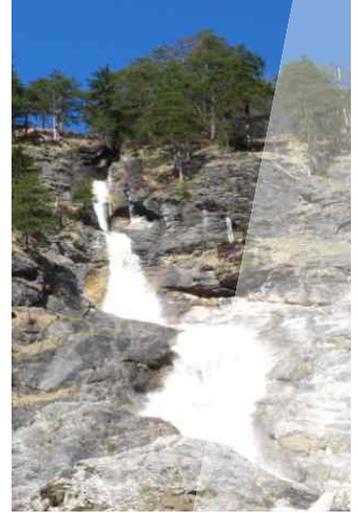


ALMBACH GORGE

Nature and Water Trail



- Wild romantic moments
 - Waterfalls
- Experience stations
 - Kugelmühle
- Historical wood drifting
 - Nature and legends



ALMBACH GORGE

Nature and water hiking trail



Survey

- [Pictures and impressions](#) >
- [Interesting facts](#) >
- [Localities](#) >
- [Wood drifting, Salt and wood](#) >
- [Route description](#) >
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- [Experience stations](#) >
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ALMBACH GORGE

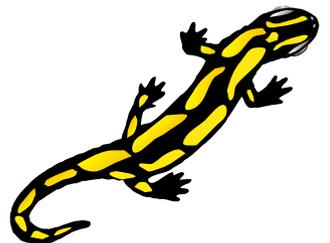
Nature and water hiking trail

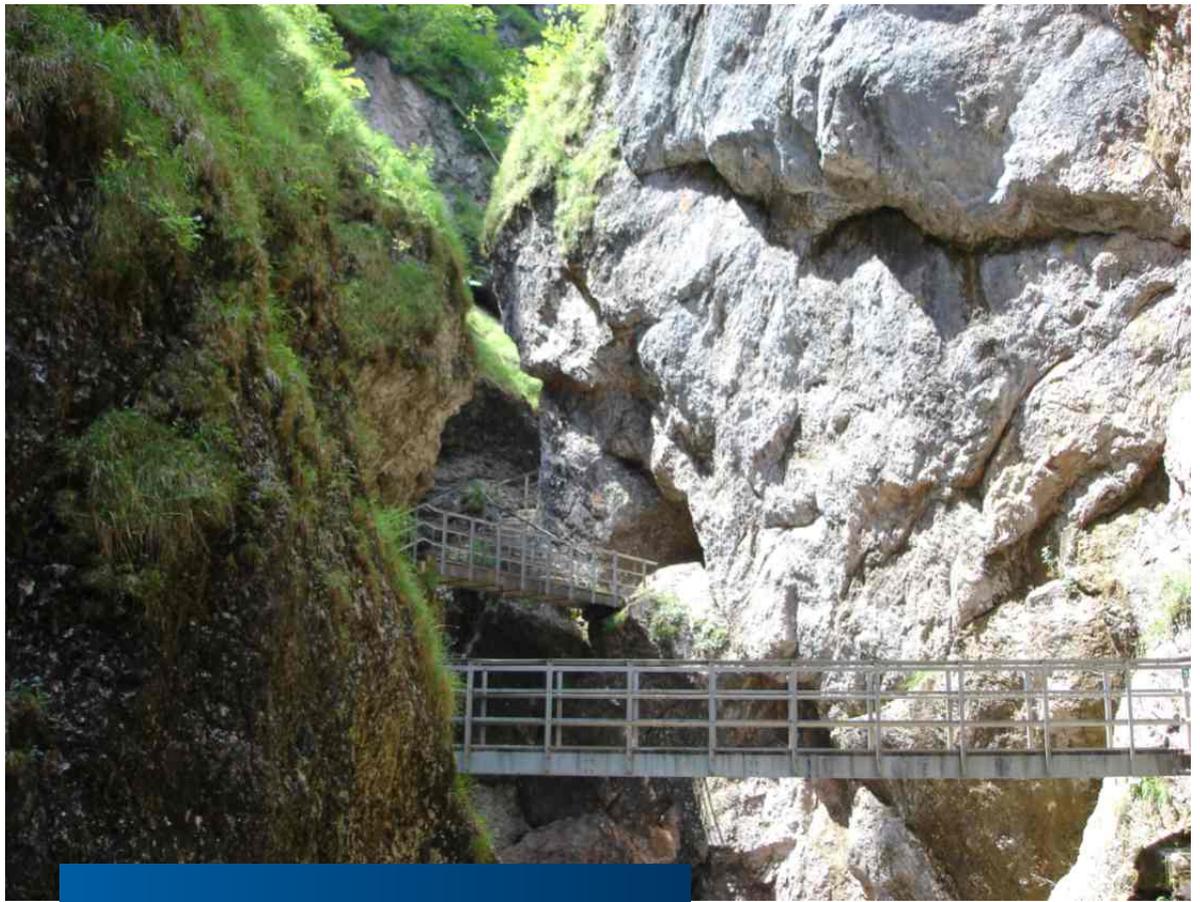


Welcome to the Almbach Gorge!

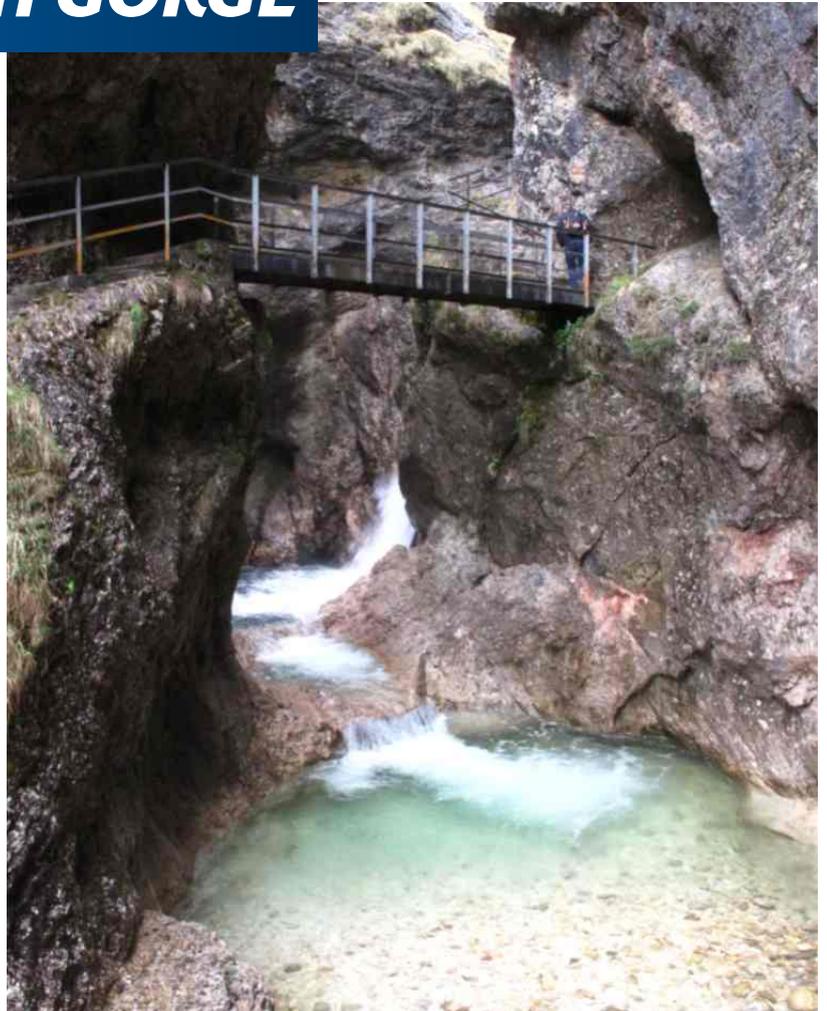


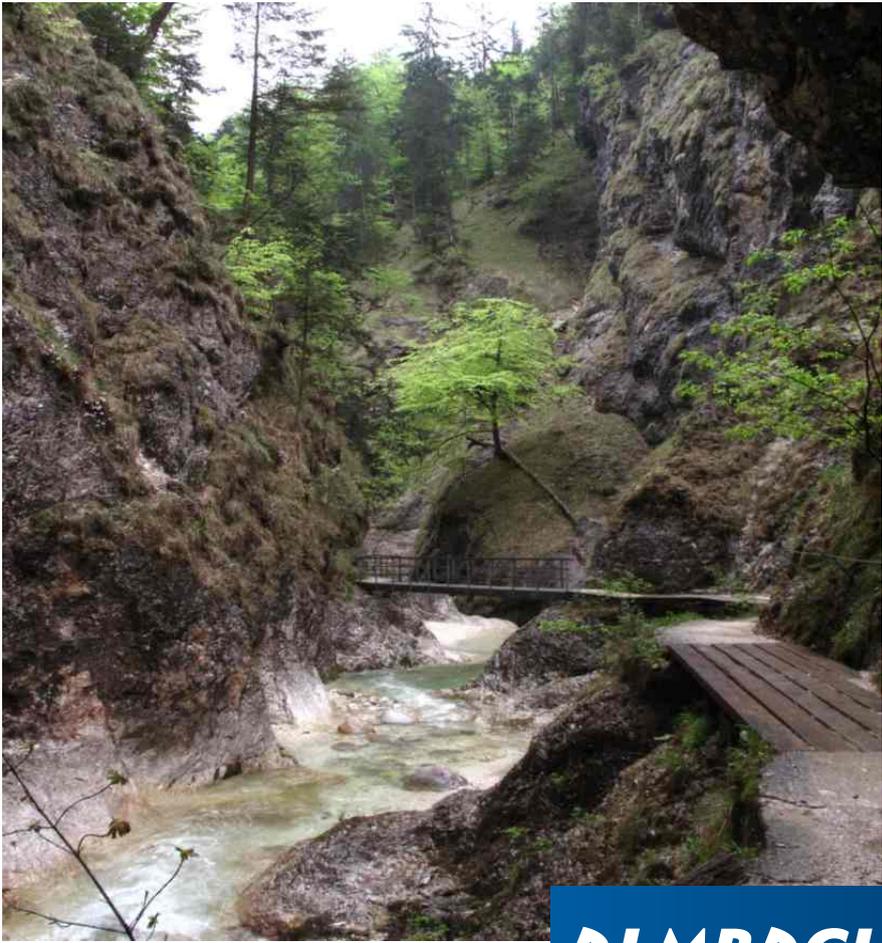
*“There is a lot to see and experience here.
May I accompany you?”*





ALMBACH GORGE





ALMBACH GORGE



GEOLOGY

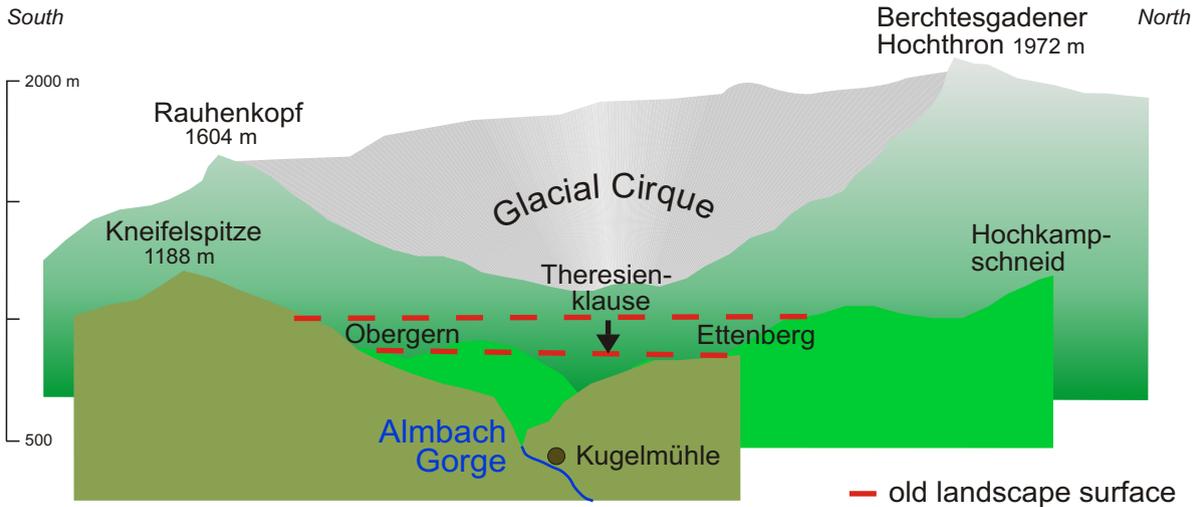
At the beginning of the hike, Werfen schists can be found in the area surrounding the Kugelmühle, followed by dark dolomites. From the first weir onwards, these merge into the Ramsadolomite which dominates the gorge up to the Theresienklause and further beyond.

It is worth taking a look at the Dachstein limestone blocks used for building the Theresienklause as they contain some clearly visible shell remains of 10 cm large megalodont mussels.



Ramsadolomite

HISTORY OF ORIGIN



Approximately 12,000 years ago the formation of the Almbach Gorge began with the melting glaciers of the last ice age.

Meltwater and later rainwater carved and separated the once contiguous old landscape surface of Ettenberg and Maria Gern. Making its way down a high valley via a waterfall, the

Almbach joined the Berchtesgadener Ache as a side creek. Then, it started to cut itself deeper and deeper. The steep valley flanks and the waterfalls of the lower gorge area show the youngest age due to their shape. Looking at the upper gorge area in comparison, a clearly v-shaped valley has already been formed.

FLORA

The Almbach Gorge is a diverse habitat for plantlife. In the smallest places a variety of biospheres such as moist and cool ravine forests with ash and sycamore maple or sunny and warmth-loving snow heathland-pine forests can be found next to each other. In addition to that, there are crevices and the steep wet rocks where only algae and mosses are able to survive.



In the sun: bear's ear (primula auricula)

FAUNA

The inaccessible walls of the gorge offer a wide range of different habitats for wildlife. Numerous types of insects and butterflies populate the higher, sunny places and usually remain hidden from visitors. However, those who visit the gorge on foggy, rainy and

not too cold days will certainly encounter the fire salamander. Adult animals usually prefer the warm and moist deciduous forests, but the salamander females need the little rock-pools of the river Almbach to shed their larvae in spring.



Fire salamander



KUGELMÜHLE

For the understanding of the word "Kugelmühle": it is a mill (= Mühle) producing marbles, balls and globes (= Kugeln) out of stones.

At the beginning of the Almbach Gorge, the last Kugelmühle (stone ball mill) in Germany is located. It has been existing since 1683 and therefore has a history of more than 300 years. In the area of Schellenberg alone, there were around 130 ball mills, about 40 of them along the river Almbach.

Roughly hewn blanks made from various rocks in the surroundings are sanded down between a stone slab and a rotating wooden disc until the round balls are formed. As marbles, they once went all over the world, often as ballast in the keel of sailing ships. Nowadays the balls are appreciated as souvenirs.

A closer look at the balls can be worthwhile as they often contain beautifully preserved fossils.



[Map](#) >

SULZER WATERFALL



The Sulzer Waterfall can be reached from the Kugelmühle (stone ball mill) within a 45 minutes walk.

With a height of 114 m spread over three steps it is considered as the eleventh highest waterfall in Germany.

[Map](#) >

TERESIENKLAUSE



Until 1963 wood was drifted through the Almbach Gorge. For this purpose, a 14 m high, 6 m wide and 17 m long water retaining wall was built in the upper part of the gorge in the period from 1834 to 1836.

In honour of the Bavarian queen Therese, the wife of Ludwig I., it was named "Theresienklause".

In the Berchtesgaden county, the Almbach Gorge, with the Theresienklause and the rake at the Kugelmühle (stone ball mill), is the best-preserved example for this type of getting timbers down to the main valleys.

[Map](#) >

[Wood drifting](#) >

ETTENBERG

The pilgrimage church "Mariä Heimsuchung" was built on the Ettenberg plateau in 1724-1725. Worth seeing are the baroque interior decoration of the church and the ceiling paintings. Every year the Ettenberger Annafest takes place here

on the first Sunday after the Annentag (26th of July). From Ettenberg you can enjoy a magnificent view of the surrounding Berchtesgaden Alps, the southern faces of the Mt. Untersberg and the Berchtesgadener Hochthron.



[Map](#) >

The legend of Emperor Charlemagne in the Untersberg

Deep in the Mt. Untersberg, Emperor Charlemagne has been sleeping with his court for a long time. He sits on his throne and his beard has grown twice around the table in front of him. Once his beard has grown around the table for the third time and the ravens no longer fly around the Mt. Untersberg, he will wake up and move with his entourage to the Walserfeld nearby Salzburg, where he will destroy all his opponents and the evil in a horrible three-day battle on the last day. He will then move victoriously to Salzburg to proclaim eternal peace.



HISTORICAL WOOD DRIFTING

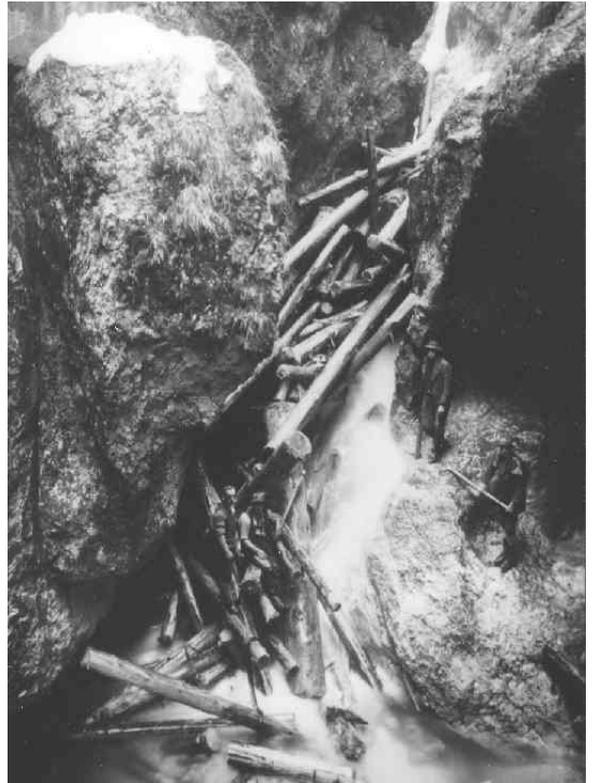
Behind the Theresienklause up to 15,000 m³ of water could be dammed up which poured through the gorge with a huge gush after opening the water retaining dam. The water masses carried away the wood thrown into the gorge and transported it down the gorge. At the lower end of the Almbach Gorge, the bridge at the Kugelmühle (stone ball mill) served as a rake for collecting the washed up wood.

In front of the Theresienklause about 300 solid cubic meters of wood are ready for drifting.



Picture taken: Schmid, J., *Berchtesgadener Heimatkalender*, c. 1930, archive G. Gödde.

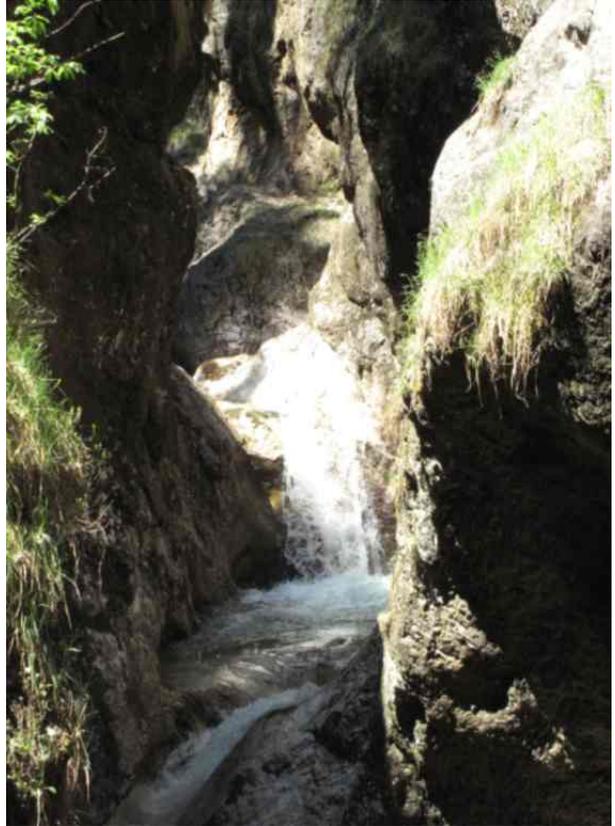
During a drift, wood wedged itself into a barrier. This had to be solved in order to transport the wood further in a night drift.



Picture taken around 1930: Stanggassinger, E., *Böcklmühle, Bischofswiesen*, Archive G. Gödde.

The historical wood drifting is impressively depicted by the Bavarian State Forest Company, Forest Branche Berchtesgaden, on several panels from the “Kugelmühle” up to the “Theresienklause”.

As here in the gorge at bridge 8, historical photos from the time of the wood drift at the corresponding places show the dangerous work of the woodcutters in bringing wood.



View from bridge 8 to the “Kleinen Kessel” which means “small basin”.

[Map >](#)

SALT AND WOOD

Salt and wood have been inextricably linked for centuries in the Berchtesgaden county. The salines (Berchtesgaden 1517-1928, Marktschellenberg at least since 1212-1805) used large quantities of wood to produce salt from brine. The firewood was mainly drifted in streams and rivers to the salines. In the course of time, more and more remote forests in the mountains were used for timber production. To do so, logging dams and sometimes rakes towards the valley were set up at various streams to bring the wood from the high altitudes down to the valley.



ALMBACH GORGE

Nature and water hiking trail



Route description

At the beginning of the hike through the Almbach Gorge:

the road to the first bridge is barrier-free.



Experience stations:

- 1 Gold panning
- 2 Power of water



The narrowest section of the gorge follows:

footbridges lead over the waterfalls and rock-pools. In between there are steep stairs and steps that follow the river Almbach upstream.

Experience stations:

- 3 Water levels
- 4 Water quality
- 5 Limestone and Dolomite



The Sulzer waterfall cascades 114 m down from Ettenberg.

Along the way: information boards
The formation of the gorge, rocks, flora and fauna, water levels, precipitation and runoff, growth of trees and historical wood drifting.



A deeply carved valley follows after the waterfalls:

it is widening on the way up to the Theresienklause.

Experience stations:

- 6 Flow velocity
- 7 Wood drifting



From inn "Kugelmühle" to Theresienklause:

Distance 2,8 km

Elevation gain 220 m

Hiking time 2 hours in total, to Sulzer waterfall approx. 45 minutes.

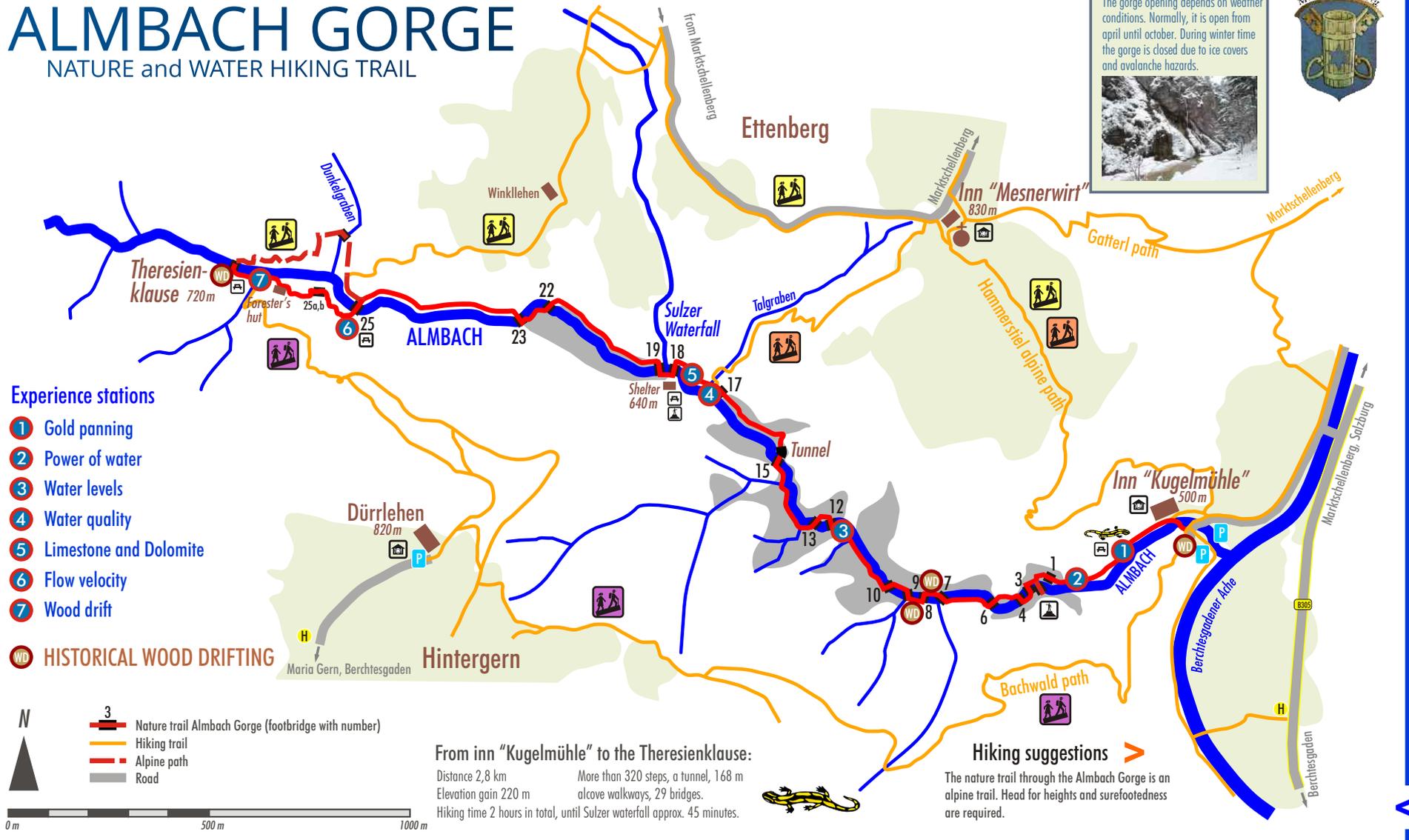
More than 320 steps, a tunnel, 168 m alcove walkways, 29 bridges.



ALMBACH GORGE

NATURE and WATER HIKING TRAIL

The gorge opening depends on weather conditions. Normally, it is open from april until october. During winter time the gorge is closed due to ice covers and avalanche hazards.

Experience stations

- 1 Gold panning
- 2 Power of water
- 3 Water levels
- 4 Water quality
- 5 Limestone and Dolomite
- 6 Flow velocity
- 7 Wood drift

WD HISTORICAL WOOD DRIFTING

- 3 Nature trail Almbach Gorge (footbridge with number)
- Hiking trail
- Alpine path
- Road



From inn "Kugelmühle" to the Theresienklause:

Distance 2,8 km
 Elevation gain 220 m
 Hiking time 2 hours in total, until Sulzer waterfall approx. 45 minutes.

More than 320 steps, a tunnel, 168 m alcove walkways, 29 bridges.



Hiking suggestions

The nature trail through the Almbach Gorge is an alpine trail. Head for heights and surefootedness are required.

ALMBACH GORGE

Nature and water hiking trail



Experience stations

Measure, feel, determine, evaluate and test:

- How fast does the river Almbach flow?
- What's its water level?
- Can you feel different types of rock?
- What is the water quality of the river Almbach?
- How does a dam for wood drifting work?
- How old was the tree?

Or with a bit of luck:

- Gold panning in the Almbach-river!



ALMBACH GORGE

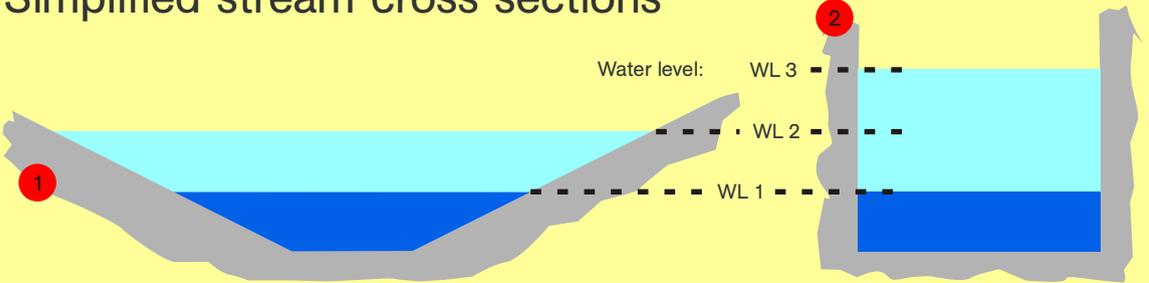
Nature and water hiking trail



Quickly changing water levels



Simplified stream cross-sections



A doubling of the water level means a tripling of the cross-sectional area of the water body. At a constant flow rate, this results in three times the amount of water in the stream bed.

A water rise of twice as much, from WL 1 to WL 2 also means in this case a doubling of the water body cross-section. Only tripling the water level (WL 3) leads to the same cross-sectional area as in **1**.

Therefore, it is not surprising that visitors to the Almbach Gorge report that in a sudden onset of heavy rain the Almbach swells particularly strong or fast in certain places. The reason for this is the shape of the stream bed and the steepness of the bordering cliffs.

ALMBACH GORGE

Nature and water hiking trail



How fast does the river Almbach flow?

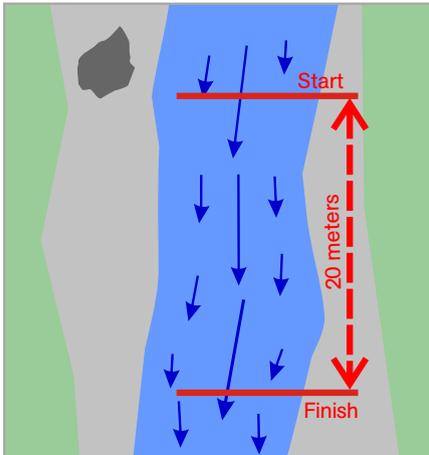
The flow velocity of the Almbach at bridge 25.

Here the Almbach flows a bit farther in a relatively straight bed. And depending on the water level, the stones lying on the shore or in the river bed are no bigger obstacles.

First of all, a measuring distance of **20 m length (start - finish)** must be determined by walking along the shore.

Now the time has to be measured, that a piece of wood thrown into the middle of the stream needs from the starting point to the finish line. The easiest way to do this is to work with two people. The "timekeeper" at the finish line gives a sign to the "thrower" who throws a piece of wood right in the middle of the stream. The drifting time has to be stopped when the piece of wood crosses the finish line.

Now it's time to calculate:
20 meters divided by the stopped time in seconds gives the flow velocity in meters per second.



For comparison:

stopped time	2	4	6	8	10	15	20	seconds
flow velocity	10	5	3,3	2,5	2	1,3	1	m/s



ALMBACH GORGE

Nature and water hiking trail



With the fire salamander through the Almbach Gorge:



CHILDREN'S QUIZ

Along the way through the Almbach Gorge there are a lot of interesting facts to learn. At some stations you have to answer a question:

- **Salamander:**
"The life expectancy of the fire salamander is ??? years." 

■
- **Station power of water:**
"The cube has an edge length of ??? m." 

+ ■
- **Station water quality:**
"The Almbach has the water quality class ???." 

+ ■
- **Palpation Limestone - Dolomite:**
"Is the surface of dolomite rather smooth (7) or angular (1)?" 

+ ■
- **Station flow velocity:**
"The point of interest is at ??? m/s." 

+ ■
- **Now, count your results:** 

= ■

Have you read all the boards carefully? Then, you've already encountered this number before.

Maybe there's a little reward at the box office.
Just ask!



ALMBACH GORGE

Nature and water hiking trail



Hiking suggestions

Circular hiking trails

Starting point P Almbachklamm,
Inn "Gasthaus Kugelmühle"



Almbach Gorge up to bridge 17, turn right up to
Ettenberg (baroque church) to the inn "Mesnerwirt".
Back via Hammerstiel alpine path.
Walking time approx. three hours.



Almbach Gorge up to Theresienklause, turn right
uphill to Ettenberg to the inn "Mesnerwirt", back to
Kugelmühle via Hammerstiel alpine path.
Walking time approx. 3,5 - 4 hours.



Almbach Gorge up to Theresienklause, turn left
uphill to the inn "Dürrolehen", back along the
Bachwaldweg.
Walking time approx. three hours.



Almbachklamm:



ALMBACH GORGE

Nature and water hiking trail



How to get there



Location: at the foot of Mt. Untersberg between Marktschellenberg and Berchtesgaden.

Directions: B305 Marktschellenberg - Berchtesgaden, signposting Almbachklamm, inn "Gasthof Kugelmühle", Kugelmühlweg 18, D-83487 Marktschellenberg.

P: N47°40.220 E013°01.900.

Public transport: Bus line 840 "WATZMANNexpress" Berchtesgaden - Salzburg,

(H) Almbachklamm.



Touristinfo Marktschellenberg

www.marktschellenberg.de

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