněžník, Zvíčina, sometimes even the Trosky Castle. We can see beautiful views of the region of the Čapek brothers, Božena Němcová and Alois Jirásek also from other places of the ridge part of the Jestřebí Mountains.

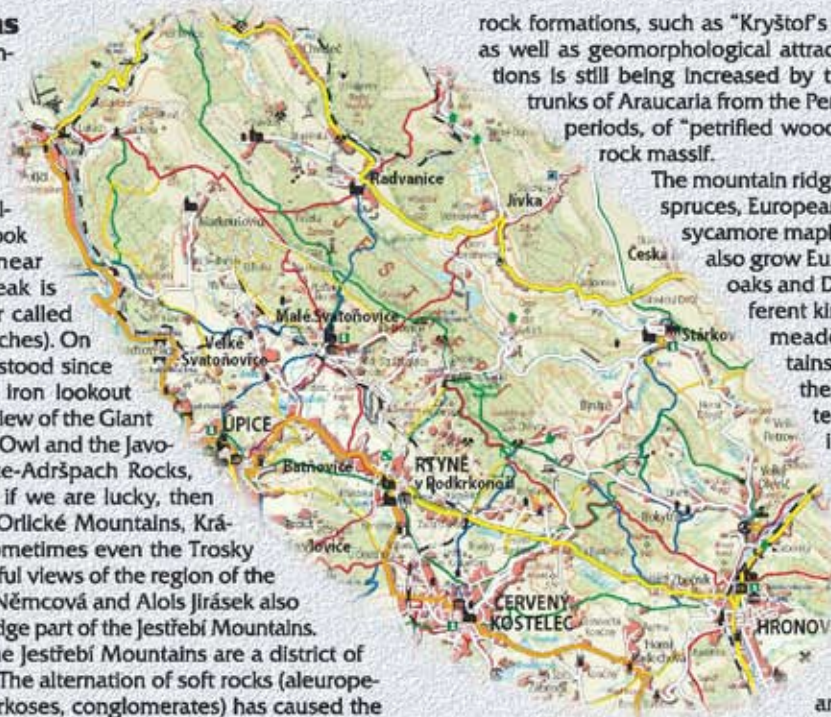
Geomorphologically, the Jestřebí Mountains are a district of the Broumov Highlands. The alternation of soft rocks (aleuropelites) and harder rocks (arkoses, conglomerates) has caused the formation of longitudinal little ridges and shallow dips. On the front slopes of many of these little ridges, over 10-metre-high rock sides with bedrock steps have been formed, interestingly shaped by weathering. We can also find here a complete set of

rock formations, such as "Kryštof's Stones" etc. The geological as well as geomorphological attractiveness of these rock sections is still being increased by the occurrence of fossilized trunks of *Araucaria* from the Permian and the Carboniferous periods, of "petrified wood", deposited directly in the rock massif.

The mountain ridges are forested with Norway spruces, European beeches, not unfrequently sycamore maples occur in the debris. There also grow European larches, northern red oaks and Douglas firs. Every spring different kinds of flowers bloom on the meadows of the Jestřebí Mountains. The best-known among them are millions of protected snowflakes, forming white carpets.

The landscape formation of the Jestřebí Mountains was also affected by extensive mining activity. We are reminded of it by defunct drifts and shafts and by today closed mines in Radva-

nice and Malé Svatoňovice and their pits. These localities are connected through the Mining Educational Path.



A forest in the valley of the Jivka brook



Alongside the Elbe and Úpa - rivers



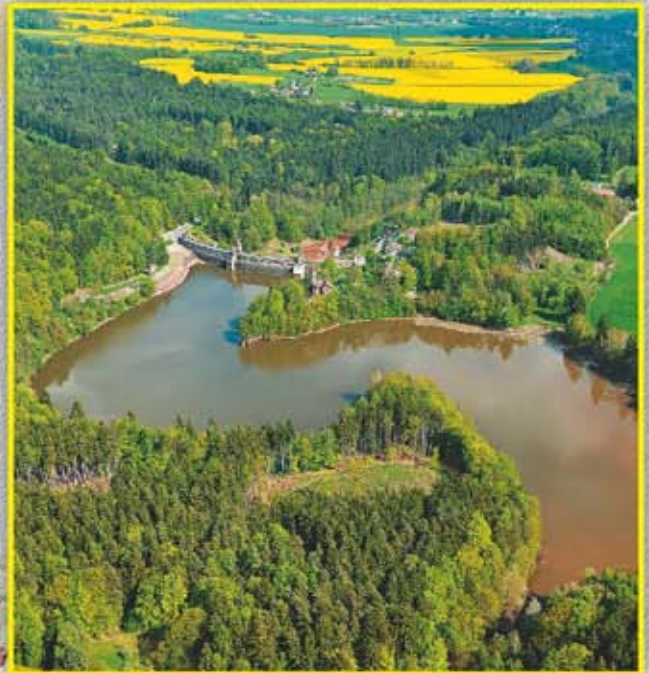
The spring of the Elbe river

As far as waters are concerned, we can just mention that the Giant Mountains, the same as most of our northern bordering mountains, belong to the European water divide. The springs of the northern hillsides of the main ridge drain their waters to the Baltic Sea, whereas the other springs empty into the Elbe and along with its waters they head for the North Sea.

Now let us move along the flow of the rivers into the Bohemian foothills. We are leaving the deep valleys of the Giant Mountains and ahead of us there opens the beautiful picturesque landscape of the Sub-Giant Mountains, which continue under the Zvičina hill (671 m a. s. l.).

The Elbe Valley forms here romantic recesses, so it is no wonder that the region under Zvičina (called Podzvičínsko), more and more often becomes a much-sought-for location. Among its tourist attractions definitely ranks the Forest Kingdom dam (Les Království), a technical monument completed in 1919, the oldest of its kind in Central Europe. Nature lovers will definitely find time to visit the zoological garden in Dvůr Králové nad Labem, which is famous for its African safari.

The Zvičina hill seen from Pecka

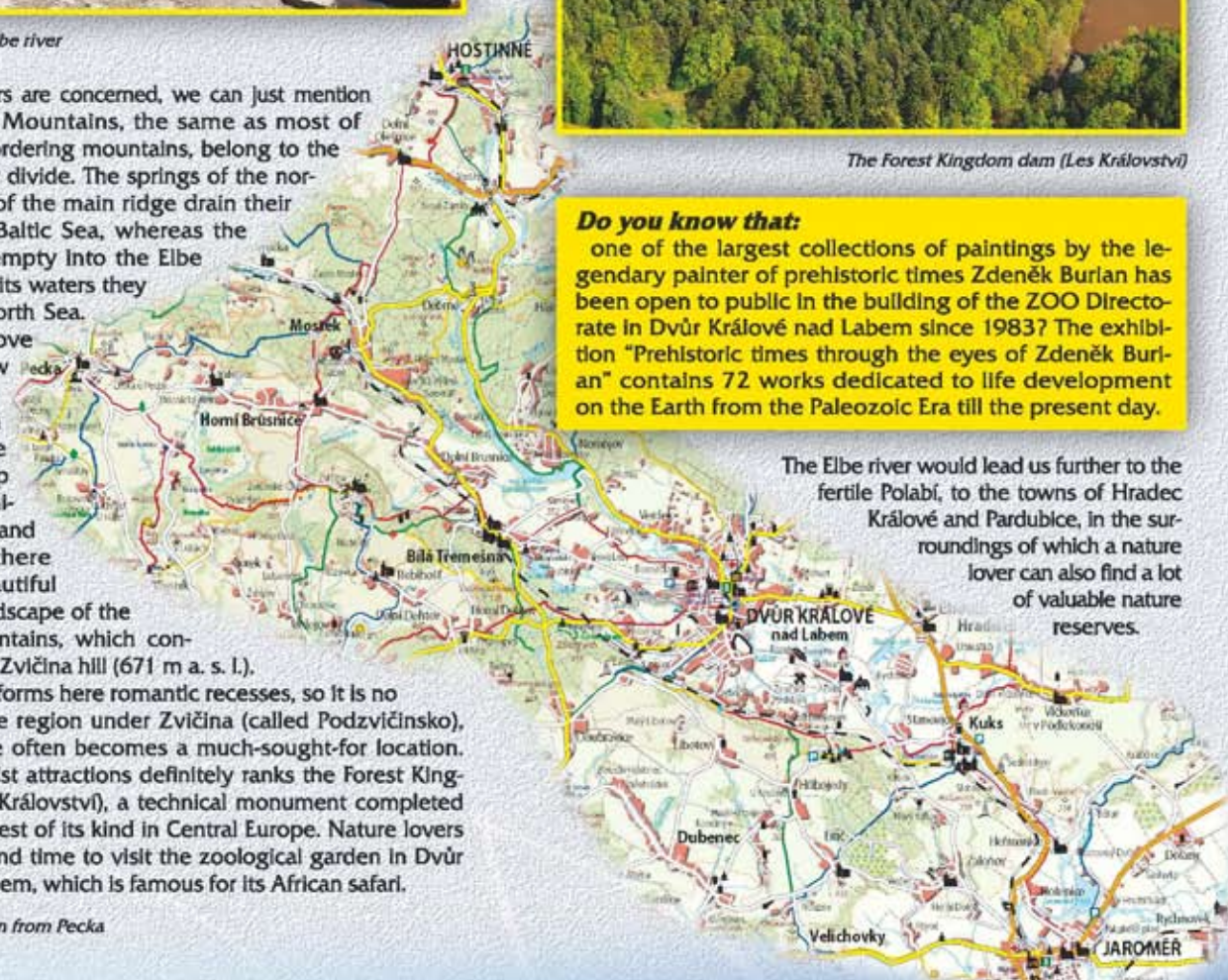


The Forest Kingdom dam (Les Království)

Do you know that:

one of the largest collections of paintings by the legendary painter of prehistoric times Zdeněk Burian has been open to public in the building of the ZOO Directorate in Dvůr Králové nad Labem since 1983? The exhibition "Prehistoric times through the eyes of Zdeněk Burian" contains 72 works dedicated to life development on the Earth from the Paleozoic Era till the present day.

The Elbe river would lead us further to the fertile Polabí, to the towns of Hradec Králové and Pardubice, in the surroundings of which a nature lover can also find a lot of valuable nature reserves.





The Úpa stony riverbed near Slatinský mlýn



A flood-plain forest in the Dubno reserve with a little monument commemorating the battle from the year 1866

Another river important for our region is Úpa. Due to the altitude of its spring of 1,432 m a. s. l., it is the highest springing Czech river. Not far from its spring area, Úpa falls abruptly by almost 400 m and forms the Upper Úpa Waterfall and the Lower Úpa Waterfall. Through the Obří důl (Giant Pit) and the Beech Valleys it heads towards Pec pod Sněžkou. Below Svoboda nad Úpou it leaves the Giant Mountains and flows through their foothills.

Starting with Havlovice the Úpa valley is called Babiččino údolí (Grandmother's Valley). The famous Czech writer Božena Němcová (1817/20? - 1862) spent her childhood here as Barunka Panklová and with her work Babička (Grandmother) she doubtlessly turned this valley into a pilgrimage site. From the Slatinský Mill the Grandmother's Valley is protected as a National Natural Monument Babiččino údolí with the total area of 780 ha. Subject to protection are the river-basin, the forest and meadow herbage. This part includes well-known places such as Staré běldlo (Old Bleaching Ground), Viktorčín splav (Viktorka's Weir) and the chateau of Ratibořice. Among the attractions also belongs a technical monument, the irrigation system from the 19th century. The National Natural Monument Grandmother's Valley spreads in the length of about 15 km through the romantic valley of the Úpa river from Havlovice up to Česká Skalice. The Úpa floodplain is mostly surrounded by forested hillsides with mixed stand. The charming valley was first called "Babiččino údolí" by the physician and writer Otakar Jedlička from Smiřice. Through the entire valley leads a very popular cycle and educational path. It is 7.5 km long and provides detailed information on 18 boards and 7 literary and scientific stops.

On the way to the Grandmother's Valley we can visit the Dubno nature reserve, which is located approximately 2.5 km eastwards from the centre of Česká Skalice.

The reservation formed by the natural floodplain forest of a primeval forest type was declared in 1956 and it comprises the area of 86.19 ha. Apart from forests mainly consisting of oaks (the oldest at the age of 270 - 320 years), the reserve is also composed of the adjoining meadows and the Zličský pond. This area has been chosen as a rookery by a considerable number of birds. There can be seen for example the Eurasian golden oriole, the collared flycatcher, the great reed warbler as well as the sedge warbler, the red-backed shrike, the middle spotted woodpecker, the tawny owl, the European turtle dove and others. Remarkable is the great amount of molluscan; with the number of 70 various species Dubno is one of the richest finding-places in eastern Bohemia.

In the lower section of the Úpa stream, a part of water is drained away from the river by the upstream waterway supplying the Rozkoš water reservoir. However, the water from the dam does not return into Úpa, but it flows out into the widened bed of the Rozkoš pond, which empties into the Metuje river after 3.5 km.

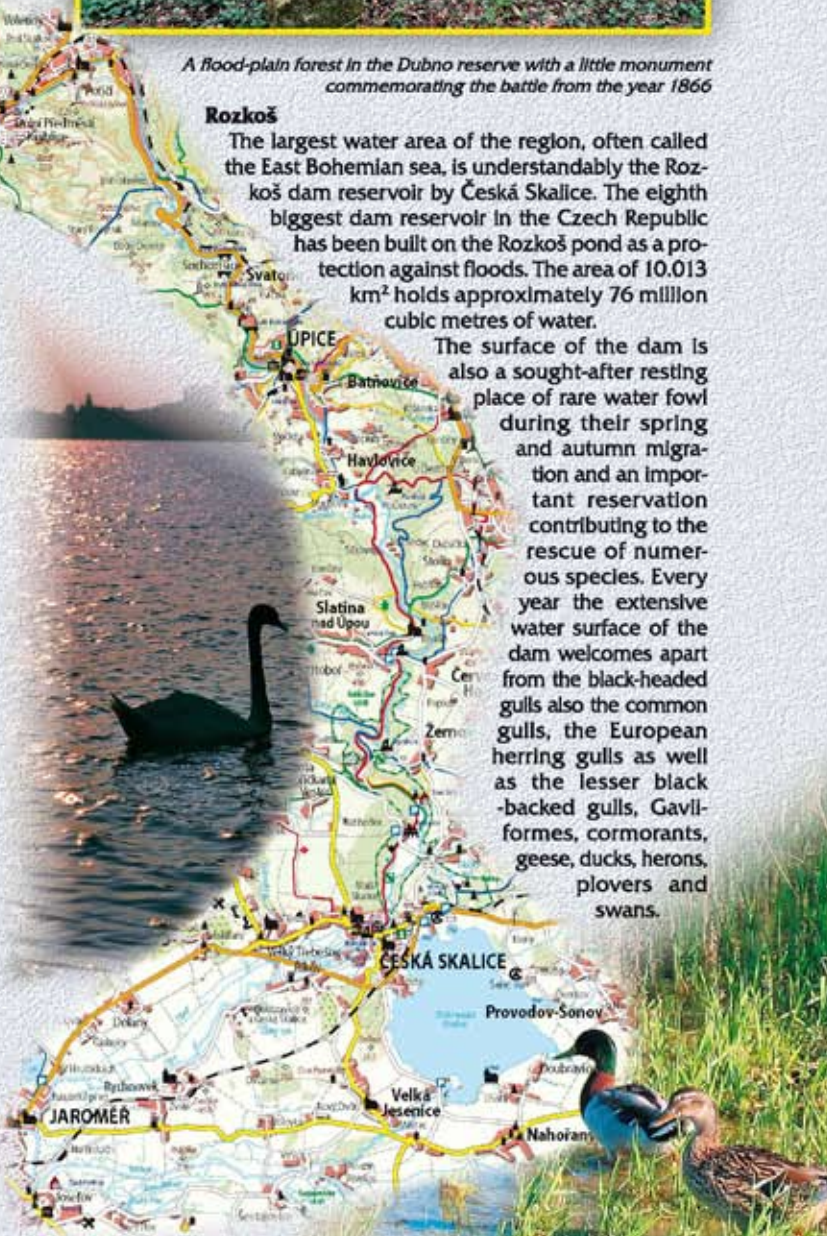
An aerial view of the Rozkoš water reservoir

Rozkoš

The largest water area of the region, often called the East Bohemian sea, is understandably the Rozkoš dam reservoir by Česká Skalice. The eighth biggest dam reservoir in the Czech Republic has been built on the Rozkoš pond as a protection against floods. The area of 10,013 km² holds approximately 76 million cubic metres of water.

The surface of the dam is also a sought-after resting place of rare water fowl during their spring and autumn migration and an important reservation contributing to the rescue of numerous species. Every year the extensive water surface of the dam welcomes apart from the black-headed gulls also the common gulls, the European herring gulls as well as the lesser black-backed gulls, Gaviiformes, cormorants, geese, ducks, herons, plovers and swans.

There also appear the white-tailed sea-eagles, ospreys, the rare parasitic jaeger, Caspian terns as well as a lot of winter guests such as the snow bunting, the twite, the shore larks and the sanderling, nesting far beyond the polar circle and hibernating in western and southwestern Europe.



Rock towns in the Kladsko borderland and the Kladsko region

If we look through the eyes of Růbezahel again, this time in the southeast direction along the state border, we can see the range of the mountains, where each section has its own inner charm and is more beautiful than the others due to something. Within eyeshot there are the **Broumov Highlands** on the territory of which we can find the largest nature reserves in the Czech Republic, especially the Adršpach-Teplice Rocks, the Broumov Walls and further on smaller rock towns such as the Cross Hill, Ostaš and others. Their protection is secured by the Broumovsko Protected Landscape Area.

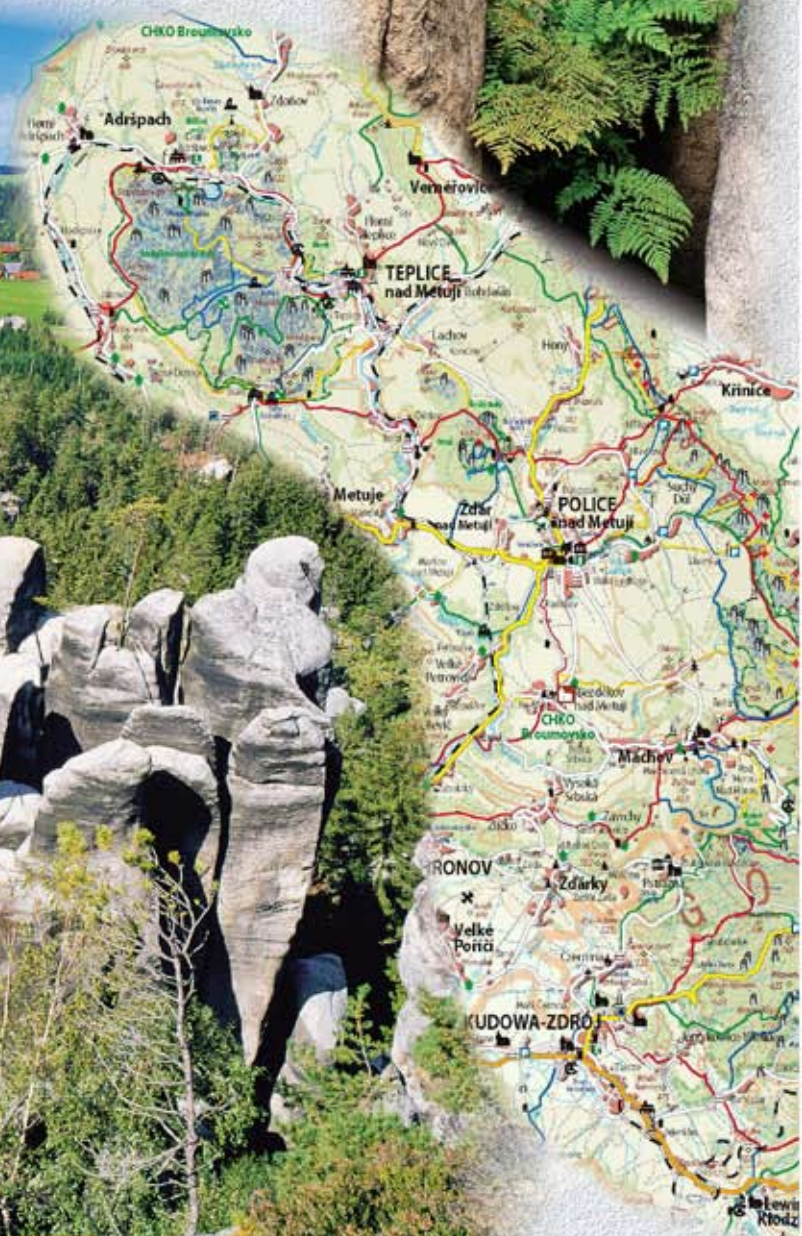
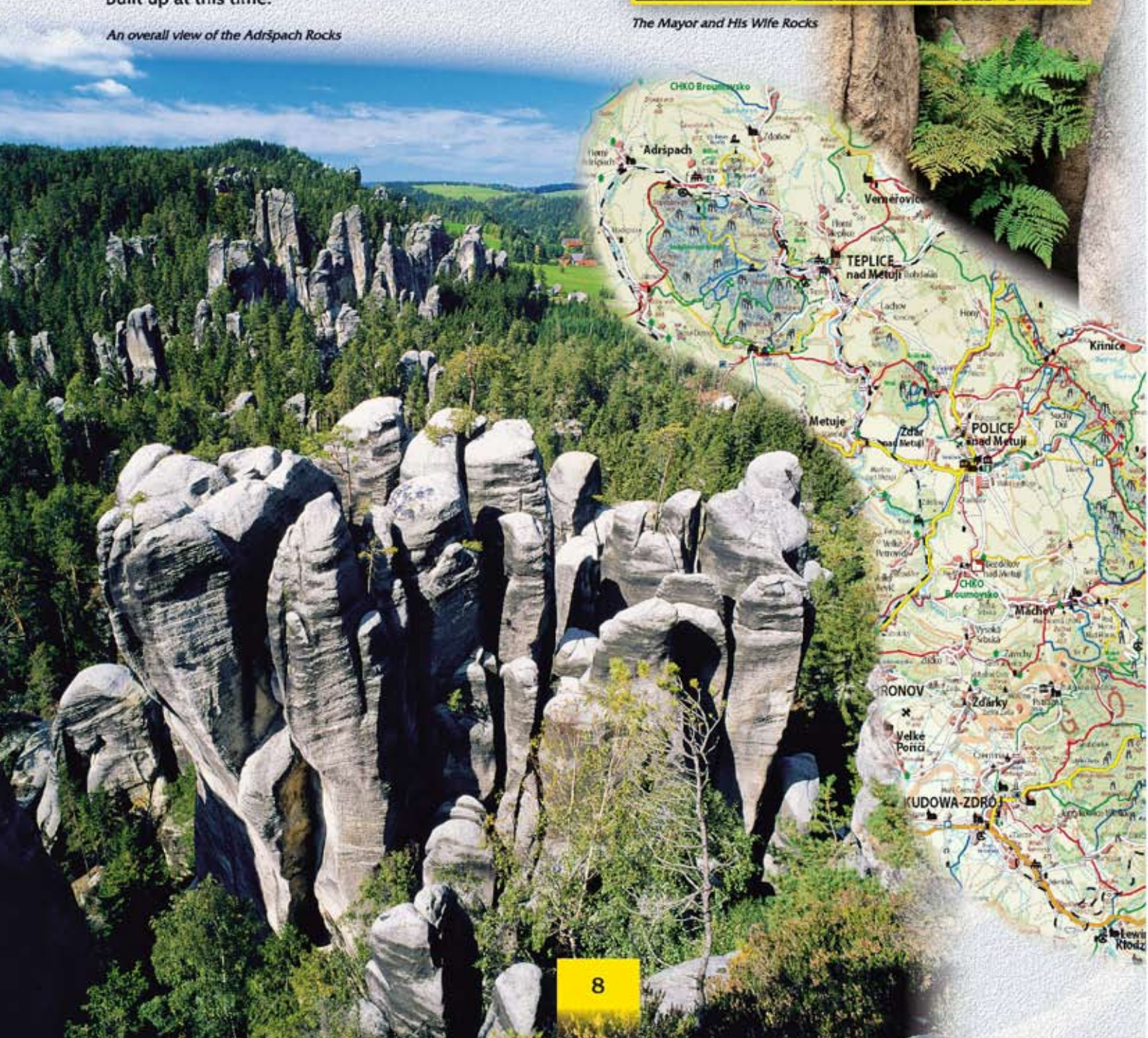
A little jump into history

Let us go back to school for a while and recall the geological past at least a little bit to clarify the origin of the impressive rock giants. Approximately 330 million years ago, in the Carboniferous period, among the then probably powerful mountain chains of the Orlické Mountains, the Giant Mountains and the Polish Owl Mountains there was formed an extensive basin, where thick layers of conglomerates, sandstones and claystones built up at this time.

An overall view of the Adršpach Rocks



The Mayor and His Wife Rocks

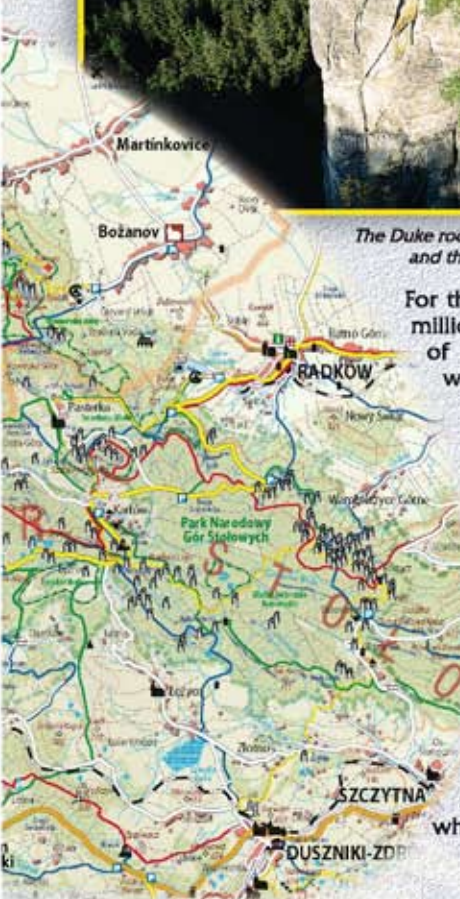




The Garden of Růbezahel in the Teplice Rock Town



The Duke rock tower with a sandstone lake and the Cross Hill in the background



For the next several tens of millions years, the territory of northeastern Bohemia was geologically relatively inactive and it just came to rock erosion and transport.

As late as in the Upper Cretaceous period (approximately 40 million years ago), northeastern Bohemia was penetrated by the sea (coming from the territory of nowadays Poland), where the today thick layers of sandstones, marl stones and argillites, which fill the Police Basin,

the Zbečnik - Hronov stream valley and the Rtyň - Svatoňovice Basin, have become deposited. And exactly of the Cretaceous origin are also the rock towns of Adršpach and Teplice Rocks, Ostaš, the Broumov Walls and the borderline Bor. Deep defiles and admirable rock formations have come into existence due to the long-lasting disruptive activity of water, wind and frost. The Cretaceous plates also form the base of the broad flat landscape in the surroundings of Česká Skalice and Jaroměř, disrupted by the cutting of water-courses.



The Big Waterfall in the Adršpach Rocks



The Ostaš table mountain seen from Žďár nad Metují

The Adršpach-Teplice Rocks National Nature Reserve (NNR) was declared already in 1933 on the area of 1,771 ha (today 1,712 ha) with the aim to protect the well-preserved units of the rock towns. The NNR is located approximately in the triangle demarcated by the municipalities Adršpach (Horní Adršpach), Teplice nad Metují and the Čáp (Stork) peak over the Skály (Rocks) village, which forms with its ridge in the altitude of 786 m a. s. l. the highest part of the nature reserve.

After the recess of the aforementioned Cretaceous sea due to tectonic and erosive activity, including weathering, two isolated groups of rocks were formed in the originally sandstone plate on this territory – the rock towns of Adršpach Rocks and Teplice Rocks separated from each other by the deep Wolf Gorge.

The NNR is significant not only due to its geomorphology, but also the abundance of many protected animals and plants. The rock towers, many a time rock mazes, lagoons as well as the surrounding landscape are a sought-after destination not only for rock climbers, but also for film-makers, particularly authors of fairy tales.



The Čertovo auto (Devil's Car) rock formation on Ostaš is an example of sandstone weathering



The lake of a former sandpit in Adršpach forms fairy tale-like sceneries



The ring of rocks bordering the top of Hejšovina from a bird's eye perspective

Hejšovina and Bor (Szczeliniec and Skalniak)

"It was a long time ago, when the magician Magiáš conducted his magical business on the mountain of Hejšovina. As you know, there are good magicians, who are called wizards or thaumaturgists, and evil magicians, who are called sorcerers. Magiáš was somewhere in between; sometimes he was so good that he did not practise witchcraft at all, and at other times he conjured so mightily that it thundered and lightnings were flashing about; sometimes it occurred to him that stones might rain down, and once he even made little frogs rain down. In short, say what you may, such a wizard is not a very enjoyable neighbourhood, and even though people swore they did not believe in magicians, they rather avoided Hejšovina; it was just an excuse when they used to say it was a long way uphill - no wonder they did not want to admit that they were afraid of Magiáš!"

Karel Čapek: The Great Doctor's Tale

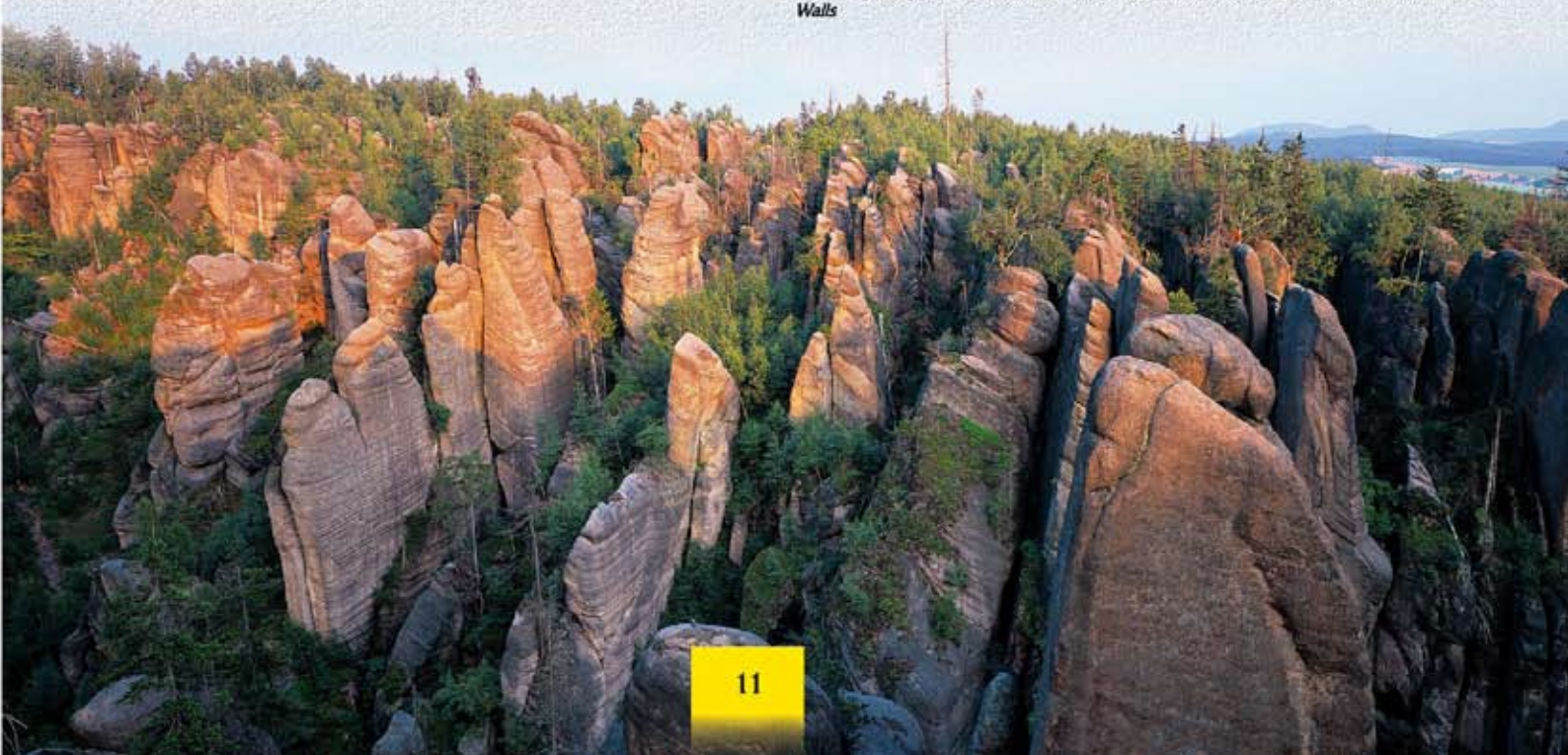
In close vicinity of the Broumov Walls there is the **Table Mountains National Park (Stołowogórski Park Narodowy)**, declared in 1993. Due to its geological development it is uniquely linked with the Broumov Walls, but in Poland it is the only case of a flat geological structure.

The Broumovsko Protected Landscape Area is a popular nesting place for peregrine falcons



The central landmark is the "split" Szczeliniec hill, in Bohemia rather known as Hejšovina. It protrudes to the altitude of 919 m a. s. l., which is a record figure among the sandstone areas in the whole Bohemian Massif. To the hilltop leads a stairway with 665 stairs carved into the rock. Among the rock corridors there are marks of tourist trails. The summit of this table mountain is formed by an oval platform with a maze of sandstone rocks. In the area of the highest peak of the Great Hejšovina our imagination is provoked by bizarre rock formations of Brood-Hen (Kwoka), Elephant (Sloň), Camel (Wielbiąd), Anthropoid (Małpolud) or we come across cold ravines, in which snow often lies even in June. Another significant table mountain is **Skalniak** (918.5 m a. s. l.), reaching up to the Czech border and known to us as **Bor**. The maze of the **Errant Rocks** (Błędne Skały) on its foothills belongs to the greatest attractions of the park. It is formed by rock blocks of fantastic shapes, among which there are tangled labyrinths. Some rock defiles reach the depth of up to 12 m.

The rocky canyon called Kovařova rokle (Blacksmith's Ravine) in the Broumov Walls





Leżyckie Skalki

To the south under the Fox Ridge (Lisi Grzbiet) of the Table Mountains (Gór Stołowych) there is the protected area of **Leżyckie Skalki**. In the eastern part of the territory, there extends itself a big mountain meadow in the altitude of 740 up to 780 m. It captivates at first sight with several scattered 3 to 4 m high little rocks. These small rocks from the Miocene period came to existence due to the weathering of the upper sandstone layer.

The composition of the peat layer enables the growth of several rare flowers such as veratrum, orchis and globe-flower, which the locals call the rose of the Kladsko region. The grassy mountain plain with blooming herbs and flowers resembles a meadow prairie. Therefore it is also designated as "African savannah".

A frequent tourist destination is also the **Great Batorowskie Peatbog** (Wielkie Torfowisko Batorowskie) reserve. The entire reserve is overgrown with beautiful flora, the greatest attractions of which are rare willows and low plants. We can find here for example the longleaf pine, Saxifraga decipiens and typical marshy plants such as the black crowberry, the marsh Labrador tea, the cross-leaved heath, the fen-berry, the pod grass, the purple small reed, the cranberry, the orchis and the sundews. There also occur rare species of moss here.



The exploration trail in the Níkna Laka peat bog



Skalne Grzyby (Rock Mushrooms)

Rock Mushrooms (Skalne Grzyby)

Rock mushrooms are situated in the northern part of the rocks of the Table Mountains between the Batorów and Karlów villages. This cluster of originally shaped rock forms is set out in the length of 2 km and the altitude of 680 - 700 m a. s. l. The small rocks have the shape of picturesque mushrooms, rods, towers, gates and even the whole rock walls. A lot of rock formations have their own names, for example Pine Mushroom, Rock Gate, Moss-grown Mushrooms, Penguins, Storey Mushrooms. Rock mushrooms are an example of the so-called selective weathering of sandstone rocks, i. e. the lower part consists of softer sandstone than the upper part. On the Czech territory we can find rock mushrooms in the surroundings of Slavné and Božanovský Špičák.



A rock maze in the Errant Rocks

Do you know that:

the highest peak is: Szczełnlec Wielki 919.2 m a. s. l.?

Here spring/flow: Metuje, the Dřevíč Brook

What you should see: Adršpach-Teplice Rocks National Nature Reserve

Hvězda (Star) chapel

- the initial point of the Broumov Walls

Horní Ostaš rock maze

Table Mountains National Park

(Stołowogórski Park Narodowy)

A mountain meadow under the peak of Narozník



Along the Metuje river in search of devils to Peklo (Hell)

Do you know that ...

the Metuje river springs in the altitude of 586 m a. s. l.?
the confluence with the Elbe is in the altitude of 248 m a. s. l.?

the length of the stream is 77,2 km.

It also drains a part of the Polish territory?

you can find devils in Bartoň's Shelter Hut from the year 1911 not far from the confluence with the Olešenka?



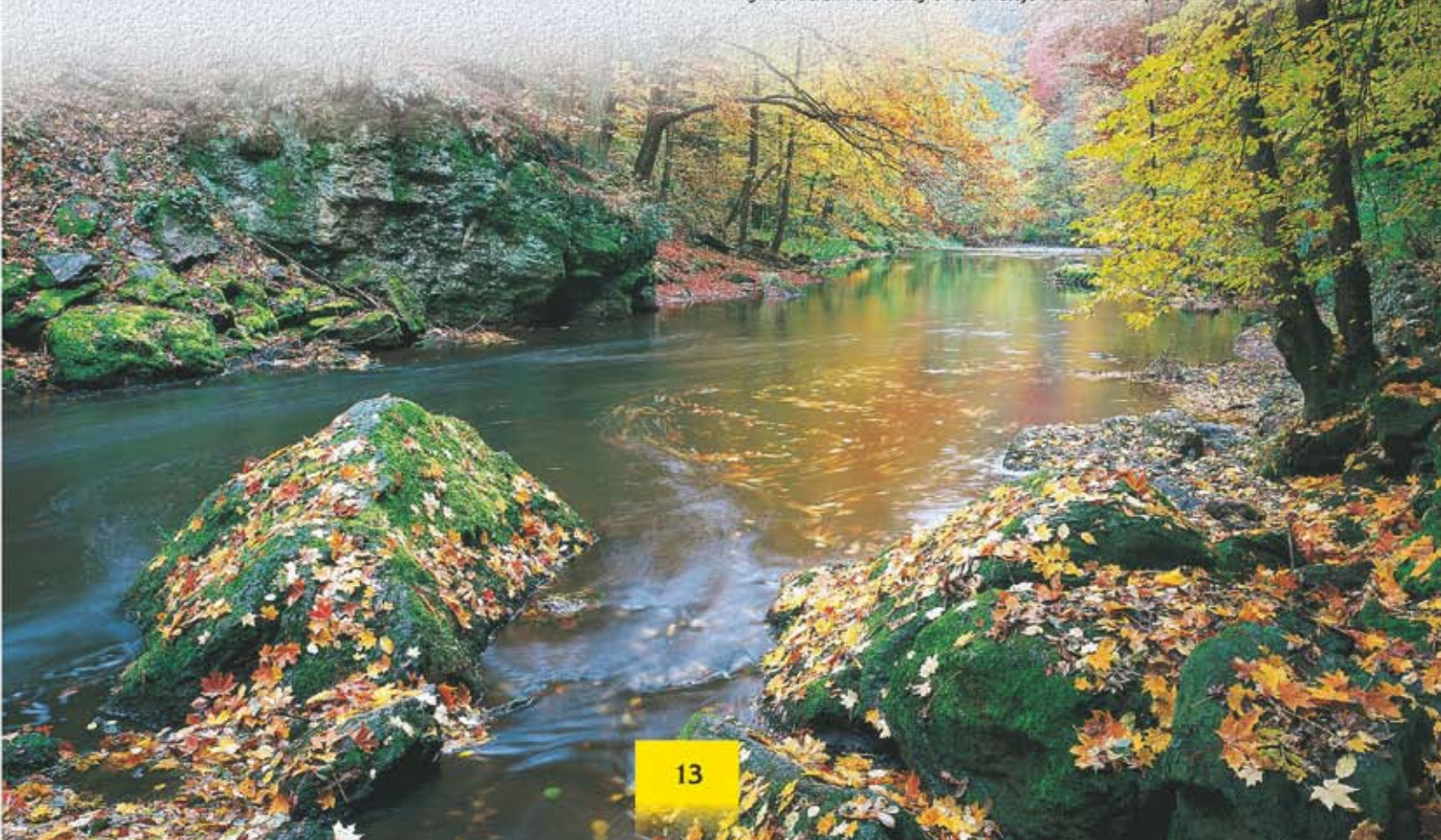
The upper stream of the Metuje river at the village of Dědov

West of the Adršpach Rocks, not far from the village Hodkovice, there is the spring of the Metuje river. According to some sources, in reality it springs in the Wolf Gorge. In older texts we can find names like Medhuje or Methuja (in Proto-Indo-European languages "medh" means "medium" - i.e. the middle river between the Úpa and the Orlice, according to an old legend the name supposedly comes from the statement "med tu je", which means "honey is here"). It struggles really hard through the glens of the Adršpach Rocks right from the spring. On the upper and lower stream it forms deeply cut valleys. On its course we can find the towns of Teplice nad Metují, Hronov and Náchod like beads on a blue ribbon. Immediately behind Náchod the basin of the Metuje river becomes wider, is stony and the water flows faster. After about 4 km the stream of the Metuje river cuts into the phyllite rocks of the Peklo (Hell) Valley, on the confluence with the Olešenka it passes by the excursion settlement Peklo (Hell) with its well-known tourist shelter and further on struggles through the romantic valley. On the promontory flanked round by the Metuje river from three

sides there shines the charming town of Nové Město nad Metují with well-preserved ramparts, with a lot of Renaissance town houses and the chateau restored into nowadays condition within the years 1909 - 1940. Below Nové Město nad Metují there was ditched a new basin next to the original one, with a lot of levels with sluice-gates, which regulate the water inflow into the irrigation channels. The Old and the New Metuje reunite and separate again. About eight kilometres in front of the estuary into the Elbe, the Metuje river accepts the Rozkoš pond from the right side, on which the aforementioned Rozkoš dam reservoir was completed in 1972. Then the Metuje empties into the Elbe in Jaroměř.

The Peklo (Hell) nature reserve by Nové Město nad Metují was declared in 1997 on the territory with the measured area of 320 ha. The nature reserve protects in deeply cut valleys of the Metuje and Olešenka rivers rare species of plants and animals, which take advantage of the coldness of the clenched valley. The reserve Peklo (Hell) is enclosed by the slopes of Dobrošov, Sendražský hill and the scenery of the Koníček (Little Horse) hill. The reason for protection is the preservation of the natural forest, rock and water communities, first and foremost of beechwoods, talus forests and the flora and fauna of rock crevices, with emphasis on rare plant species. Just as important is the protection of the characteristic topography of the deeply cut valleys of the Metuje and Olešenka rivers with the distinctive rock formations of the Nové Město phyllite with beautifully preserved examples of orogeny.

Phyllite rocks in the valley of the Metuje river in Peklo (Hell)



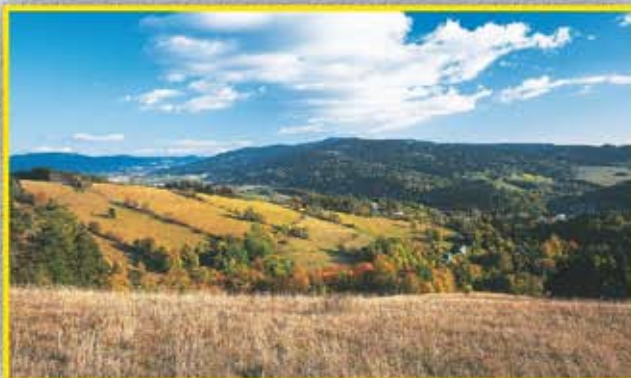
Orlické Mountains and Bystrzyckie Mountains



In the northeast of East Bohemia there rises the protracted bluish belt of the **Orlické Mountains**. It is situated in close vicinity of the border with Poland in the length of over 50 km in the northwest - southeast direction.

Geologically the mountains are a part of the so-called Orlicko - Kladsko crystallinicum. They mostly consist of a series of minerals arisen from the sediments of a Proterozoic sea and later folded. They were composed of slates, conglomerates, sandstones and other sedimented rocks. All once higher ridge parts were gradually taken down due to erosive water activity and only metamorphosed minerals were preserved, so-called crystalline slates, e.g. gneisses, schists, phyllites, crystalline limestones and quartzites. These together with deep porphyries, granites, form the Orlické Mountains.

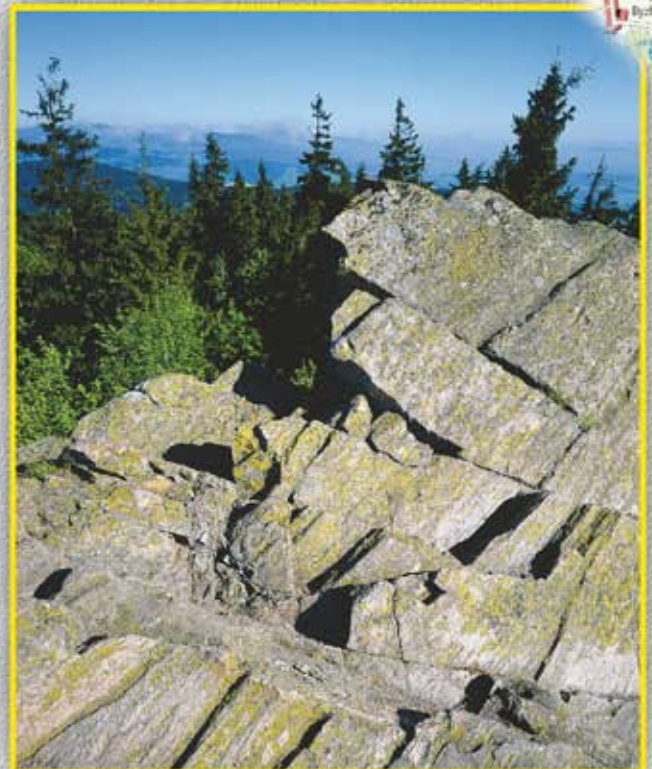
Mountain-forming motions in the Tertiary period caused the cranking of the original peneplain, which was being raised in the northeast direction. Thus the main ridge with a marked lean towards the Polish side came into existence, whereas on the Czech side the Orlické Mountains slowly decline down to the fertile Polabí lowlands, formed by the Orlice and East-Elbe Basin. This character and the lean are given exactly by the breaking and jamming of the fault block.



The Suchý Hill seen from Mladkov

The Orlické Mountains Range seen from Ošerov

Geomorphologically the Orlické Mountains belong to the Sudetes (earlier geomorphological system) or also Sudety Mountains (more accurately Central Sudetes) and we can divide them into three parts: the Deštná Highlands, the Mladkov Highlands and the Bukov Highlands.



The Bradlo rock outcrops on the Suchý Hill



The Orlický Ridge with the average altitude of 789 m forms an area of connected main peaks, exceeding the altitude of 1,000 m a. s. l., out of which Velká Deštná with its 1,115 m a. s. l. is the highest. The remarkably well-preserved landscape unit, consisting of the ridge of the Orlické Mountains, the slopes in front of and behind the main range and partially also the foothills, constitutes a picturesque region with splendid

of the best-preserved natural biotopes, which descend from the mountains to their foothills through wooded valleys. In their closures there are a lot of other spring areas and water-logged mountain meadows. We can find rests of original vegetation in the Bukačka and Trčkov National Nature Reserves and in the Sedloňov hill, Pod Vrchmezím and Černý důl Nature Reserves. The Jelení lázeň (Deer Bath) and U Kunštátské kaple (At the Kunštát Chapel) peak peatbogs are localities with interesting flora and fauna. The peculiar beauty of this area is topped up by the well-preserved folk architecture.



sceneries, which attracts not only tourists, but also a lot of artists who have found their second home in these mountains.

Deep and steep valleys are typical for the streams of the Orlické Mountains. The Wild Orlice, Zdobnice, Řička, Bělá, Kněžná, Olešenka and the Golden Brook disrupt their steep valley slopes the rounded denudational ridges and thus complete the characteristic physiognomy of the countryside. Today the spring area of these rivers, located on the slopes of the main ridge, is represented by little islands



Cascades on the Bělá stream by Deštné

In spite of a relatively low altitude and not a very nutritious mineral foundation, the Orlické Mountains have a fairly rich vegetation, comprising almost a thousand species. Amongst them stands out a number of mountain types, often with a surprising frequency of occurrence. Significant plant species reach here the limit of their distribution, e.g. the northern border of the global distribution is achieved here by the Austrian leopard's bane and the alpine lovage. In microlocalities we can find the Bohemian dwarf gentian. The only endemic of the Bohemian Massif, i.e. plant growing only on this territory,



The Jelení lázeň peak peatbog



Orchid meadows by Trčkov



Plants of the Austrian leopard's bane by Neratov

is the garden monkshood, but in the Bukačka NNR we can even find the Manchurian monkshood.

The Wild Orlice in the Zemská brána (Land's Gate) Nature Reserve





The Bukačka Reserve under a snow blanket

The Bukačka NNR is one of the most significant localities in the whole subprovince. Its importance is accentuated by the occurrence of 61 species of vertebrates. It represents the most prominent small-area protected territory in the Orlické Mountains. It is located about 1 km to the northwest of the Masaryk Chalet on Šerlich in the altitude of 910 - 1,025 m on the main ridge in the cadastre of the Sedloňov village. It was established in the year 1954 on the area of 50.72 ha. The preserve consists of the rest of the dwarfed beech primeval forest with dropped-in spruce, sycamore and rowan. With regard to the climatic conditions the 200-year-old beeches reach the height of just about 15 metres; only due to their crooked trunks unsuitable for industrial use, this growth remained spared during forest plundering in the Orlické Mountains in the past centuries.



The primeval beech forest in Bukačka

Wetlands in Bukačka



A valuable part of the reserve is also a peat meadow with the bedrock of phyllitic gneisses, divided by the Jirásek Path roughly into two nearly identical sections. This wet grassland on podzols is a "primeval meadow", which means that there was a woodless area already before the violent deforestation of the whole mountain range.

For its species variety the Bukačka NNR is called the "botanical garden of the Orlické Mountains". There have been found altogether 310 species of higher plants, out of

which 23 are protected, often as in the only habitat in the mountain chain. Here grow for example the small white orchid, the spring snowflake, the Manchurian monkshood and the garden monkshood, the mountain arnica, the western marsh orchid and the *Dactylorhiza longibracteata* orchid, the common butterwort, the ghost orchid, the Sudeten bedstraw and the strongly endangered round-leaved sundew. Of interest is also the bog beacon mushroom, on the spruce grows the rare *Phellinus viticola* etc.

Meadows in Bukačka are a botanical garden of the Orlické Mountains

Do you know that:

the highest peak is: Velká Deštná 1,115 m a. s. l.
Here spring/flow: Zdobnice, Bělá, Kněžná, Bystrzyca
Dusznicka, in the foothills
of the Bystrzyckie Mountains
the Wild Orlice river

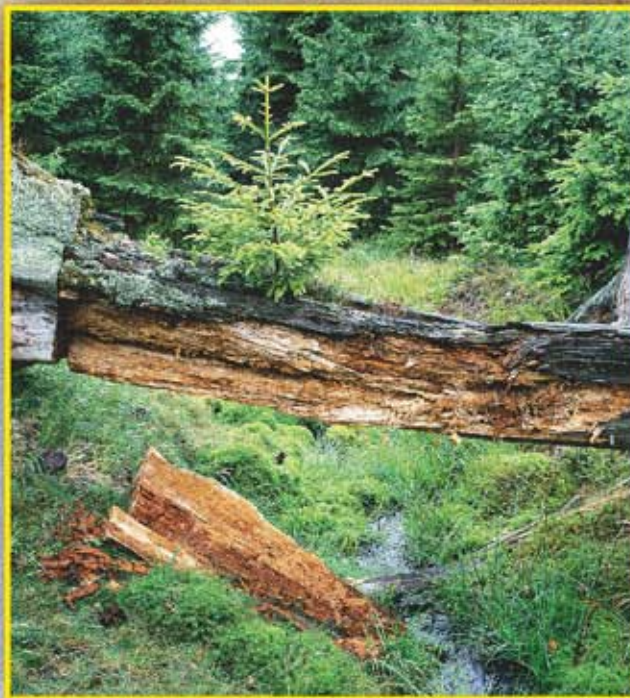
What you should see: Primeval Forest Bukačka NNR
Kunštát Chapel
the lookout tower on the Anenský hill
Land's Gate (Zemská brána)
- the glen of the Wild Orlice
Bradlo on the Suchý hill
the peatbog by Zleleňec



The Bystřické Mountains seen from Kladská Bystřice

The breakage of the original crustal segment gave rise to the sisterlike **Bystřické Mountains (Góry Bystrzyckie)**. They are separated from the Orlické Mountains by a protracted ravine of the Wild Orlice river, which flows through the Orlickozáhorská furrow and forms a 29-km-long state border from Trčkov up to the Land's Gate. Its source area is located in the zone of a peatbog not far from the Zieleslec village (rezerwat Torfowisko pod Zielescem), which is interesting mainly for its flora. After the initial relatively peaceful stream, the Wild Orlice turbulently makes its way through the mountain range and penetrates the inland on the territory called Zemská brána (Land's Gate). It creates here a deep glen with up to 40-metre-high bare gneiss crags and calms down its fierce stream in the Pastviny (Pastures) valley barrage.

The Polish Bystřické Mountains are not only a smaller, but also overall lower sister of the Orlické Mountains. The names of their highest peaks smell of spring and summer - Sasanka (Anemone; 965 m a. s. l.) and Jagodna (Blueberry; 977 m a. s. l.).

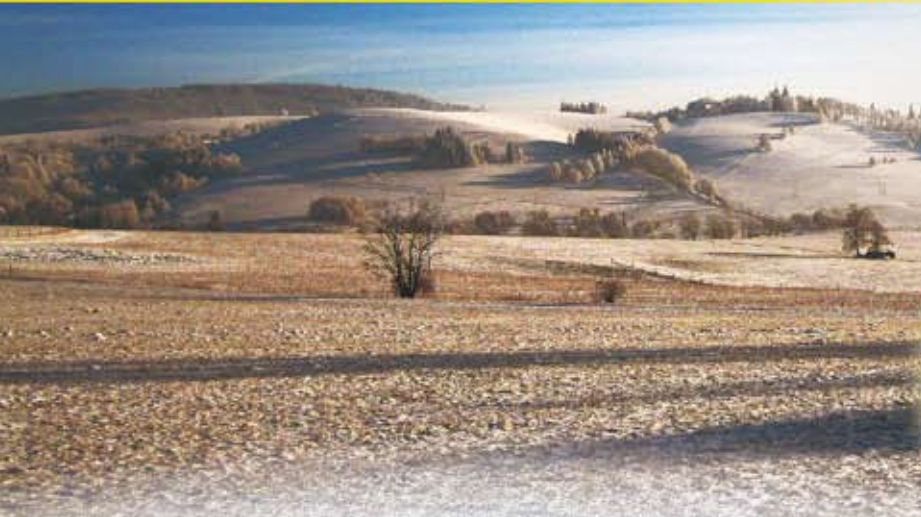


At the spring of the Wild Orlice

The peat bog under Zieleslec



Through the valley of the Orlice to the confluence with the Elbe



The Jeřáb (Rowan) National Park at sunset

The Calm Orlice river is the southern branch of the Orlice river. It joins its "sister", the aforementioned Wild Orlice, by Týniště nad Orlicí. It springs in the slope of Jeřáb not far from Králíky in the altitude of 760 m. It flows through the Kladsko basin and between Lichkov and Těchonín. It intersects the lowered ridge of the Orlické Mountains and thus it imaginarily separates the Bukovohorská Highlands with the Suchý hill from the main ridge. On the upper stream it has the character of a mountain torrent with rapids and it



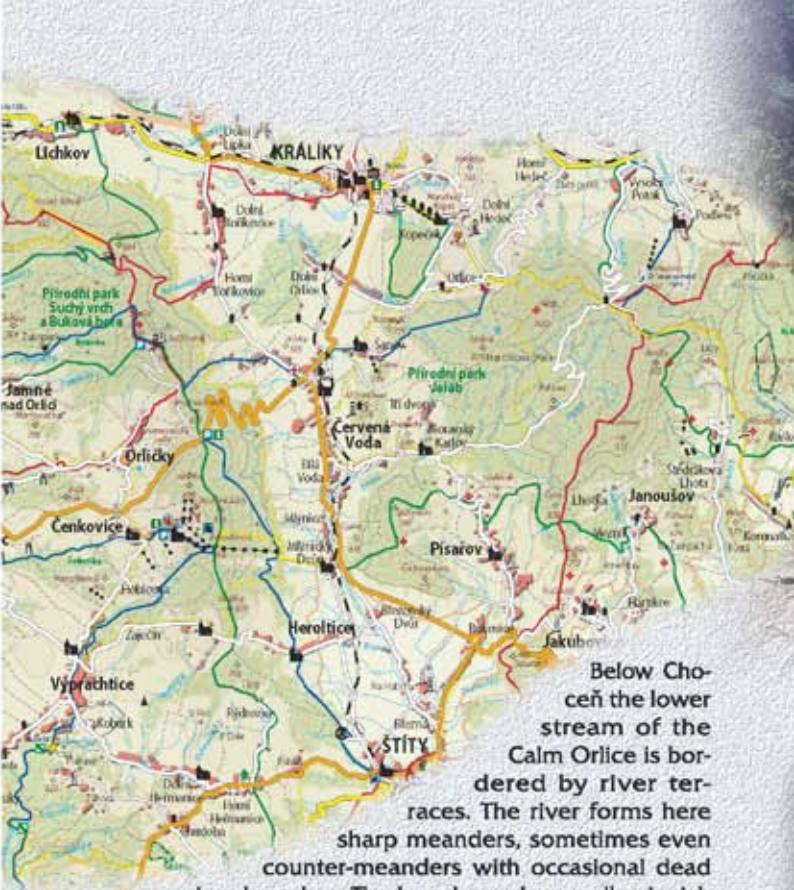
The Calm Orlice by Mladkov



flows in a great descent to Jablonné nad Orlicí, a picturesque town with well-preserved timbered town houses from the 18th century, at the confluence of the Calm Orlice and the Orličský Brook. Under Jablonné the river moderates its speed and runs through the submontane landscape, Letohrad with the town memorial zone, passes by the ruin of the Lanšperk Castle from the 13th century, streams through Ústí nad Orlicí, the town on the promontory over its confluence with the Třebovka. In the valley it flows through meadows, mostly in the riverbed without any major technical interventions. The stream of the river becomes gradually calmer and that is where its name has been derived from. Some historical sources mention it as the Choceňka. Around the entire stream there are rather small and narrow alluvial plains, whereas the stretch Ústí nad Orlicí - Choceň may be considered one of the most beautiful ones. Under the Lanšperk Castle and particularly under Ústí nad Orlicí the river creates a deep valley, changes its direction several times and sinks down to the gneiss and granite bedrock. Here it already has the appearance of an about 10-metre-wide river, flowing in long (rarely straightened) bends, accompanied by scarce arboreal vegetation. A striking meander with the biggest marlstone rock formations is created in Pellny by Choceň.



Hradiska, alluvial meadows in the valley of the Orličský Brook by Jablonné nad Orlicí



Below Choceň the lower stream of the Calm Orlice is bordered by river terraces. The river forms here sharp meanders, sometimes even counter-meanders with occasional dead river branches. The broad meadowy valley is rich

in greenery and pine woods.

Significant tributaries on the upper stream come from the left, from the slopes of the Bukovohorská Highlands. However, the greatest tributary is the Třebovka in Ústí nad Orlicí, further on the Řetovský Brook from the left too.

The Calm Orlice is worth the attention, esteem and admiration of cyclists and fishermen as well as canoeists and all people who love peaceful nature.

Do you know that:

the Calm Orlice springs in the altitude of	760 m a. s. l.?
It joins the Wild Orlice in the altitude of	247 m a. s. l.?
the confluence with the Elbe lies in the altitude of	227 m a. s. l.?
the length of the Calm Orlice is	107.5 km?
the length of the Wild Orlice is	99.3 km?
the length of the united Orlice	32.7 km?



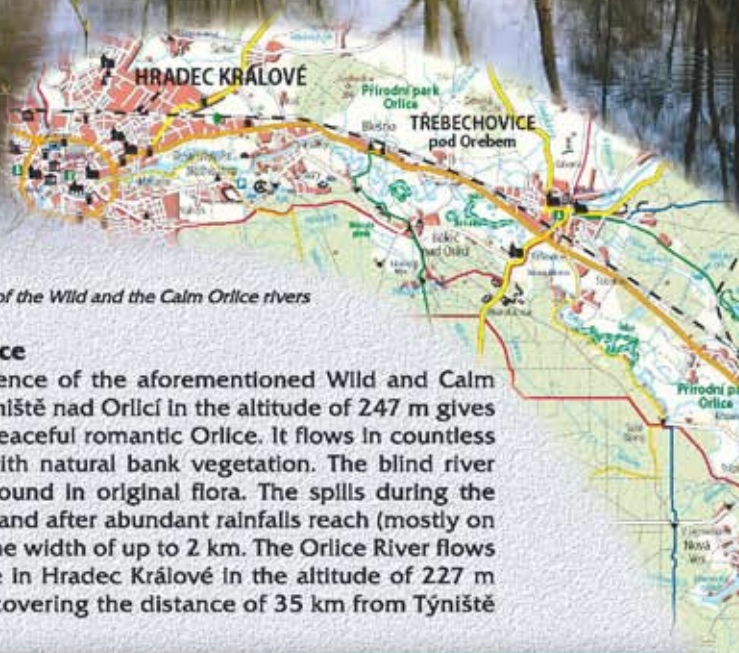
The Pellny Nature Reserve, blooming basket-of-gold on the rocks above the stream of the Calm Orlice



Rich abundance of snowflakes in the Orlice Natural Park by Kostelec nad Orlicí

A natural mirror on the blind branch of the meandering Calm Orlice

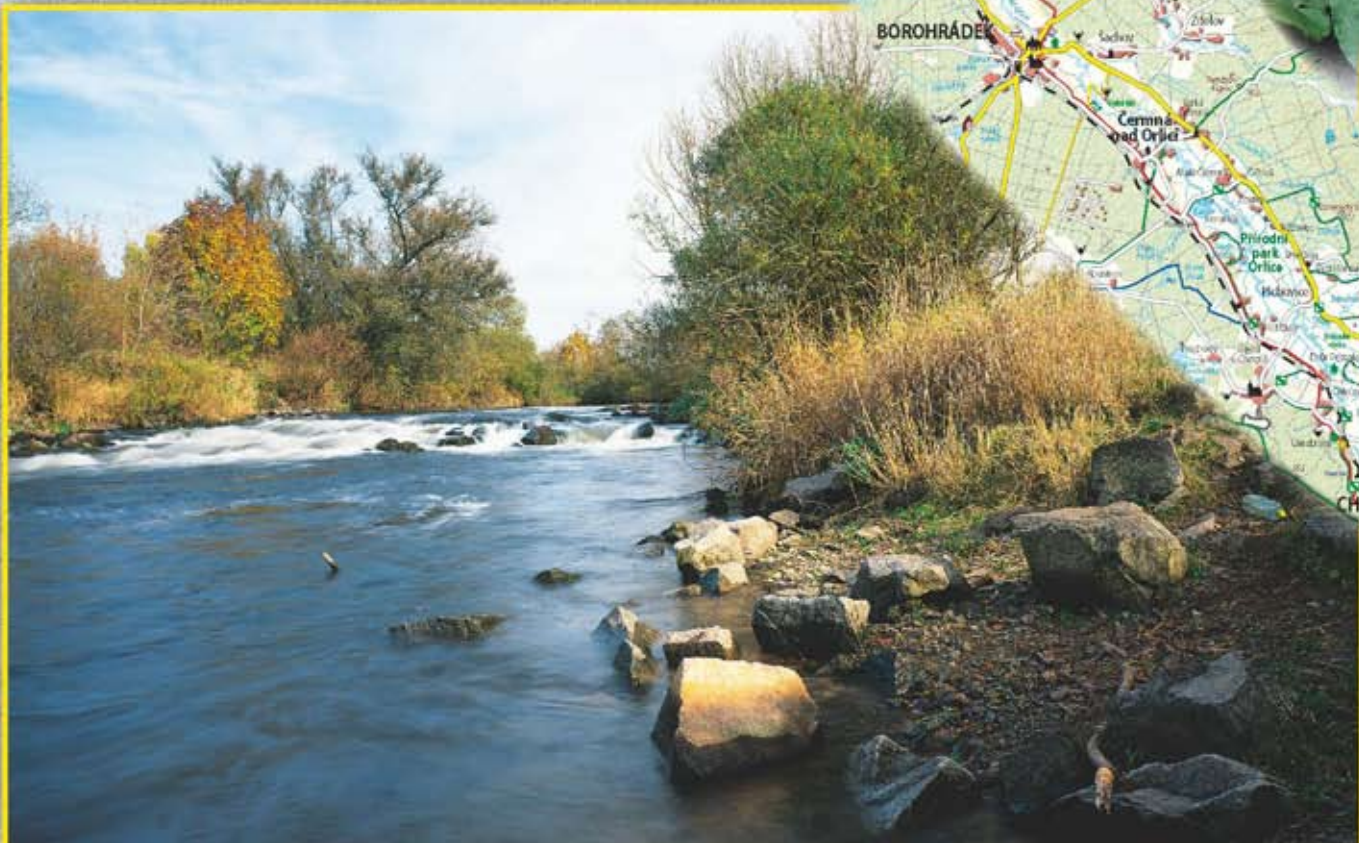




The confluence of the Wild and the Calm Orlice rivers

United Orlice

The confluence of the aforementioned Wild and Calm Orlice by Týniště nad Orlicí in the altitude of 247 m gives rise to the peaceful romantic Orlice. It flows in countless meanders with natural bank vegetation. The blind river branches abound in original flora. The spills during the spring thaw and after abundant rainfalls reach (mostly on meadows) the width of up to 2 km. The Orlice River flows into the Elbe in Hradec Králové in the altitude of 227 m a. s. l. after covering the distance of 35 km from Týniště nad Orlicí.



Rapids on the Orlice river by Bělč

Both the streams, the Calm as well as the Wild Orlice, have been declared European Significant Localities. Right for the protection of the river, the Orlice Nature Park was established in 1996. The total length of the river streams along which the nature park was established is approximately 200 kilometres. The extensive area of more than 11,000 ha includes the valley floodplains of both the Orlice rivers, except for the spring area of the upper streams, and after the confluence by Týniště nad Orlicí also the floodplain of the united Orlice. On the Calm Orlice the park begins at the village of Mladkov, on the Wild Orlice under the Land's Gate on the borders of the Orlické Mountains Protected Area. The nature park ends in the cadastre of the town of Hradec Králové, at the place where the Orlice stream is spanned by a municipal ring road. The purpose of the nature park is to protect the well-preserved river and floodplain ecosystems and the overall character of the landscape surrounding the stream. The Calm, Wild and united Orlice belong to those few Czech rivers that have not been regulated in long sections on their lower streams. They have a natural and further developing character. There are numerous meanders, blind branches, drifts and bare banks. On the middle stream both the Orlice rivers have a typical submontane character. The stream of the Calm Orlice has the status of a European Significant Locality due to a relatively abundant occurrence of the European brook lamprey.



A view over the surface of the Dlouhý pond

Lanškroun ponds

The "Lanškroun Ponds" Nature Park was declared in the year 1990. It is situated west of Lanškroun in the territory of the pond system on the Ostrovský Brook on the area of 243 ha. It is composed of the Olšový, Pšeničkův, Slunečný and Plockův Ponds with surrounding forest stands. The park closely neighbours on the suburban, recreationally used area of the Dlouhý pond.

The total water area of the Lanškroun ponds is 45 ha. The Krátký and Slunečný ponds serve to sports fishing. The Dlouhý pond is a natural bathing place with the possibility of yachting and windsurfing. Its surroundings offer a wide range of possibilities for accommodation as well as sports self-realization.

The surroundings of the Lanškroun ponds have been declared a protected area of peace and a nature park. The nature park has an extraordinary importance in terms of biology, landscape as well as aesthetics. The area is also a prominent breeding place for water fowl and an important stop for birds of passage. From the significant protected species there abound for example the common snipe, the little bittern, the black and the white storks, the common goldeneye, the water rail, the river hawk, the great reed warbler and many species of ducks. We can also find here the European crayfish, the alpine newt, the common as well as the green toads, the European tree frog and other species of amphibians.

As far as flora is concerned, there also grow the yellow iris, the dwarf white water lily, the western marsh orchid, the bog-bean, the spring snowflake and other species of protected plants.

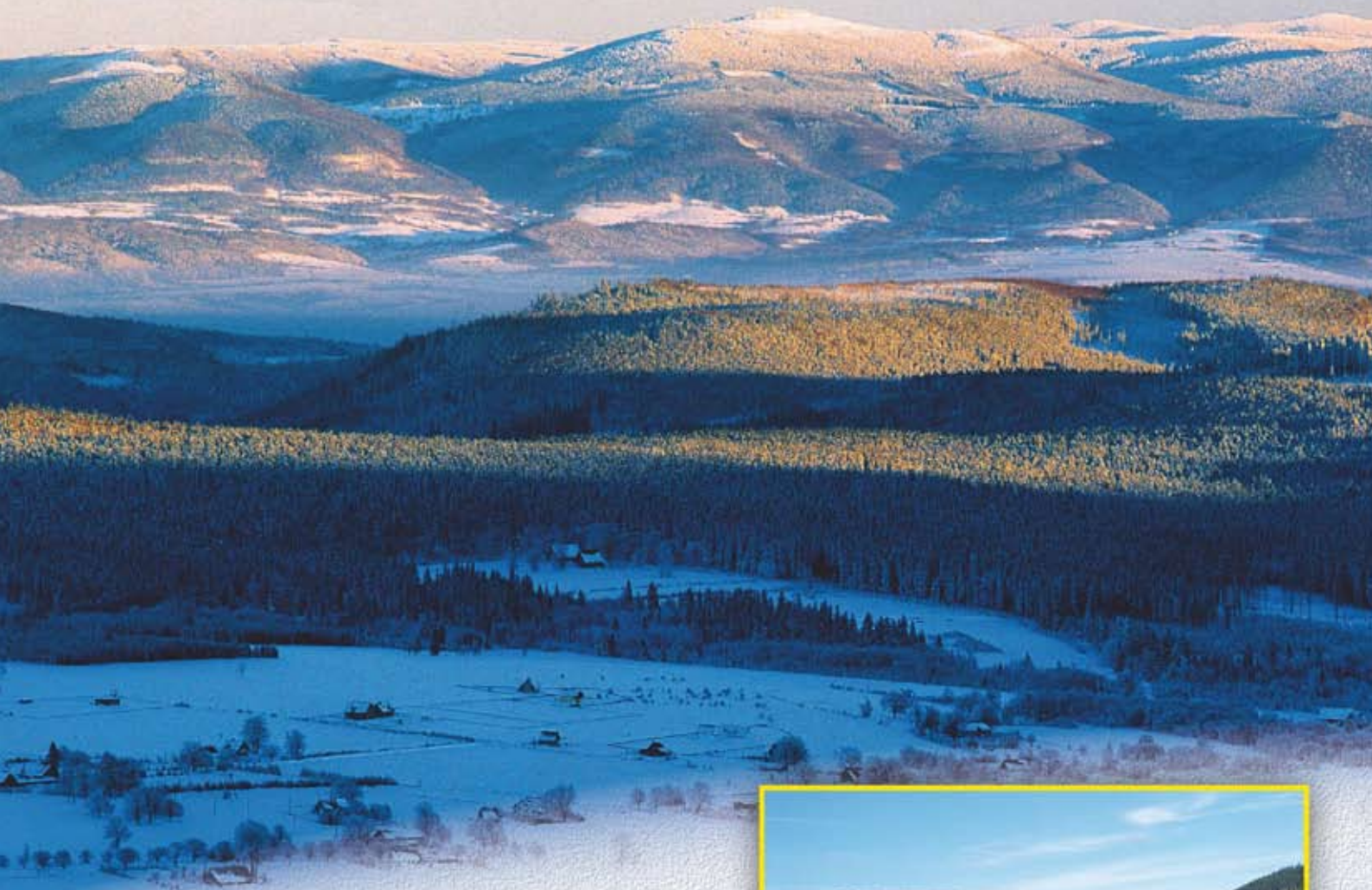
The "Lanškroun Ponds" Nature Park contains a walk circuit with an educational path, where visitors can become acquainted with interesting features of this area in a more detailed way.



The confluence of the Orlice river with the Elbe in Hradec Králové

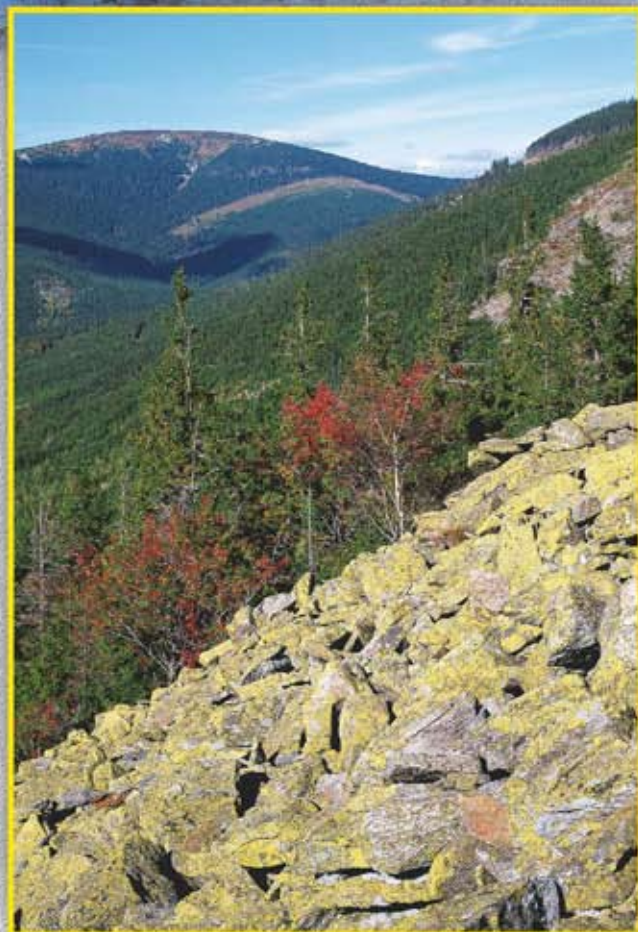


Sněžník Massif



A view seen from the Malá Deštná Mt., over the Bystřické Mountains to the massif of Krállický Sněžník

If we look around over the Klodzko Basin (Dolina Klodzka), our eyesight stops at the massif of **Krállický Sněžník** (1,424 m a. s. l. – the Polish maps indicate 1,425 m). Krállický Sněžník is the third highest mountain chain in the Czech Republic and forms the boundary among Bohemia, Moravia and Klodzko. The highest peak provides a unique view in all directions – of Hrubý Jeseník, the Orlické Mountains as well as the Klodzko Basin in Poland. Over the peak runs the Czech – Polish border and about 400 m southeast of the baby elephant statue a landmark is laid. The statuette of the elephant calf not far from the bottom of the former Liechtenstein Cottage is a nowadays symbol of Krállický Sněžník. The area with the rarely well-preserved nature is intersected by educational paths leading from the Lower Morava and Stříbrnice up to the top of Krállický Sněžník. Its massif in the altitude of 1,380 m a. s. l. is the place where the Morava river springs. In the year 1990 a national nature reserve was declared here on the area of 1,694 ha. It is located in the central and upper part of the mountain range bearing the same name in the altitude of 820 – 1,424 m. The purpose of the reserve is the protection of natural and close-to-nature communities bound to the geological base and the relief of the mountain massif. There are subalpine communities of the peak unstocked areas represented here, in the peak altitudes below the upper forest border the fragments of the original forest stands with the local ecotype of spruce and peak peat bogs have been preserved.



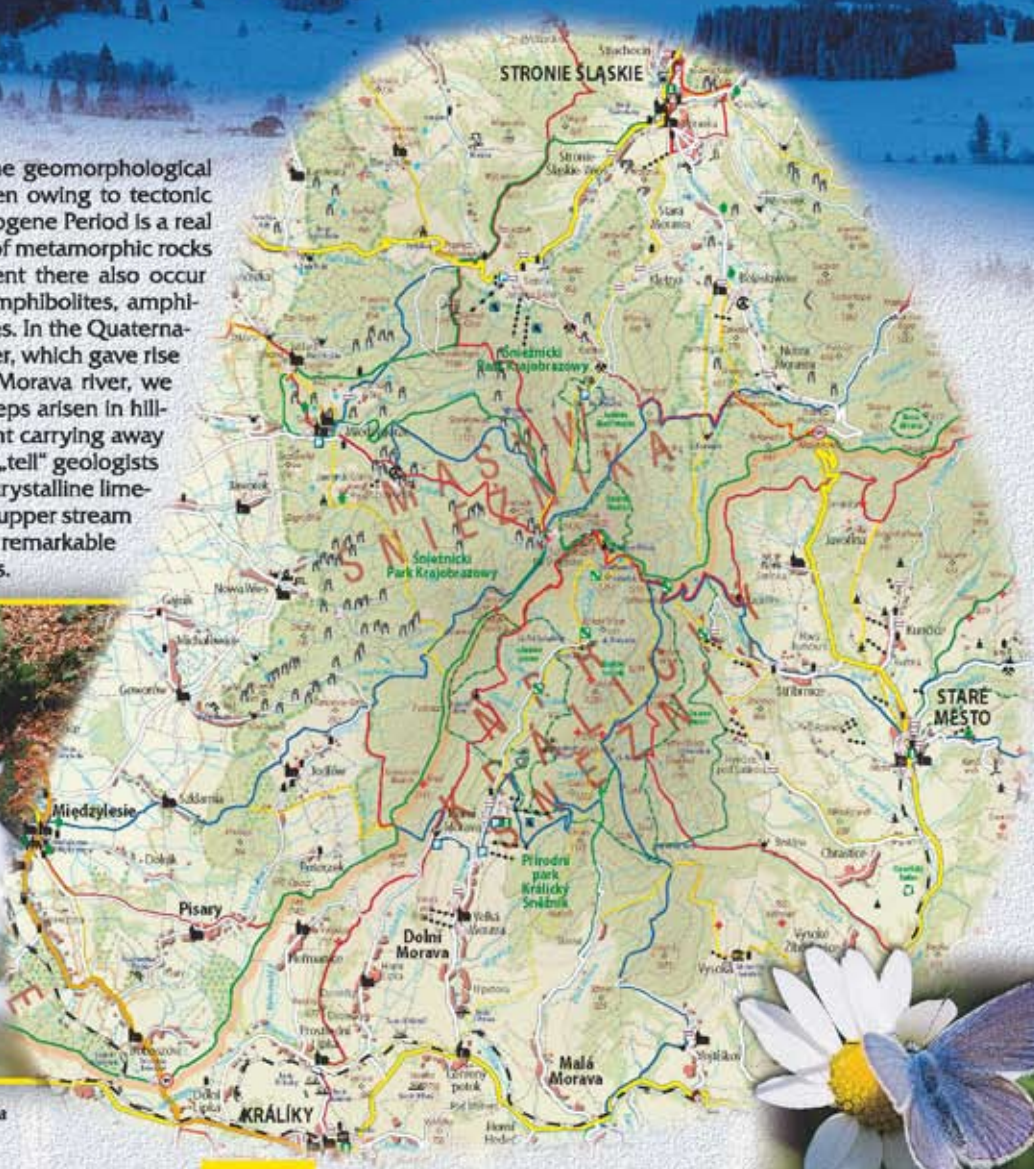
A blockfield on the slopes of Velká Morava with the peak of Sněžník



The territory is also interesting from the geomorphological point of view. The mountain range arisen owing to tectonic elevations of crustal segments in the Neogene Period is a real attraction for geologists. It is composed of metamorphic rocks (gneisses and schists), in a smaller extent there also occur crystalline limestones and dolomites, amphibolites, amphibolic slates, quartzites and quartzite slates. In the Quaternary Period the area was shaped by a glacier, which gave rise to a characteristic amphitheatre of the Morava river, we can also find here interesting bedrock steps arisen in hillsides due to frost erosion and subsequent carrying away of rock, blockfields and phenomena that „tell“ geologists about the ancient times of glaciation. In crystalline limestones and dolomites of the valley of the upper stream of the Morava river there was formed a remarkable karst with caves, ponors and karst springs.



Rapids of the Prudký brook flowing down from Sušina





Bearded bellflower

On the protected area there abound some rare plant species such as the garden monkshood, the Austrian leopard's bane, the grass of the *Helictotrichon planiculme* species, or the bearded bellflower. From the rare mushroom species there have been found the octopus stinkhorn and *Russula quéletii*. As far as the protected animal species are concerned, the reserve is inhabited for example by the northern birch mouse, the hazel grouse and the water pipit.

Peat pools under Malý Sněžník



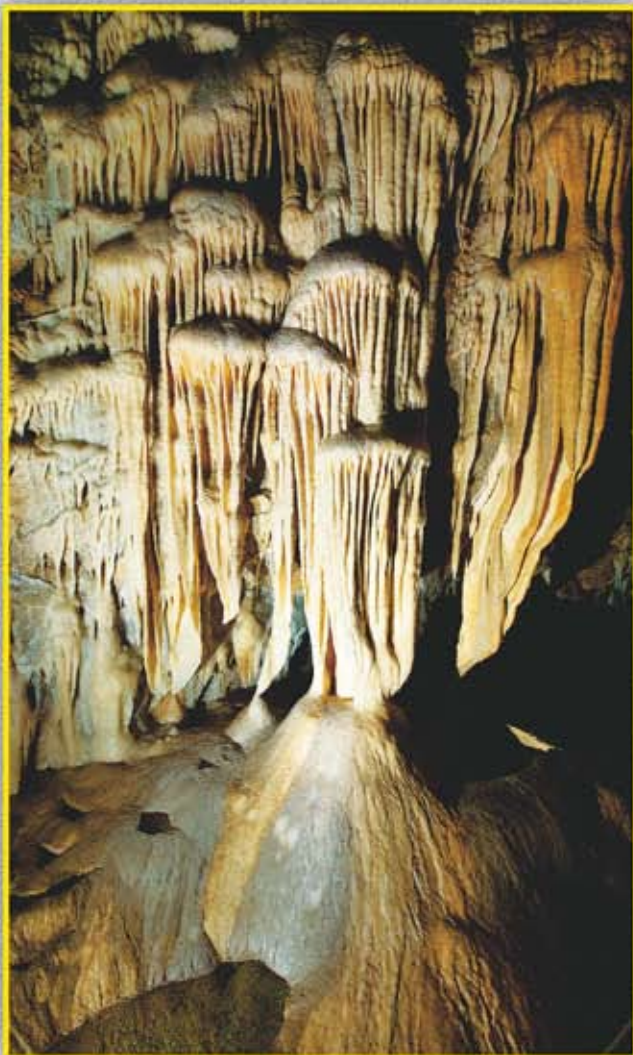
Morning mists at the Červený potok (Red Brook)



A waterfall on the Wilczka stream by the town of Miedzygorze



On the Polish side there has been established the extensive Sněžnický Landscape Park, including the Sněžník Massif, the Zlaté and Biłskie Mountains. Right in the Biłskie Mountains there are two precious nature reserves: Nowa Morawa and Puszcza Śnieżnej Białki. The entire territory is unique for its intact nature, localities of original vegetation and fantastic landscape relief. In terms of the altitude and drip-stone decoration, extraordinary is the Bear Cave (Jaskinia Niedzwiedzia) with a magnificent system of miniature pools.



Dripstone decoration in the Medvědí (Bear) Cave (Jaskinia Niedzwiedzia)

The Bear Cave with a pool



A blockfield on the hillside of the Klepý hill

However, the Klepý hill (1,143 m a. s. l.) on the border with Poland reaches the greatest European significance. On maps it is also designated as Trójmorski Wierch (Hill of Three Seas), which precisely depicts its importance. The water from its peak flows into three seas – the Black, North and Baltic Seas. When it rains, many a time just a few centimetres decide about which sea the water is going to flow to. Therefore Krállický Sněžník is often poetically called the "roof of Europe". Another such place we could find as far as in the southeast of Switzerland on the peak of the Bernina (4,049 m a. s. l.).

Do you know that:

the highest peak is: Krállický Sněžník 1424 m a. s. l.?

Here springs/flows: the Morava river

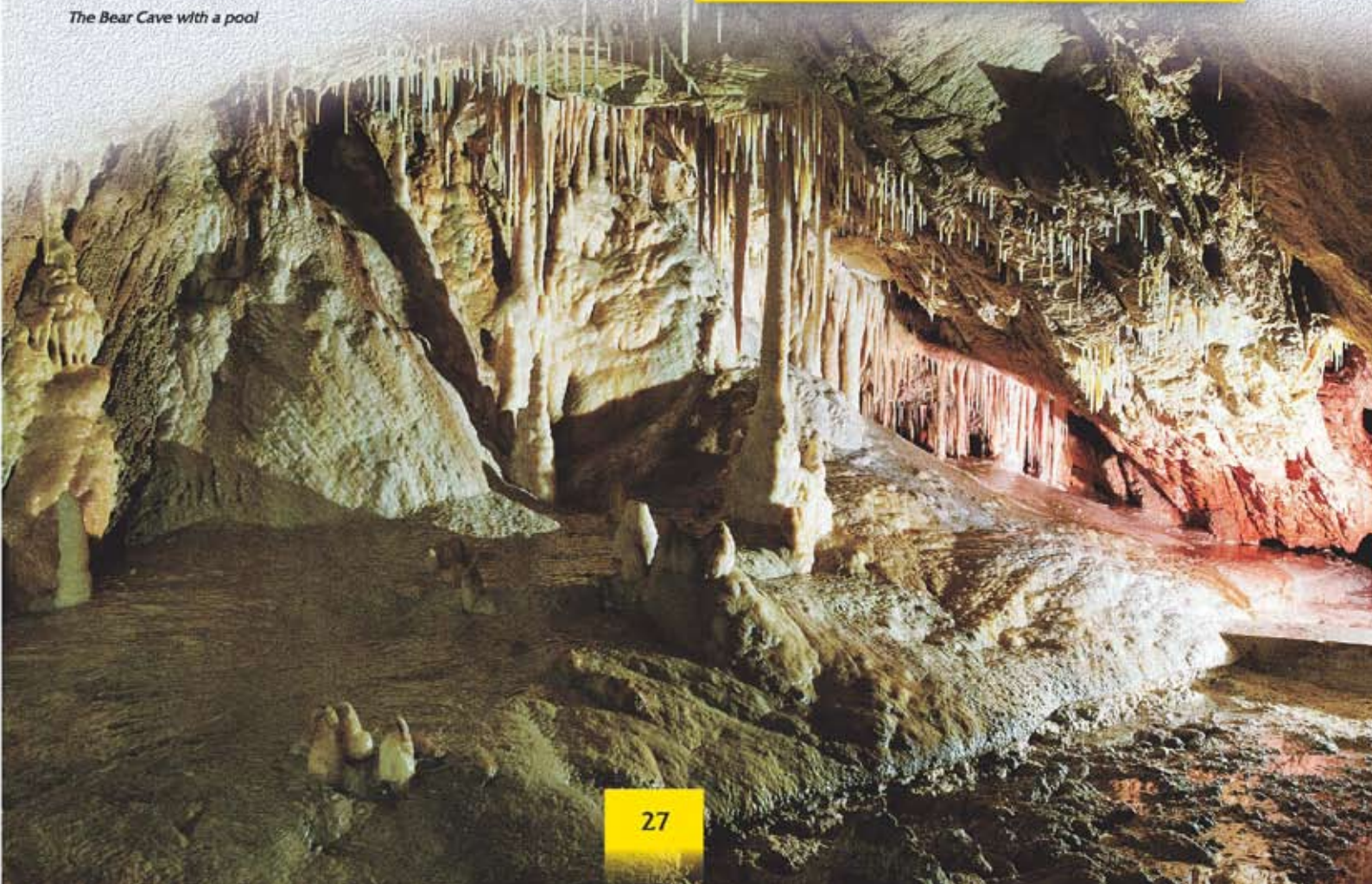
What you should see: the lookout tower on the Klepý hill

the lookout tower on the hill of Val by Králíky

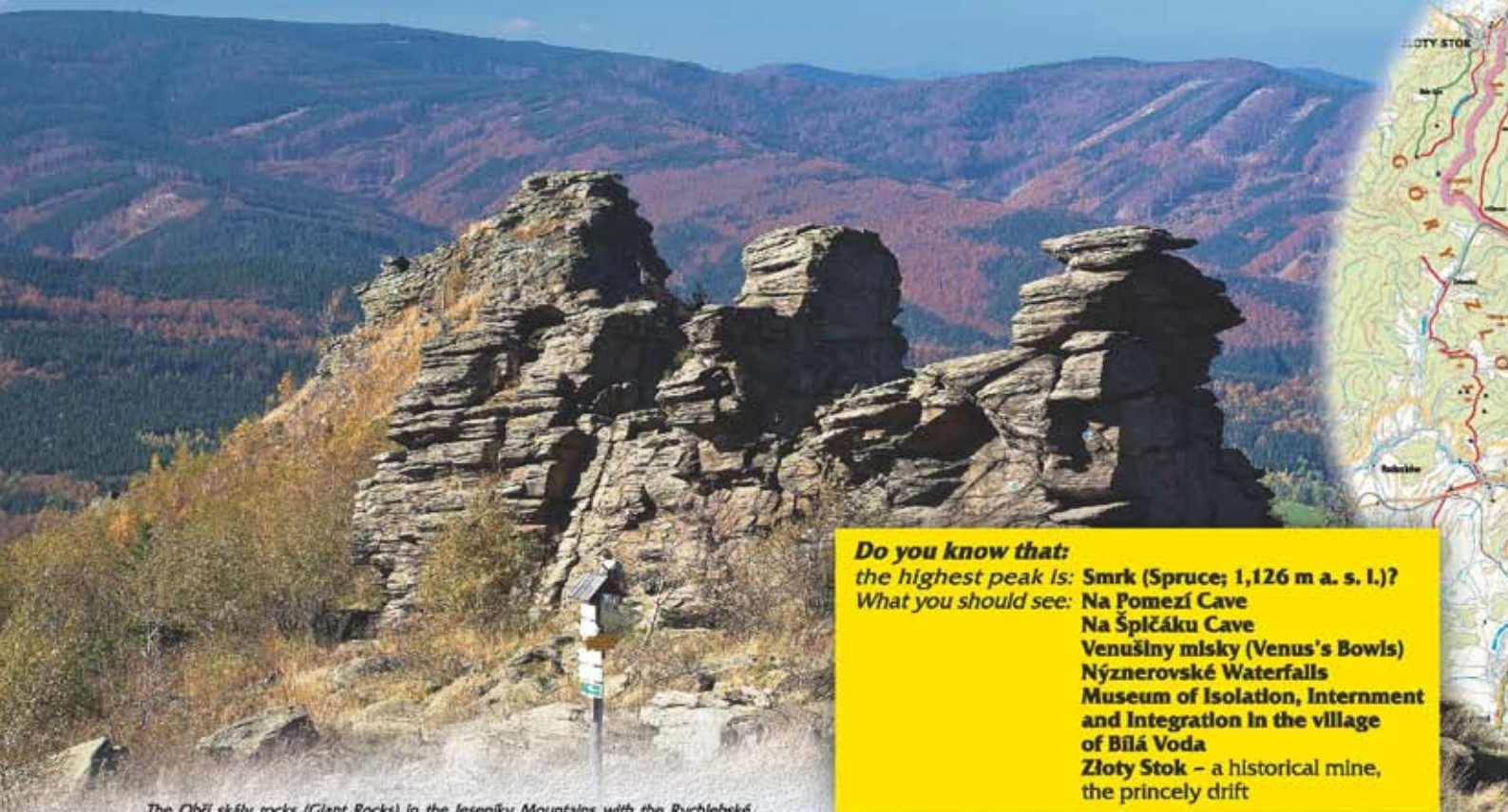
the source of the Morava river

Bear Cave

the waterfall on the Wilczka river



Rychlebské Mountains, Zlaté Mountains (Góry Złote), Hrubý Jeseník Mountains



The Obří skály rocks (Giant Rocks) in the Jeseník Mountains with the Rychlebské Mountains in the background

Rychlebské Mountains

On the northeastern edge of the Sudeten mountain chain, which lines our northern borders, one of its least known and the most desolate parts, the Rychlebské Mountains, is located. We can find them in the Javornický promontory, north-east of the town of Jeseník. The border mountain range stretches along between Bílá Voda at the very tip of the promontory and Ostružná. The average altitude of the Rychlebské Mountains is approximately 645 m a. s. l. and the mountain range is situated on the area of 276 km². Their name is derived from the old designation of the Polish town of Złoty Stok ("golden slope"), in German Reichenstein, hence Rychleby in Czech.

The highest peak of the Rychlebské Mountains is the Smrk (Spruce) Mountain (1,126 m a. s. l.) rising in the southern part of the mountain chain in the proximity of Razmovské Saddle. The altitude between 900 and 1,000 m a. s. l. is reached by 16 peaks and 15 spot heights are even higher than 1,000 m (they are predominantly on the ridge between Smrk and the Kladské Saddle).

Thanks to the rich geological past of the Rychlebské Mountains it is possible to find there a great number of interesting rocks and minerals. What is definitely worth seeing is the Na Pomezí Cave with rich dripstone decoration arisen in snow-white limestones or the nearby crevice cave called Na Špičáku close to the border with the Zlatohorská Highlands, the dripstone decoration of which was unfortunately damaged not only by man, but mainly by torrential waters of the melting continental glacier at the end of the last glacial period.

On the Polish side we recommend a visit to the spring area of the Biała river, where there is the Puszcza Śnieżnej Białki Nature Reserve.

The Natural Monument of Nýznerovské Waterfalls or the Stříbrný potok Brook Waterfalls (declared in 1968) is a cascade system of waterfalls in the wild canyonlike gorge of the Stříbrný potok brook (Silver Brook) above

Do you know that:

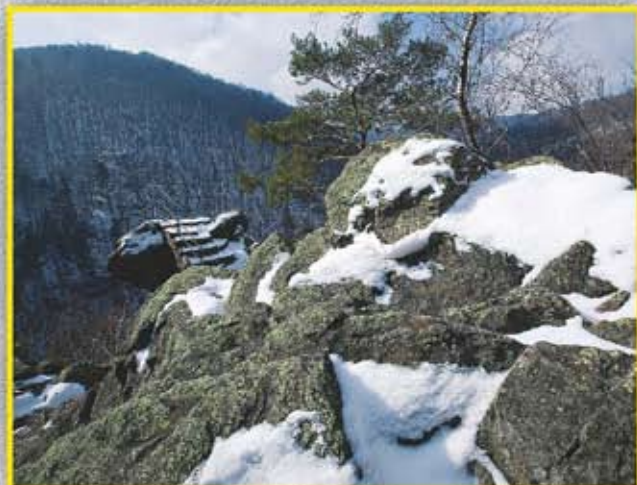
the highest peak is: **Smrk (Spruce; 1,126 m a. s. l.)?**

What you should see:

Na Pomezí Cave
Na Špičáku Cave
Venušiny mísky (Venus's Bowls)
Nýznerovské Waterfalls
Museum of Isolation, Internment and Integration in the village of Bílá Voda
Zlatý Stok – a historical mine, the princely drift

the tributary of the Bučinský potok brook at the village of Nýznerov. The gorge is about 110 m long with a lot of rock thresholds creating several waterfalls and cascades with the total super-elevation of 14 m. The highest waterfall is about 3 m high. The Silver Brook has also hollowed numerous rock bowls, kettle holes and giant pots in its riverbed.

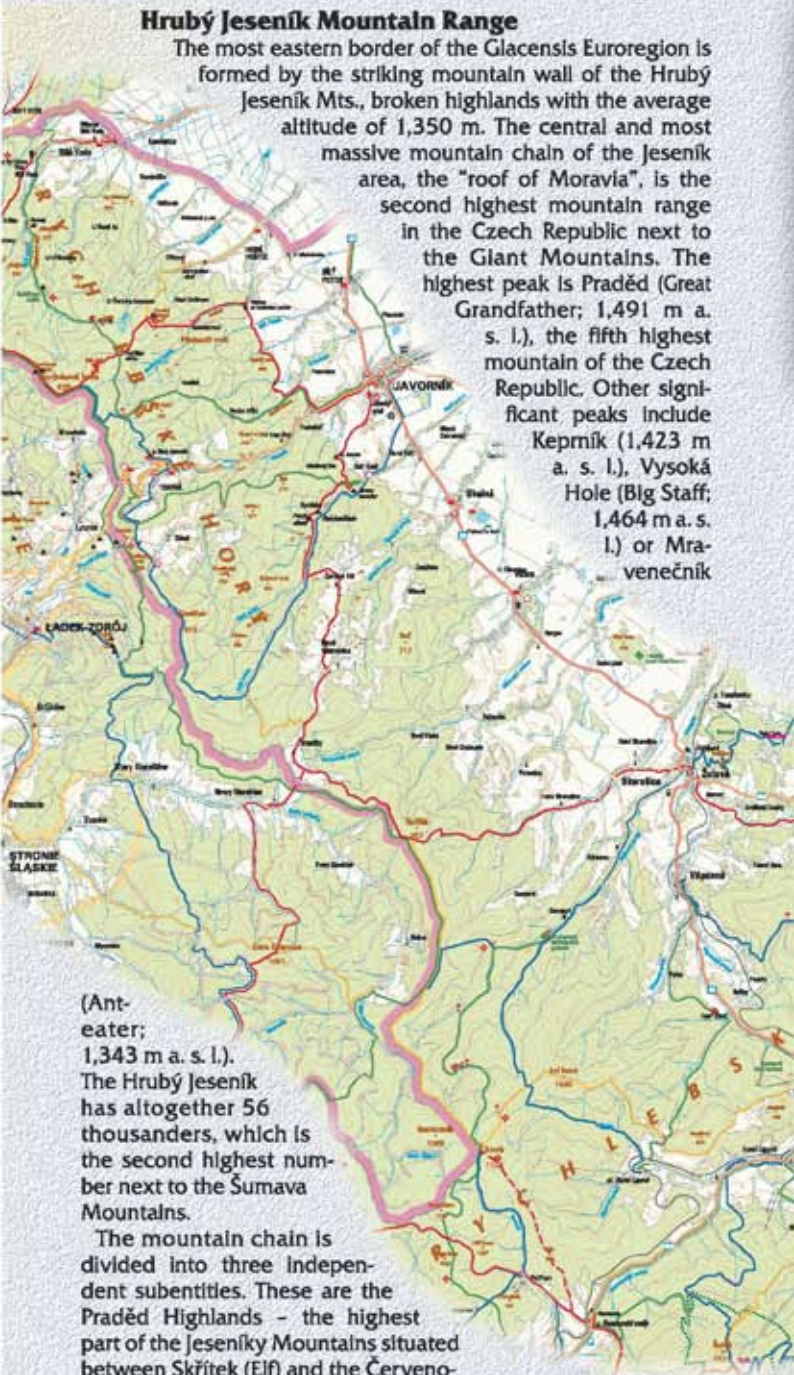
In **Žulovská Hilly Land** on the Smolný hill (404 m a. s. l.) there lies a rock town called Venušiny mísky (Venus's Bowls). Due to the spheric separability of granite we can find here peculiar rock formations (bowls, seats, niches), which are worth climbing to the top. Although they are a result of the activity of water and wind, in the past a mythical significance was attributed to them. What captures our attention on the steep walls are unusual vertical rock formations – grooved furrows.



Čertova kazatelna (Devil's Pulpit) Natural Monument in the Rychlebské Mountains

Hrubý Jeseník Mountain Range

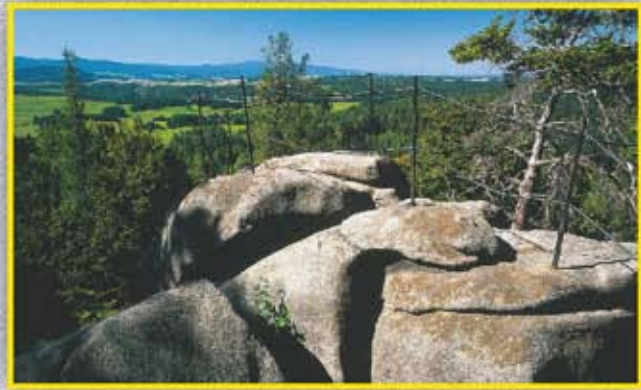
The most eastern border of the Glacensis Euroregion is formed by the striking mountain wall of the Hrubý Jeseník Mts., broken highlands with the average altitude of 1,350 m. The central and most massive mountain chain of the Jeseník area, the "roof of Moravia", is the second highest mountain range in the Czech Republic next to the Giant Mountains. The highest peak is Praděd (Great Grandfather; 1,491 m a. s. l.), the fifth highest mountain of the Czech Republic. Other significant peaks include Keprník (1,423 m a. s. l.), Vysoká Hole (Big Staff; 1,464 m a. s. l.) or Mra-venečník



(Ant-eater; 1,343 m a. s. l.). The Hrubý Jeseník has altogether 56 thousanders, which is the second highest number next to the Šumava Mountains.

The mountain chain is divided into three independent subentitles. These are the Praděd Highlands - the highest part of the Jeseníky Mountains situated between Skřítek (Elf) and the Červenohorské sedlo (Red Mountain Saddle), the Keprnická Highlands - the part between the Červenohorské and the Ramzovské Saddles and finally the highlands of Medvěďská hornatina (ear Highlands), which is the most northeastern part of the Hrubý Jeseník Mountains.

The geological structure of the complex is very varied, even though gneisses, amphibolites and metamorphic Devonian rocks prevail. Regarding the origin, it is composed of several crustal segments of terraced arrangement with eroded remnants in the highest parts. As a whole, the Hrubý Jeseník is protected in the



Venušiny mlisky (Venus's Bowls) in the Žulovská pahorkatina Highlands

Jeseníky Protected Landscape Area. There is also a larger number of protected areas, especially in higher altitudes. One of the most precious ones is definitely the Velká kotlina (Great Basin) with residues of glacial flora and with almost 500 species of higher plants (the most in the Czech Republic).

Šerák - Keprník National Nature Reserve

This reserve is with the area of 1,170 ha the second largest reserve in the Jeseníky Protected Landscape Area. Its territory occupies the peak parts of the Keprnická Highlands, the ridge around the Vozka Mountain, the Keprník Mountain and the eastern and northern slopes of Šerák. It is the oldest reserve in Moravia. The efforts to preserve the ridge vegetation of spruce groves in the main massifs of Šerák, Keprník and Vozka date back to the beginning of the 20th century when in the year 1904 172 ha of forests were included into the so-called reservation (primeval forest), where any human interventions were to be excluded.

The peak areas of Vozka and partially also Keprník are a natural accumulation territory of precipitation waters. We can find here a smallish bog where precious and strictly protected flora is found.

Bílá Opava Waterfalls

After about 2 km from its spring, the Bílá Opava river cuts into a deep canyon in the mountainsides of Praděd and Vysoká Hůl. With rapids, cascades and waterfalls it covers the length of approximately 2.5 km with the altitude difference of about 400 m. The Big Waterfall, the highest of the waterfalls, reaches the height of 7.9 m and is part of the cascade with the total height of 16.4 m and the length of 40 m.

Do you know that:

the highest peak is: Praděd (1,491 m a. s. l.)?

Here spring / flow: Branná, Desná, Bělá, Moravice, Černá, Střední and Bílá Opava

What you should see: Šerák - Keprník NNR

Bílá Opava Waterfalls

Rejvíz Peatbog NNR

with an educational path (the Big and Small Moss Lakes)

Outlook rocks on the top of Keprník, the skyline of the Hrubý Jeseník Mountains and Praděd on the horizon



Wysoczyzna Ziebicka (Wzgórza Niemczańsko



Muszkowicki Beech Forest

In the next section we will move again to the Polish territory and to geographically interesting places along the Polish-Czech borders. It is mostly the area of the Sudeten Foothills (in Polish Przedgórze Sudeckie, in German Sudetenvorland). The correct term from the geographical point of view is the Krkonoško-jesenické podhůří (Giant Mountains-Jeseníky submontane territory). The altitude most often ranges from 200 to 390 m a. s. l.

The **Wzgórza Strzelińskie Highlands** belong to the Wzgórza Niemczańsko-Strzelińskie complex (in Polish: mesoregion) and form its larger and higher part, whereas its section near the town of Niemcza is lower, yet richer in natural curiosities.

The hilly area consists of a picturesque arrangement of rather low hills which spread between the towns of Strzelin



The Zameczny Stream meandering in the reserve

Do you know that:

the highest peak is: Gromnik (393 m a. s. l.)?

*What you should see: **Wojślawice Arboretum**
Skałki Stoleckie Nature Reserve
Muszkowicki Las Bukowy
(Muszkowicki Beech Forest)*

and Ziębice, about 40 kilometres south of Vratislav. Although the peaks reach the altitude of 180 - 220 m (they culminate in the altitude of 393 m a. s. l.), their steeper hillsides give them a mountaneous character.

The highest peaks of the hilly area are approximately in the middle of the ridge, which maintains its meridian direction. The highest of all is Gromnik (393 m a. s. l.), then Kalinka (386 m a. s. l.) and Nowoleska Góra (New Forest Mountain; 383 m a. s. l.). Geologically we can find here predominantly metamorphic rocks, shales, quartzites, amphibolites as well as limestones, intersected by veins of Carboniferous as well as Permian igneous rocks (granites and granodiorites). From time to time there occur even traces of precious minerals and crystals. On the whole territory we can find remainders of the exploitation of local rocks, quarries, which are sometimes flooded and thus form small romantic lakes, but also lime kilns.

What is surely worth visiting is the Wojślawice Arboretum, the Skałki Stoleckie Nature Reserve and the beech forest at the village of Muszkowice.

The Wojślawice Arboretum

represents one of the most significant dendrological gardens in Lower Silesia. Wojślawice is situated near the town of Niemcza. The arboretum takes up the area of over 65 hectares and there grow roughly about 2,500 species of

- Strzelińskie)

The Wojsławickie Arboretum

woody plants and 3,500 species of other plants. The garden offers its visitors mainly a large collection of rhododendrons, lilies and box trees. The Wojsławickie Arboretum has a long tradition, a romantic park was established at its location already in the year 1821. Sixty years later it was transformed into a rhododendron garden by Fritz von Oheimb, who accumulated there more than a few thousand varieties of rhododendrons.

The Skałki Stoleckie Nature Reserve is located in the southern part of the Niemcza Hills on the territory of the village of Stolec, about 4.5 km east of the town of Zabkowice Śląskie.

In the reserve, which was declared in a former lime quarry, on the southern slope of the Góra Waplewna Mountain (Lime Mountain; 398 m a. s. l.), there are four kinds of protected Mediterranean insect and it is the most northern place where they occur. The most valuable among them is the so-called black bee, which builds its dwellings from clay directly on a lime rock. Apart from bees, there are three protected species of wasps. The reserve also offers a diverse mixture of protected plants including the wild rose and large areas of the white stonecrop. Moreover, in the seams and tunnels of the former quarry there is a hiding and mainly hibernation place for up to 12 species of bats.

Muszkowicki Las Bukowy (Muszkowicki Beech Forest)

A floristic and forest reserve not far from the village of Muszkowice created for the preservation of the original forest with a rich flora of forest undergrowth. Not far from the reserve there is a burial site from the Lusatian period with 29 well-preserved barrows, which are archeological relics.



The Skałki Stoleckie Nature Reserve

Bardzkie Mountains and Owl Mountains

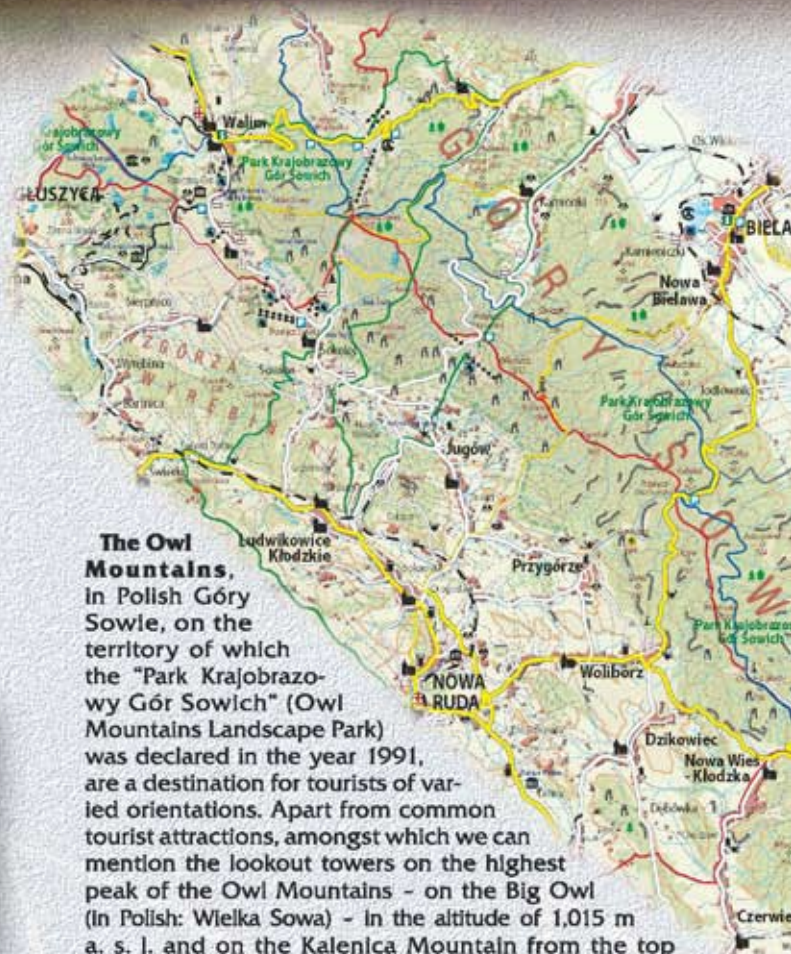


The range of the Owl Mountains seen from the north from Bielawa

The Bardzkie Mountains, in Polish Góry Bardzkie, represent a mountain chain with the total length of 18 km, lying in the Middle Sudeten between the Owl Mountains in the north-west (Przełęcz Srebrna 585 m a. s. l.) and the Zlaté (Golden) Mountains in the southeast (Przełęcz Kłodzka 475 m a. s. l.). The mountain ridge is divided by the Nysa Kłodzka river almost in the middle and thus their northern and southern parts are formed. This smallish, but really picturesque mountainous area is composed first and foremost of sandstones and conglomerates and its geological structure reminds us of distant processes during the formation of high massifs, but also of erosion and glaciation. The lowish peaks imbue the mountain range with unrepeatable and even fairytale-like character, so to say, particularly in the area of the breakthrough of the Nisa river (Nysa Kłodzka). On the territory of the mountain range we can also find two important reserves: the "Cisy" (Yew) and "Cisowa Góra" (Yew Mountain) reserves. Both of them are registered as forest reserves and they protect – as is obvious from the name – the natural habitats of yew trees.



Berries of the European yew



The Owl Mountains, in Polish Góry Sowie, on the territory of which the "Park Krajobrazowy Gór Sowich" (Owl Mountains Landscape Park) was declared in the year 1991, are a destination for tourists of varied orientations. Apart from common tourist attractions, amongst which we can mention the lookout towers on the highest peak of the Owl Mountains – on the Big Owl (In Polish: Wielka Sowa) – in the altitude of 1,015 m a. s. l. and on the Kalenica Mountain from the top of which there is a splendid spheric view not only of the surroundings, but also of more distant regions (from the Giant Mountains up to Silesia and the Polish inland), the Owl Mountains also attract history lovers with their extensive underground complex from the time of the Second World War. Its importance has not been accurately explained yet, the considered possibilities include the building of Hitler's main headquarters or the building of a secret weapons factory.

The mountain chain stretches from the Przełęcz Srebrna Pass (585 m a. s. l.) in the south east, where the aforementioned Bardzkie Mountains end, in the northwestern direction towards the valley of the Bystrzyca river. The north-eastern base of the mountains, unlike the southwestern one, is rather distinctively bordered. The whole mountain range is mainly composed of gneisses and migmatites estimated to be about 2.5 billion years old and according to experts ranking among the oldest rocks in Poland.



Do you know that:

the highest peaks are: **Kłodzka Góra Mt. (765 m a. s. l.)**, Bardzkie Mountains? **Wielka Sowa Mt. (Big Owl; 1015 m a. s. l.)** Sowie Mountains?

What you should see: **Bardo (In English: Hill)**, where the landscape was markedly influenced by the breakthrough of Nisa through the mountain massif

Cisy and Cisowa Góra Nature Reserves, Bukowa Kalenica and Góra Cholina Nature Reserves

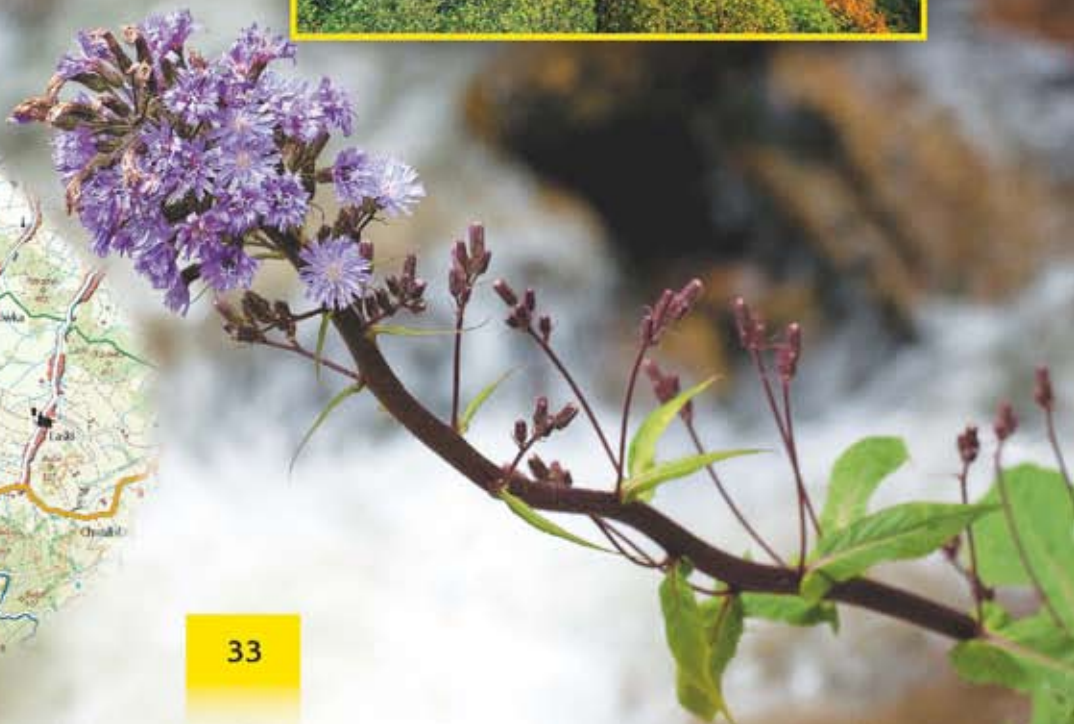
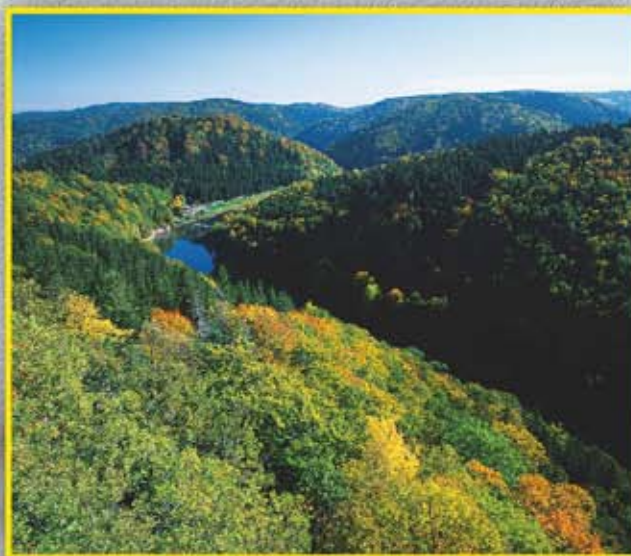


On the northeastern slopes between the Kalenica and Stoneczna Mountains we can find the Bukowa Kalenica Nature Reserve. In the northwestern part our attention is drawn by plentiful rock gardens in the surroundings of the stream of the Bystrzyca river and the Góra Cholina reserve above the valley dam on the Bystrzyca river.

Alpine sow-thistle

The Wielka Sowa (Big Owl) Mountain

The Góra Cholina Nature Reserve from the Grodno Castle and the Owl Mountain



Wałbrzyskie Mountains and our Javoří Mountains



The Książański National Park

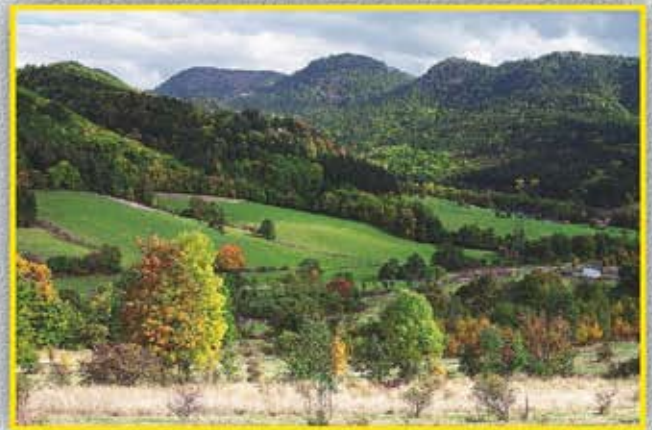
The **Wałbrzyskie Mountains** represent an area stretching in the length of 35 km from the northwest from the Bobr Valley towards the southeast into the valley of the Bystrzyca river. They consist of three independent parts of the Trójgarb Mountain (779 m a. s. l.), the massif of the Chełmiec Mountain (851 m a. s. l.) and the Czarne (Black) Mountains. The highest peak here is the Borowa Mountain (853 m a. s. l. - sometimes also called Czarna).

North of the town Wałbrzych between the towns of Szczawno - Zdrój and Świebodzice there is a lower part of the mountain chain (the highest peak reaches the altitude of 431 m a. s. l.), which is practically included as a whole in the Książański National Park. Picturesque nature sceneries are dominated by the Książ Chateau with its charming park.

Stone Mountains and Javoří Mountains

South of the Wałbrzyskie Mountains along the border between Poland and the Czech Republic there are the **Stone Mountains** (in Polish Góry Kamienne), which are called **Javoří Mountains** on the Czech side.

The highest peak on the Polish side is Wallgóra (936 m a. s. l.), whereas on the Czech side it is Ruprechtický Špičák (881 m n. m.) lying right on the border. In the entire area of the Stone as well as Javoří Mountains there are a lot of places with a scenic view of the surroundings. It is interesting that in spite of the closeness of sand-



The Stone Mountains (Góry Kamienne) seen from Sokolowska

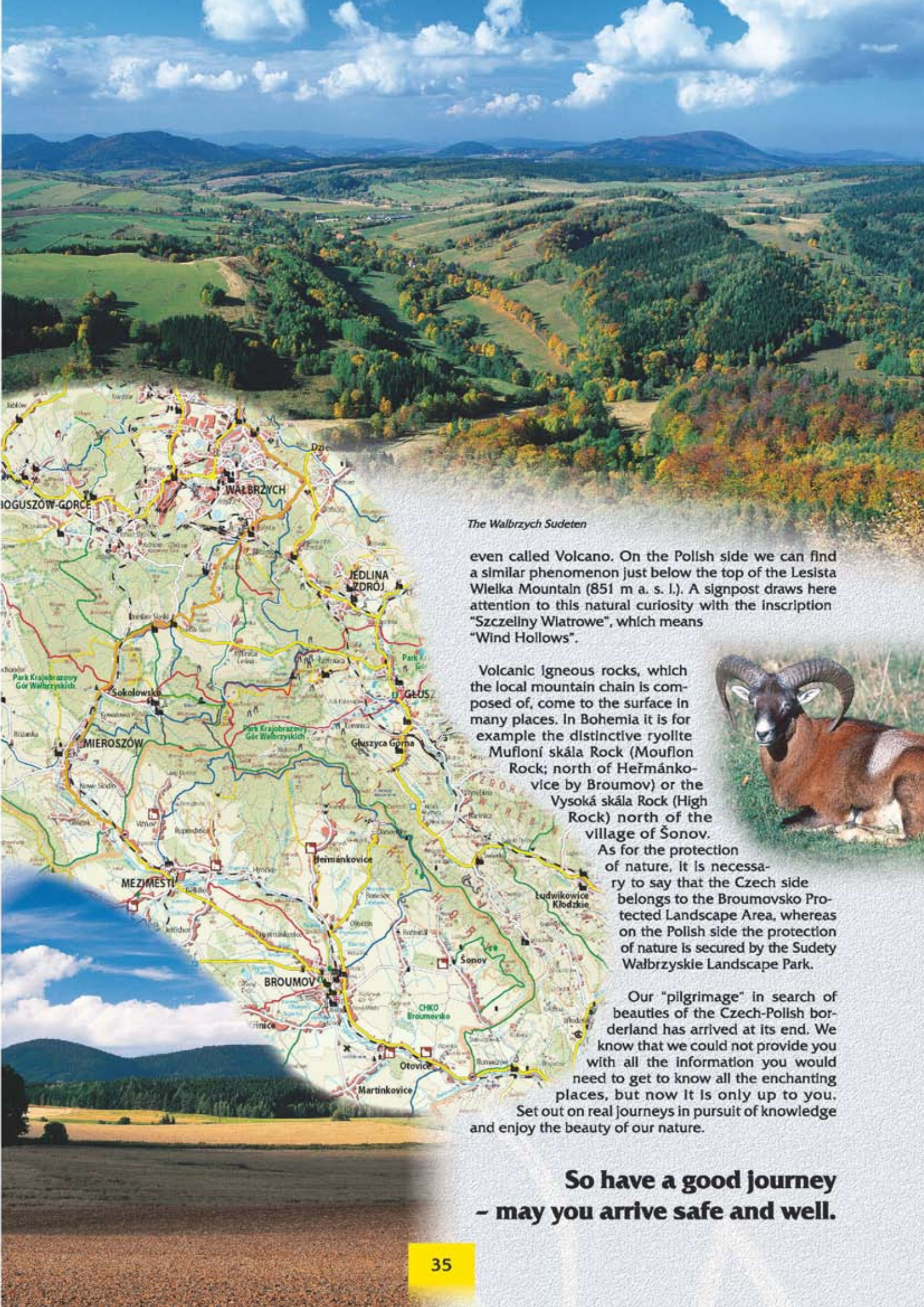
stone rocks these mountain ranges are mostly composed of igneous rocks, primarily tuffs and melaphyres. It is due to the fact that these mountain ranges are actually just small rests of a once probably massive Paleozoic volcano, the same as it is in the case of the Vraní Mountains. In several places we can see here an interesting phenomenon at the beginning of winter, when hazy clouds rise from the rocks and rock debris. The reason for this is that the crevices form narrow, a few-metre-deep crevasses, arisen due to the movement of disturbed rocks (here mostly rhyolite), which turn into an underground system of impenetrable rifts and detritus, where warm air accumulates over summer and then on frosty days leaks as a misty draught from upper openings, which have been called "Wind Hollows" since the Middle Ages (from the German Windlöcher).

At first sight it may seem to us to be a volcano. Most often we can observe this interesting phenomenon in the area around the peak of Homole (648.6 m a. s. l.) not far from the village of Šonov, which is sometimes



The Javoří Mountains from Jetřichov





The Walbrzych Sudeten

even called Volcano. On the Polish side we can find a similar phenomenon just below the top of the Lesista Wielka Mountain (851 m a. s. l.). A signpost draws here attention to this natural curiosity with the inscription "Szczelny Wiatrowe", which means "Wind Hollows".

Volcanic Igneous rocks, which the local mountain chain is composed of, come to the surface in many places. In Bohemia it is for example the distinctive ryolite Mufloní skála Rock (Mouflon Rock; north of Heřmankovice by Broumov) or the Vysoká skála Rock (High Rock) north of the village of Šonov.

As for the protection of nature, it is necessary to say that the Czech side belongs to the Broumovsko Protected Landscape Area, whereas on the Polish side the protection of nature is secured by the Sudety Wałbrzyskie Landscape Park.

Our "pilgrimage" in search of beauties of the Czech-Polish borderland has arrived at its end. We know that we could not provide you with all the information you would need to get to know all the enchanting places, but now it is only up to you. Set out on real journeys in pursuit of knowledge and enjoy the beauty of our nature.

**So have a good journey
- may you arrive safe and well.**

The most significant flora in the Glacensis Euroregion



Mountain arnica (*Arnica montana*)



Spring snowflake (*Leucojum vernum*)



Siberian iris (*Iris sibirica*)



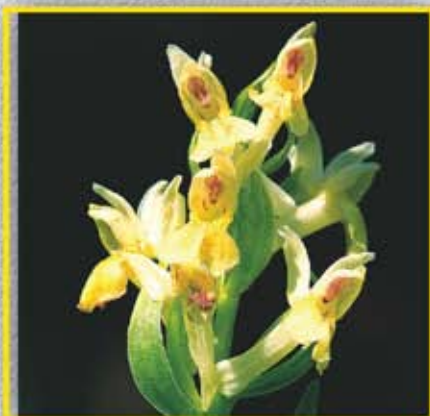
Common spotted orchid (*Dactylorhiza fuchsii*)



Bohemian dwarf gentian (*Gentianella praecox subsp. boh.*)



Willow gentian (*Gentiana asclepladea*)



Elder-flowered orchid (*Dactylorhiza sambucina*)



Dark red helleborine (*Epipactis atrorubens*)



Marsh helleborine (*Epipactis palustris*)



Turk's cap lily (*Lilium martagon*)



Early purple orchid (*Orchis mascula*)



Alpine sow-thistle (*Cicerbita alpina*)



Purple foxglove (*Digitalis purpurea*)



European columbine (*Aquilegia vulgaris*)



Western marsh orchid (*Dactylorhiza majalis*)



Burnt-tip orchid (*Orchis ustulata*)



Marsh Labrador tea (*Ledum palustre*)



Round-leaved sundew (*Drosera rotundifolia*)



Fen ragwort (*Senecio paludosus*)



Lady's slipper orchid (*Cypripedium calceolus*)



Common snowdrop (*Galanthus nivalis*)



Lesser butterfly-orchid (*Platanthera bifolia*)



Mountain pansy (*Viola lutea* subsp. *sudetica*)



Bearded bellflower (*Campanula barbata*)



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