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und lawinenverbauung

Bundesministerium
Nachhaltigkeit und Tourismus

THE

“SALZKAMMERGUT”

A

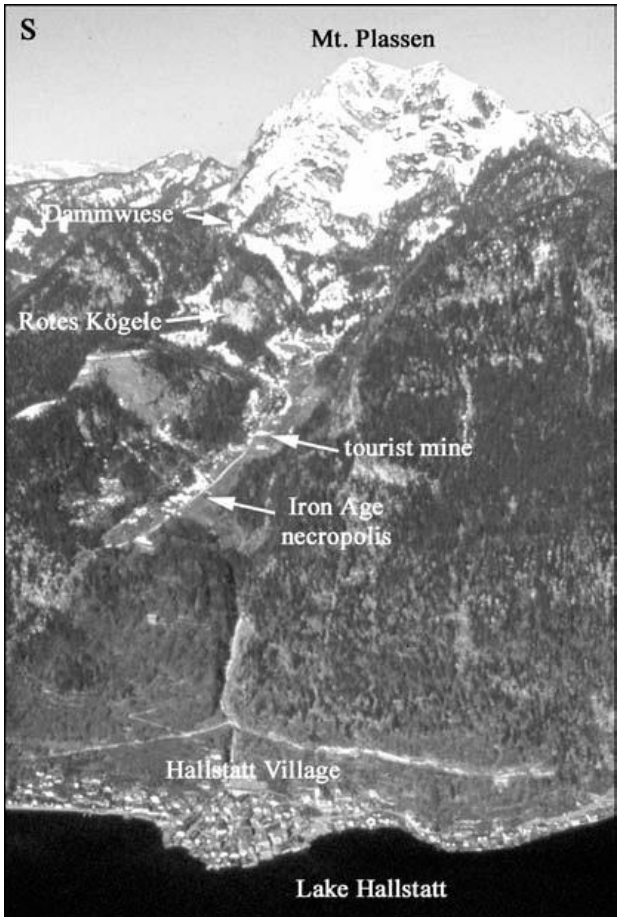
SHORT HISTORIC OVERVIEW

Austrian Service for Torrent and Avalanche Control, June 11th.2018:

Situation and history:

The name „Salzkammergut“ originates from the salt mining and salt refinery in the villages of Hallstatt, Altaussee, Bad Ischl and Ebensee. It is situated in the very centre of Austria and stretches over the three counties of Styria, Upper Austria and Salzburg, with the biggest part in Upper Austria. The expansion of the name Salzkammergut is related with the wood consumption of the salt refineries. Especially because water was the only affordable media of transportation both for the firewood and the salt. Wood was transported by floating or as rafts downstream to the salt refinery where it was used as firewood for the salt production process. Thus the growing need for firewood and exploitation of forests had two consequences: first, the location of the salt refineries had to move on further downstream and secondly, the name Salzkammergut expanded with the expansion of the exploitation areas of wood. Most of the forests were dispossessed in favour of the crown and came subsequently under possession of the Austrian federal forests SA.

Geology:

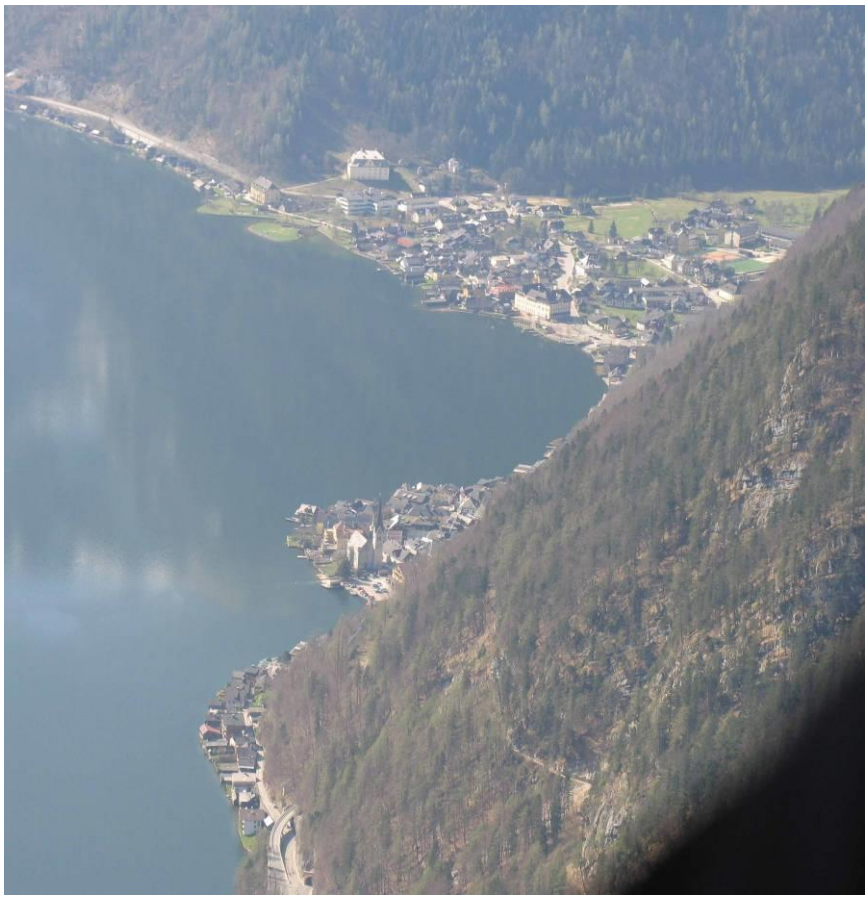


The geology of the Salzkammergut is predesigned by tectonic and glacial morphology. Lines of tectonic perturbation are crossing the region and form a zone of high geological risks within this mountainous landscape. The area is part of the Northern Calcareous Alps which are composed predominantly of Mesozoic carbonates, frequently with clastic sediments at certain stratigraphic levels. At Hallstatt, no continuous stratigraphic succession exists. The Hallstatt Zone of Mt.Plassen is a laterally discontinuous subunit, stretching in an east-west direction. Due to alpine thrusting and various tectonic processes, the geological situation is very complex.

CLIMATE:

The Mountains as barrier for the dominating western winds lead to a very humid, oceanic influenced climate with annual precipitation of up to 2000 mm, a 24- hour's maximum of up to 400 mm and extreme sum of freshly fallen snow of 9000 mm.
This combination of meteorological factors leads to a wide spectrum of natural hazards: inundations, mudflows, landslides and avalanches.

THE FORESTS:



In terms of forest scientific classification we are in the northern sub alpine fir and beech forests area (Abieti-Fagetum). The natural wood society therefore should consist of fir, spruce and beech, with domination of the beech in lower regions and of spruce near the sub alpine zone. Above 1400 m altitude the sub alpine spruce society would be regular. Beginning with that altitude also larch and pine are added to the stands and with further approach to the upper edge of forests even the cembra-pine becomes dominant in some places.

Regarding the actual forest structure and texture, we still find the influence of over - exploitation in the early days of salt mining and also of traditional imperial hunting

(Emperor Franz Joseph had chosen the Salzkammergut for his summer residence and spent most of his time hunting).

The fact that fresh cut beech wood does not swim, made it unsuitable for floating transport, so it was left over, when remote areas were clear-cut. Another reason to leave the beech over was an energetic one: the different types of burning made the wood of the beech trees less asked for in the salt refineries. It was even pretended, that beech wood would burn the brewing coppers through. That's why exploitation concentrated on coniferous wood and here preferred the less resinous spruce and fir.

This led in a first consequence to a predomination of beech in the following stands and to denudation of stands, where beech did not grow for expositional or other climatic reasons. The imperial hunting manners led to a high stock of game and still by this reason in some places the fir became nearly extinct. Grazing by game and animals as well as the clearing of alpine pastures was the reason for the depression of the natural upper forest margins.

The extraordinary economic importance of salt mining (salt was called the white gold) together with the bad experiences with over-exploitation of forests led to the first known rules for forestry (Urbariis) worldwide, beginning in the 16th century. The roots of the actual forest law of 1975 date back to the „Reichsforstgesetz" of 1852.

The austrian forest law gives the proprietor basically the obligation to tend the protective forest, but this obligation is limited with the profit of the harvested wood out of them. This did lead to a lack of tending in extreme stands, where the possible profit equals zero. Where protective forests are essential for a special kind of infrastructure or buildings, the forest law gives the opportunity of declaring a protective forest by decree. The favoured of this declaration can be forced to pay for the economic hardness of special measurements in this protective forest by decree or the authority can turn over the obligations to the favoured.

As the emperor had chosen Bad Ischl as its summer residence, there had to be build one of the first railroads through the mountains. The “Kronprinz Rudolf Bahn” had the goal, to link the Danube river with the Adriatic sea. So the imperial privilege gave the corporation of the Kronprinz Rudolf Bahn the right to build a railroad from Schärding to Triest. Due to bankruptcy it was never finished, but from the year 1872 on it linked the emperors residence in Vienna with his summer residence in Bad Ischl.
Going all along the Traun valley from Gmunden until the innermost of the Salzkammergut it had to cross a lot of avalanches, rockfall areas and torrents like the Kesselbach, which we will see tomorrow.

In years with heavy precipitation like at the end of the 19th century, the railway company had a lot of problems with interrupted routes. Blocked either by avalanches, mudflows or eroded bridges.
That’s when our ancistors within the torrent control had to carry out a lot of fast projects, like e.g. the Kesselbach.