GEOPARKS AND THEME PARKS: A SPECTRUM of CAVE and KARST EXPERIENCES in GERMANY and the UNITED KINGDOM

Cath Loder
Canberra Speleological Society

Not far from Stuttgart, Germany is a karst wonderland. The Schwäbische Alb (Swabian Alps) Geopark is located in the state of Baden-Württemberg and runs in a North-Easterly direction from Hochrhein towards Nördlinger Ries. The Geopark has a plethora of activities that people can experience including caves, museums, fossicking sites, natural wonders and archaeological sites. On a visit to Germany in September 2015, I was fortunate enough to spend a few days in the Geopark region. Soon after in December 2015, a visit to the United Kingdom provided an opportunity to visit Wookey Hole to the west of London. Below I will share some of my experiences from these visits.

Germany - September

Using Reutlingen, Germany (in the central area of the Swabian Alps Geopark) as a base, a number of sites were able to be visited across a three-day period. A hire car made it easy to move between each of the sites, particularly on a limited timeframe, but some of the areas were also accessible by public transport. In hindsight it would have also been just as easy to stay at local accommodation close to each site, which would have added to the local experience and provided more time to explore the karst region!

Karls und Bärenhöhle (Charles and Bear Cave)

The Charles and Bear Cave is a single cave attraction offering guided tours and a surface karst walk. Supporting facilities include a beer garden, café, children's playground and souvenir hut. The tour is not expensive, priced at a modest €4 (approximately AUD \$6.40*) per adult for a tour that lasts approximately 40minutes. The tour is only offered in German, with a written English translation of key highlights also available. Fortunately, on the day of my visit, my husband and I were the only participants on the tour and the guide was more than happy to adapt his interpretation to personal interests and to facilitate translation!

The cave is known for the fossils that were found within it, including the complete fossil remains of bears, other animal remains, human remains and artefacts. A bear skeleton is on display in the cave and visitors can still see some fossils encased in a flow stone floor of the cave. Whilst some of the interpretation addressed the bear fossils, for more in depth information we were referred to the nearby University of Tübingen.

Although the cave, like many others, has suffered from early visitors removing various elements, it still has some very beautiful features which are now protected with wire fencing. Some sections of the roof had good examples of re-solution, but unfortunately a little obscured by the vast amount of lampenflora that was present in the cave. Despite recognition of lampenflora as an issue and efforts at control through lighting changes (which sounded as though they were problematic also), it appeared as though they were



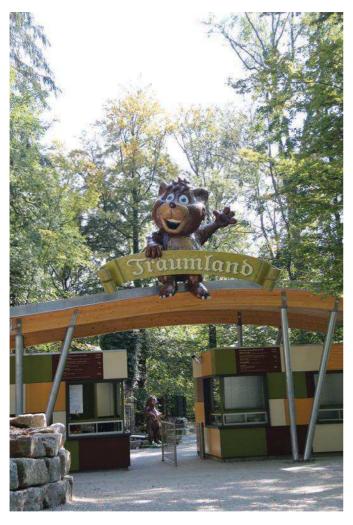
A bear skeleton within Bärenhöhle Cave Photo: Cath Loder

somewhat defeated at trying to remedy or prevent the problem getting worse.

Having noted over 30 cars in the car park and not having seen another visitor around the cave area, the conversation also focussed on the small theme park located at the site – Traumland (translation: Dreamland). Having made a good connection with the guide through our interest in caves, he intimated to us that he was somewhat saddened that many people, particularly young families that visit the area, are not interested in the cave and just want to go to the theme park. Exiting the cave at a different area to the entrance, one has to walk past Traumland on return to the ticketing area. It was certainly not a development that complemented the natural environment or even remotely fitted in to its surroundings.

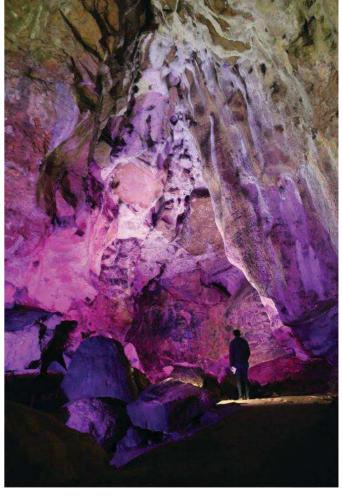


Re-solution features on the roof of Bärenhöhle Cave Photo: Cath Loder



Entrance to the Traumland themepark. A Ferris Wheel and many other similar rides and attractions are located within the fences of the theme park.

Photo: Cath Loder



One of the larger chambers lit with coloured lighting (Hans Loder in the lower right of picture for scale). Photo: Cath Loder

Nebelhöhle (Fog Cave)

Fog Cave can be visited as a self-guided tour. With over 450m of pathway within the cave there are opportunities for visitors to see the cave up close and feel dwarfed in the larger chambers towards the end of the cave. An information sheet in English was available from the ticket office which gave some detail about the cave, how it formed, bats and other interesting facts relating to the cave.

Dogs are allowed in the cave and during our visit we noticed muddy footprints over a cross-section of stalagmite that was a feature highlighted in the tour notes and scratch marks along a section of footpath before finally coming across the dog and its owners. It was interesting to observe the behaviour of the visitors with the dog. The visitors were doing all the right things such as staying on the pathway, however the same wasn't applying to the dog despite having it on a lead. Perhaps this is a demonstration of one way that a self-guided tour is ineffective in building a true level of understanding and respect for a cave environment with people that visit it.



Dog prints over the cross-section of stalagmite which was removed to be utilised as panelling in a castle.

Photo: Cath Loder

As with Bärenhöhle Cave there was recognition of lampenflora as an issue as there were a couple of paragraphs in the tour notes dedicated to it, but clearly not much action being taken to prevent or reduce the issue due to the level of growth seen throughout the cave.

Lichtenstein Schloss (Castle)

Within close proximity to both Bärenhöhle and Nebelhöhle is Lichtenstein Schloss, a place where the natural landscape morphs into a built landscape. Whilst the castle is certainly an interesting feature, the site provides some great views over the landscape. The castle is perched precariously atop a limestone outcrop and looks across a valley towards a number of other limestone outcrops in the area



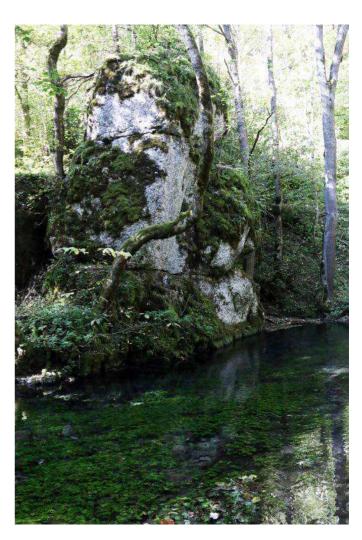
Lichtenstein Castle is a feature that stands out in the landscape Photo: Cath Loder

Wimsener Höhle

Travelling through agricultural fields and rolling hills, the drive into the Wimsener Höhle area is definitely a scenic one. Quite unsuspectingly the drive then changes to a very narrow winding country road which drops you steeply into a valley to a guesthouse, trout farm and cave; definitely no buses!

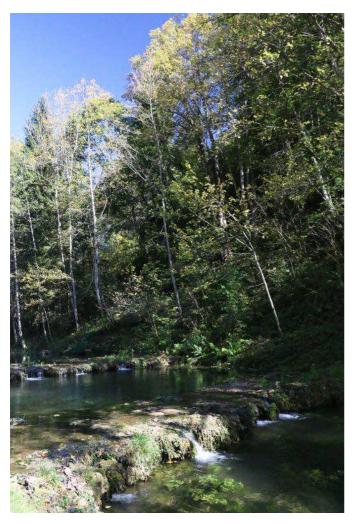


View from Lichtenstein Castle over the town of Honau, with limestone outcrops along the top of the hill behind the town. Photo: Cath Loder



The Zwiefalter Ach Photo: Cath Loder

A small ticket office / souvenir shop is located at the cave entrance, however this was unmanned at the time we visited the cave. Enquiries at the guesthouse pointed us in the direction of the guide, who did not seem at all



Tufa features along the Zwiefalter Ach Photo: Cath Loder

interested in taking a cave tour, seeming too preoccupied with other business.

Whilst waiting for the guide to become less busy with other matters, we took a look around the area. The Zwiefalter Ach is the river that passes through the area and has been dammed to create a section of river for a trout farm. In the rising popularity of eating local, you can indulge in a meal of trout at the guesthouse while dining next to and viewing the very large and friendly trout cruising in the crystal clear water of the farm; it doesn't get more local than that! What seemed a popular walking track also followed the banks of the river, with numerous hikers streaming through and stopping for a bite to eat at the guesthouse. A short stroll along a section of the track was rather pleasant and showed off some of the limestone surface features in the area.

The Wimsener Cave is one of the points at which groundwater emerges from the mountains into the surface waters of the nearby river. Only a very short section of the cave is accessible and done so by boat, very similarly to a Waitomo experience without the glow worms! The tour is very short as only 70m of the cave is accessible and the tour is given in German only. A written English version of the tour was made available, but this had to be handed back at the end.

The tour provided information about the cultural aspects of the area and suitability of the cave to age up to a boat



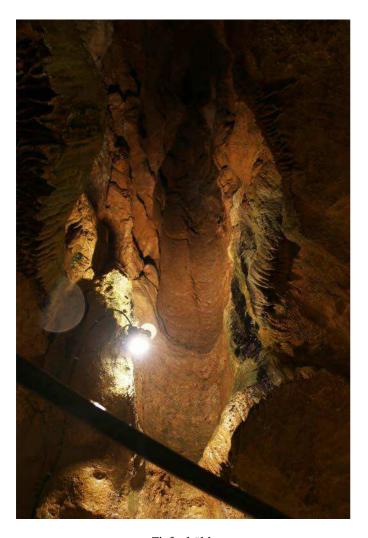
Entrance to Wimsener Höhle Photo: Cath Loder

load of the very popular, potentially teeth breaking German "Springerle" Christmas biscuits, that are baked months before and then stored in a cool, humid environment (typically a cellar) in order to soften them for consumption. While making us hungry and keen to visit the adjacent guesthouse, the opportunity is missed to talk about cave and karst processes at a really interesting location. There is a point of difference at this cave, particularly in comparison to others visited in the area because of the water exiting the cave system.

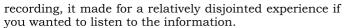
Tiefenhöhle Laichingen

This cave was unique in the geopark area, being more vertical in nature. The cave is self-guided and the experience is enhanced by a fabulous museum and interpretive display at the entrance area. All of this was offered for the bargain price of $\ \ \$ 3.80 per adult and included the loan of simple gaitors to protect the bottom of your trousers from getting muddy as you navigated all the ladders and steps in the cave.

Verbal recordings are able to be listened to throughout the cave in German, German for children, French or English by selecting the relevant option at stations throughout the cave. Unfortunately these were quite lengthy and if someone was already part way through a



Tiefenhöhle Photo: Cath Loder



New metal plumbing fixtures had been installed in the cave to assist with cave cleaning and cleverly doubled as hand railing infrastructure. Stairs in the cave were steep in order to navigate through the vertical cave which had plenty of solution pipes and narrow fissures to look through. The cave had some areas of formation, however not as much as Bärenhöhle and Nebelhöhle. As with the other caves, the Lampenflora was healthily growing in many areas.

While the cave was interesting, the small yet very effective museum at the site was a highlight. The written information was in German, however there was enough other material to gain an appreciation without the need to understand what was written. Action packed models of the cave system (inclusive of abseiling, diving, squeezing and picnicking figurines), videos of caving expeditions and information on bats, bat gates, bears, cave invertebrates and cave surveying provided a well-rounded interpretive experience. The small size of the museum was beneficial as it limited the potential for information overload. The site had a number of small booklets for sale that included an expedition book



Dual purpose infrastructure in Tiefenhöhle Photo: Cath Loder



One half of the small museum at Tiefenhöhle showing a cross section of cave, a 3D diorama of the cave system and a glimpse of the interpretive panels.

Photo: Cath Loder

looking at how the area had been explored, mapped and better understood.

Blaubeuren

The town of Blaubeuren has a couple of noteworthy places to visit including the Urgeschichtliches Museum (Urmu). Urmu highlights the archaeological significance of the caves in the geopark area. It does a fantastic job of connecting the natural features of the area to the palaeontological, archaeological and cultural elements by use of art, educational facilities and interpretive displays. A small entrance fee of €5 for adults is money well spent.

A short walk from the museum is a great karst feature in the Blautopf natural spring. The spring is part of the system that includes Tiefenhöhle. The water is bright blue in colour, similar to waters of the Blue Lakes at Jenolan Caves or Mt Gambier. On the day of our visit the spring was flowing at 915 litres per second. Interpretive signage has been installed at the site with maps showing the cave system, photographs from within the caves and information about water monitoring and quality.

Blaubeuren had many original buildings and guest houses. While not staying, we felt that a night in a



The Blautopf Natural Spring Photo: Cath Loder

traditional guesthouse and dining on the local cuisine would have added to the overall experience.

Gammertingen

Whilst attempting to locate one of the Geopark's natural features at Gammertingen, by pure chance we pulled into a roadside stop with a difference. The key thing about this roadside stop was you actually wanted to spend some time at it! A fantastic sensory garden has been developed at the site which provided an opportunity to take one's shoes and socks off and walk across different textured surfaces, use your nose to smell many different plants and test out the chilly waters of the Swabian Alps. A short length, shin deep outdoor pool flowing with natural spring water has been installed encouraging people to plunge their legs to reap benefit of ice bath therapy for their vascular health. At a temperature of 8-9°C (or as we felt, less) it doesn't take long for the pain of cold to set in. There were typically German signs with polite, but direct instructions for the correct use of the facility. This included the provision of ergonomic wooden benches to allow one to recline and take in the surrounds (including the limestone rock outcrops nearby) before taking the next plunge no sooner than 2 hours later in order to achieve maximum health benefit; not your typical roadside stop!



The roadside sensory garden Photo: Cath Loder



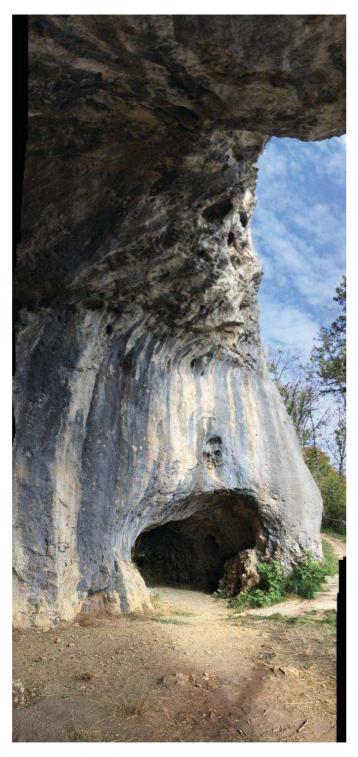
Cath Loder testing out the temperature of the spring water Photo: Hans Loder

While not advertised under part of the Geopark, the area uses a built environment to showcase the natural features of the area, connecting people to the landscape in a manner that was completely interactive and different.

Göpfelsteinhöhle

The town of Veringenstadt has set up a self-guided walking tour of cave and karst features around the town area. One of the features on the walk includes the Göpfelsteinhöhle, which is a shelter that early humans used.

Overall, the areas visited in the Swabian Alps provided many visitor experiences and an overwhelming array of cave and karst features. Each area introduces you to yet another piece of the puzzle and the Geopark has done well to promote the area as a whole. The areas visited and mentioned in this article are only a small portion of the full scope of activities and sites that can be visited



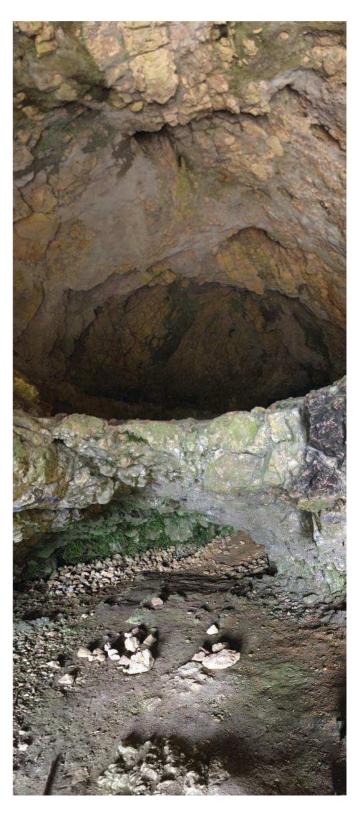
Göpfelsteinhöhle entrance Photo: Cath Loder

across the Geopark. In addition, many of the areas have significant walking tracks connecting many of the sites.



Wookey Hole

Having worked as a guide at Naracoorte and Yarrangobilly Caves, it was not uncommon for visitors to

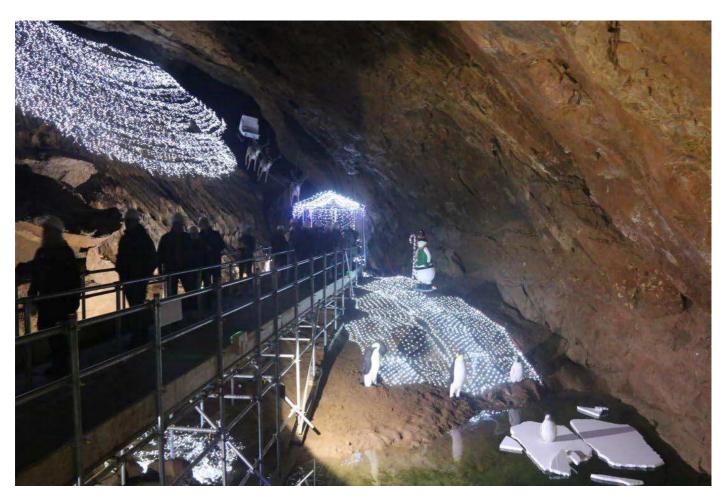


The multi-level shelter area, note hanging shelf in central area.

Photo: Cath Loder

mention Wookey Hole as a cave they had visited. It intrigued me as a location, due to the vast array of stories visitors would share about the site.

Arriving at the site we sought out the ticket office to find out more information about what was on offer and



First impression of the newly accessible chamber – penguins & icebergs to the right, Santa's chair in the centre and carpet of fairy lights in the top left. Photo: Cath Loder

being proactive we pointed out that we were keen to visit the cave. The sales person, who had the easiest sales job in the world of selling a cave ticket to someone who loves caves and wants to visit as many as they possibly can, did such a terrible job that we almost walked away. Clearly not listening to what our interest was, the sales person essentially sold the cave as a means in which to get to all the other areas of the site i.e. the theme park areas. At £15 (approximately AUD\$30) per adult the tour was significantly more expensive than those visited in Germany.

The cave is accessed by guided tour only and took approximately 45 minutes. It was somewhat difficult to actually see the cave though as a significant amount of fairy lighting, coloured and animal shaped lights obscured one's ability to actually look at the cave. Some of the larger chambers visited offered glimpses of what the cave was like, however were clearly degrading due to the effects of visitors, including from coin pools, lampenflora and disruption to the floor of the cave as the large group covered much of the area. The guide provided some interpretation on the cave, however clearly did not display a good understanding of the environment.

The cave recently received some "renovations", with a 70m tunnel being constructed through to another

chamber, previously only accessible to cavers. The access tunnel was still a work in progress requiring the wearing of hard hats and scaffolding enabling access into the chamber. In describing this access, however, I can only say that worryingly my husband who has previously worked in underground mining, started to feel quite at home in the environment! Basically he described it as a "cross cut" with the construction and dimensions which would allow a vehicle to access the area! Visitors were sent unaccompanied through this access to the chamber and just left to their own devices. Upon entering the chamber my thoughts turned from anticipation of seeing a relatively unspoilt section of cave to shear dread at having paid an entrance fee that ultimately supported this kind of detrimental development. Whilst I was picking my jaw up from the floor I almost missed one of the most interesting cave features I think I've ever seen, due to the distraction of life-size penguins floating on icebergs, snowmen, Santa's chair, sleigh, reindeer and thousands of fairy lights covering up the chamber, complete with signs about toxic waste in the water. The chamber has an amazing feature that appears like a cross pattern of rillenkarren and it was a real shame that there was not only no information provided, but it was significantly covered over with fairy lights. It was incredibly disappointing to see such a development occur in an age where knowledge of environmental impacts and



The most interesting part of the cave, unfortunately somewhat obscured by a few reindeer, a sleigh and an overload of fairly lights.

Photo: Cath Loder

sustainable resource management are far better than what this development has to offer.

Upon exiting the cave system, the only way to exit the site was to pass through the maze like theme park area. Snippets of information on cave exploration and visitation could be found, yet the connection of most of the activities were not clear in their relationship with the cave or environment of the area. There is plenty of opportunity to really improve the overall Wookey Hole experience, appeal to a broader audience and manage the cave system in a more environmentally sensitive manner.

Overall impressions

Throughout visiting the sites in Germany, for the first time I really experienced what it was like to not understand the language the tour was in. Receiving a translation on a piece of paper, whilst having the benefit of having someone with me who understood the tour allowed me to realise first hand how this can lead to a loss of connection with a guide and that many elements can be lost in translation.

Many workplaces have regular performance reviews with staff, including elements related to personal development and training within their role. Whilst having fluency in languages other than English is often regarded as



Santa's Chair Photo: Cath Loder

beneficial in the hiring process, how many places are offering the opportunity for guiding staff to develop in their roles by learning another language?

Last, while these were new cave and karst features to view, the visitor experience was very similar to many others. Innovation is a buzz word at the moment and perhaps it is time for some more appropriate innovation in visitor experiences in caves.