



evropský
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EVROPSKÁ UNIE



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY



OP Vzdělávání
pro konkurenceschopnost

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

The Jeseníky PLA (CHKO)

The Jeseníky PLA is spread out in the very northern part of Moravia and the Czech part of Silesia and on the frontier between the Moravia-Silesia and Olomouc regions and in the Bruntál, Jeseník and Šumperk districts. In 1969 the Protected Landscape Area (PLA) Jeseníky was founded, with an area of 740 km².

Vegetation is represented by herbaceous-rich and acid mountain beech forests, in high-altitude localities indigenous spruce, alpine coenosis and raised bogs dominate. Dwarf pine is not one of the indigenous woody species and does not occur here. This is one cause of the immensely rich biodiversity of some localities in the alpine zone. The area contains the richest botanical locality in the Czech Republic, Velká Kotlina, which has about and it has about 450 plant super-species.

The climate is quite cold. The high-altitude locality is one of the coldest in the Czech Republic (on Praděd peak there is annual precipitation 1440 mm and an average temperature 0.9°C). Anemographic systems are a significant feature and had a significant effect on the emergence of glacial cirque and on its flora diversity.

Landscaping guide through the valley of Bílá Opava

1. Welcome to the Bílá Opava nature trail

The Bílá Opava nature trail is 6 km long and has 13 stopping-off points. It goes through unique, centuries-old mountain forests along the Bílá Opava river and ends at the cottage Barborka. You will see rapids, many waterfalls and centuries-old original spruce forests. Your guide on the trail will be the White-throated Dipper, whose home is found here. The Waterfall in front of you is man-made, formed from a water channel overflow.

2. People in Bílá Opava

From time immemorial, people have been harnessing the power of the water, building canals and water channels in order to carry water to where it was needed, to watermills, sawmills, foundries, power plants and spas. The remains of a canal which carried water from the Bílá Opava to the mines at Suchá Rudná are located close by. The water channel in front of you was built at the turn of 19th and 20th century for use by a spa and small hydroelectric power plant. The water from the channel is still used for spa purposes.

3. Taming of Bílá Opava

The flow of the river was partially shifted in the 18th century when a dam was built to hold enough water for floating wood and for the needs of iron works and foundries in Karlova Studánka and Ludvíkov. From the beginning of the 20th century, dams were built to catch rocks, gravel and water carried by floods. The dam where you are standing was built in the

years 1968-69. During the flood in 1997, it caught nearly 3800 m³ of gravel and stones.

4. Water trails

The Bílá Opava river basin annually in many places, rocks in the river move, other rocks fall into the river, landslides occur annually on many steep slopes. Above this bridge, you can see many old river channels. The cold, pure stream water with its high oxygen content provides a suitable environment for many water species such as fly larvae, small crustaceans and fish.

5. Up to the waterfalls!?

In front of you is a path up narrow canyon of rapids and waterfall. It is an interesting, but difficult route. You will have to cross a number of bridges, climb ladders and steep paths, climbing right next to the edge of the water or along paths on steep slopes. For your safety, take this path along the waterfalls when ascending and descend following the blue hiking trail. The wooden bridges and staircases allow you to walk through the valley causing as little damage as possible to the river banks, waterfalls and the nature reserve as a whole.

6. Entering the Bílá Opava valley

You are entering the most beautiful valley in the Jeseníky mountains. You will see the Large Waterfall (Velký vodopád), the oldest forests in Jeseníky and many other records, such as the most difficult path and the biggest number of steps, ladders and bridges. In 1963 the Bílá Opava State Nature Reserve was declared, which since 1991 has been a part of the Praděd National Nature Reserve. Many unique natural phenomena are protected in the Bílá Opava valley – waterfalls, centuries-old spruce forests, rare animal and plant life and ecosystems. The *Carabus variolosus* ground beetle, *Buxbaumia viridis* moss, mountain alder, ancient mountain spruce forests and mountain meadow are protected Europe-wide.

7. Life on moss cushions

The rocks in the Bílá Opava valley and stones in the river channels are covered by many moss and liverwort species. Conditions in the Bílá Opava valley are excellent for them because of the ruggedness of the terrain and the moisture in the air. The rarest mosses and liverworts grow singly and are small and difficult to spot. Moss cushions provide a home to hundreds of fascinating small animal species.

8. Mountain spruce

In the past, the Bílá Opava valley was remote and difficult to get to, which allowed the original mountain spruce forest to be preserved. The forest has trees of diverse ages, from seedlings to huge trees of over 200 years old. Young trees grow on rooting branches and old dry trees. In autumn 2004, this section of the Bílá Opava was hit by strong gales which damaged 7 ha of forest. Many trees were left lying on the ground after the storm and were not removed. Leaving dry or rooting trees on the ground facilitates the regrowth of the damaged forest.

9. Ing. Bark beetle at work

The European Spruce bark Beetle is great at recognising weak or old trees which stand in the way of the next generation of trees and reliably gets rid of them. It does not attack healthy trees! If it tries to, it is smothered by resin. Bark beetles are not successful in natural mountain spruce forests. They do better when storms uproot and attack trees.

10. Why is this forest not “clean up”?

In autumn 2004, this section of the Bílá Opava was hit by strong gales which damaged 7 ha of forest. The gales damaged weak forest of a particular age. The ancient forest growth in the upper parts of the valley remained almost damage-free. Leaving dry or rooting trees on the ground in the forest gives a new home to many plants and animals. Spruce seedlings grow best in mountain forests on rooting wood.

11. Why are the spruce trees in Jeseníky different?

Jeseníky spruce trees are more resistant to adverse mountain conditions. Their narrow tops hold less snow and they suffer less from frost and gusts of wind. Jeseníky spruce trees are not endangered thanks to their natural renewal in mountain forests with sufficient rooting wood, without the need for human intervention.

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