## All-IUFRO Conference: Forests in a Volatile World – Global Collaboration to Sustain Forests and Their Societal Benefits

Vienna, Austria, 21-23 September 2022

## Excursion on Wednesday, 21 September 2022

## Forest management at the lower timberline

We will visit the secondary black pine forests in the Steinfeld, which literally translates as "field of stones" near Wiener Neustadt. The area is located south of Vienna in the state of Lower Austria and experiences Pannonian climate with hot summers, cold winters and low precipitation rates resulting in a potential natural vegetation of oak and hornbeam forest. Over the past few centuries, the area has been converted into agricultural land.

During the 15<sup>th</sup> century Wiener Neustadt was the capital of the Austrian Empire ruled by Emperor Maximilian. He initiated large reforestation projects with black pine to avoid erosion, but also to create hunting grounds. In the 18<sup>th</sup> century Empress Maria



Theresia continued these projects. The economically highly profitable production of tree resin harvested from the black pine forests became a major source of income in the region but ended when the resin was replaced by fossil materials.

Today the area is the largest secondary black pine forest in Central Europe and has a lot of small landowners. It is considered highly vulnerable to climate change because of the sandy soils and the low and declining precipitation rates in the region. Drought stress, resulting bark beetle infestation and forest fires are increasing threats to these forests and present huge challenges for forest management.

Our guides will be a scientist of the Institute of Silviculture, BOKU University of Natural Resources and Life Sciences, and representatives of the local forest authorities.

## **Forests and water**

We will visit "Kaiserbrunn", which literally translates as "Emperor's Well", the place where Vienna's drinking water originates. It is located south of Vienna in the Rax-Schneeberg region at the border between the states of Lower Austria and Styria at the edge of the Eastern Austrian Limestone Alps. The region experiences mountain climate with a lot of rain and snowfall in winter, which provides excellent conditions for drinking water. Historically, the area served as hunting ground for Franz Joseph I, the Emperor of the Austro-Hungarian Empire.

During the 19<sup>th</sup> century Vienna recorded a strong population growth, which resulted in a shortage of water especially for poor people. Thus, Emperor Franz Joseph decided to have the First Vienna Mountain Spring Pipeline built. The 95km-long pipeline



was opened in 1873 after a construction period of roughly four years. In 1910 a second water pipeline of ca. 180km was opened. The water flows at a speed of 5km/h by gravitational energy only. It takes about 36 hours for the water to reach the city of Vienna from the Rax-Schneeberg region. The forest in the water catchment is owned and managed by the City of Vienna with a focus on ensuring high-quality drinking water for Vienna's about two million inhabitants.

We will visit the well, the water museum and enjoy the mountainous landscape of the region. Our guides will be representatives of the City of Vienna.

Text and photos: Professor Hubert Hasenauer, BOKU University of Natural Resources and Life Sciences

