



Servus to Schachen

July 2024

Bertie Swainston - Merlin 838

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Acknowledgements

I would like to say a huge thank you to the Merlin Trust for this experience, it is hard for me to even put into words what a life-changing experience this was - personally as well as professionally. I would also like to thank Jenny, Claudia, Laurence, Dominique, and Susan for teaching me so much and for making me feel welcome. A big thank you also goes to RHS Harlow Carr for being supportive of me to be able to attend.

About the Author

I have been working in horticulture since 2012, mainly working and managing different historical gardens. Then in 2021 I decided to take my interest in alpine plants to the next level and became the Alpine Garden Society's trainee. I then gained a permanent position in the Alpine and Streamside department at RHS Harlow Carr where I was still working during my time at Schachen. I now am Head Gardener at Sizergh Castle which houses the National Trust's largest limestone Rock Garden.



Partway through a hike from Schachen to Meilerhütte

Goals

- Gain an insight into working in and managing a public garden at a high altitude
- Learn the maintenance of an unusual plant collection
- Observe native alpines at different altitudes
- Improve self-confidence in plant identification

Introduction

Alpengarten auf dem Schachen is a garden which is set in the Bavarian mountains at an altitude of 1860m with a rich history dating from 1901 when it was established. The garden is owned by Munich Botanical Garden and is only open to the public between mid-June and the start of September due to the weather conditions - the garden spends a large amount of time under the cover of snow! Jenny Wainwright-Klein is currently the head gardener at the Schachen and also runs the Alpine department back in Munich. During the summer, Jenny runs the Schachen alongside other Munich Botanical Garden staff from the Alpine and Rock Garden departments who assist on a rotary basis. Jenny also comes back to the garden when it isn't open to the public for tasks such as seed collecting.



The idyllic view looking out onto the Schachen garden from the Gardener's Hut

Botanischer Garten München-Nymphenburg - Munich Botanical Garden

I started off my bursary with a tour of Munich Botanical Garden from Bert Klein, who manages the Orchid Department and is also Jenny's husband. Bert texted me beforehand to say look out for the man in red to find him and he wasn't wrong - red is Bert's signature colour as he greeted me in his bright red dungarees. He told me how other members of staff, suited in their green uniforms, often direct visitors with specific questions to the 'gardener in red'.



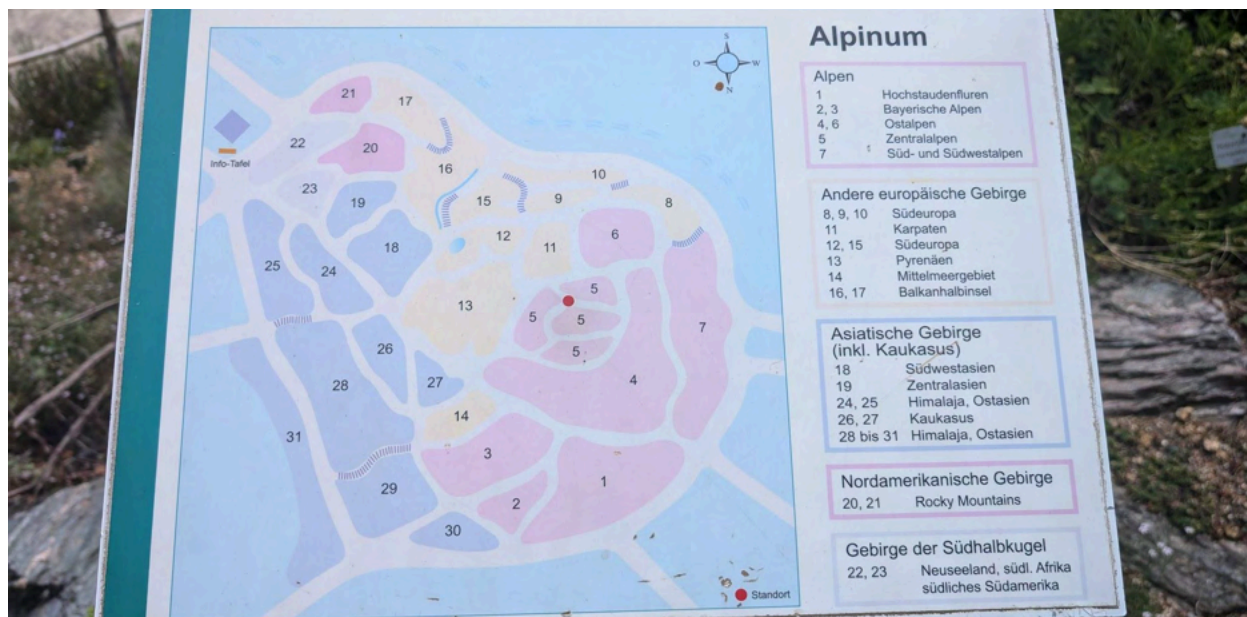
Bert, the gardener in red, giving me a tour of inside the Alpine display house with its glorious planted-up tufa

I was really grateful for Bert's time as he showed me around behind the scenes and around most of the public areas of the garden. For the large glass shading, he told me that rather than the usual white shade paint that I was seeing on the windows, it was actually a mix of flour and water - this is something that I'd like to try myself!

After my time with Bert, I then went on further solo exploration which included a long wander around the different paths of the rock garden or 'Alpinum'. The Alpinum is an impressive build and sight to behold with various winding paths which lead you in, often with the plants and rocks enveloping you making it feel as if you were entering another world entirely.



The winding Alpinum paths tempting you in by disappearing in amongst the plants



The geographical bed map for the Alpinum



One of my favourite paths leading you up into the Alpinum

To help counteract the intense heat in Munich, the behind the scenes cold frames and alpine propagation house are set lower into the ground with wooden slatted shading and the flour shading on the windows. Regular dampening down in the summer is also a must for the Summer months in the alpine glasshouses. Many alpine plants are propagated here by Jenny and the team, some of which are taken up to their new mountainous home of the Schachen itself.



The behind the scenes alpine propagation house set behind the cold frames



As I'm very biased towards the genus, I was excited to see the collection of Dionysia

The display glasshouses at Munich Botanical Gardens are divided into different growing environments and an array of fantastic collections of plants are housed here, ranging from orchids to cycads, and cacti to waterlilies. I took way too many photos and could have easily spent much more time enjoying the company of the thriving plants.



A small selection of the cacti and succulents



Vast lily pads and bright flowers in the Victoria House

Alpengarten auf dem Schachen - Alpine garden on the Schachen

It was an early start from Munich to get dropped off at Garmisch for a coffee and pastry breakfast before shopping for supplies with Jenny. It was very atmospheric to see the mountains and forests surrounding the outskirts of town to then be absorbed by nature as we drove out of town. As Jenny drove us up in the 4x4 along the steep winding paths of the mountain, she pointed out various plants to keep a look out for.



The trusty steed before heading up into the mountain tracks

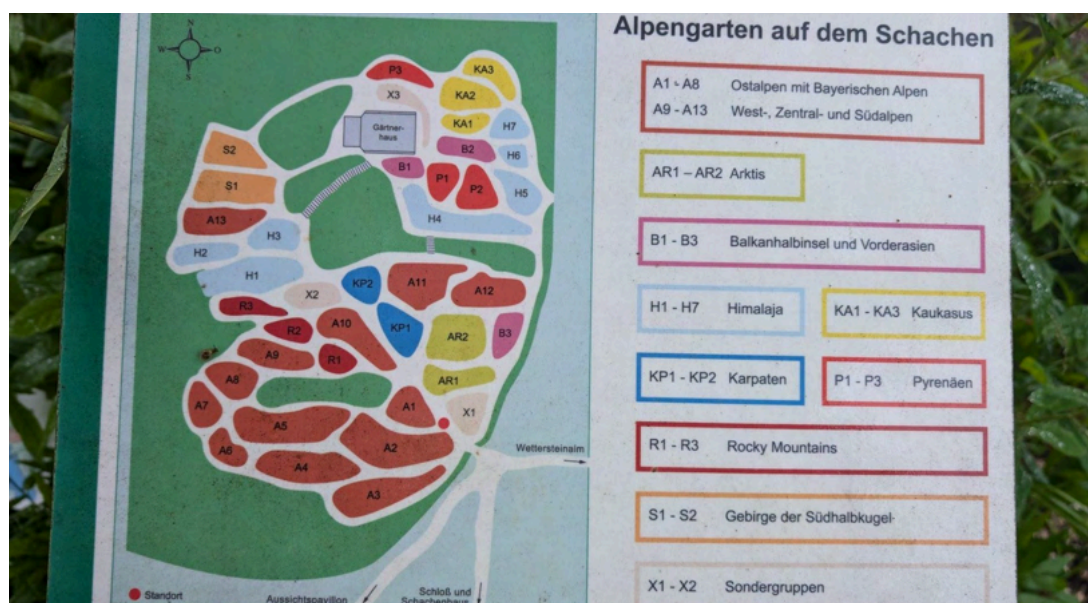
I was spoilt for choice for where to look for spotting different coloured flowers amongst the trees and rocks in their natural setting. The closest comparison for me was being a young kid being allowed to visit Toys-R-Us after getting some birthday money and being full of so much excitement I could burst. My first glimpses of the Schachen itself came between teasing drifts of low fog creeping along the otherwise sunny day.



The Schachen's Gardeners' Hut in the backdrop surrounded by colourful alpine delights

The Schachen plant collection

The plant collection at the Schachen is set out in geographical beds, much like the Alpinum at Munich Botanic. Sadly there isn't enough space to include every single plant that I took a photo of (many plants I took several photos of as they could look so different after fresh thunderstorms or amongst the rolling mists). I have tried to include a good mix and range of some of my personal highlights that I saw during my time there.



The geographical bed maps of the Schachen



Androsace sarmentosa



Mimulus cupreus



Meconopsis paniculata



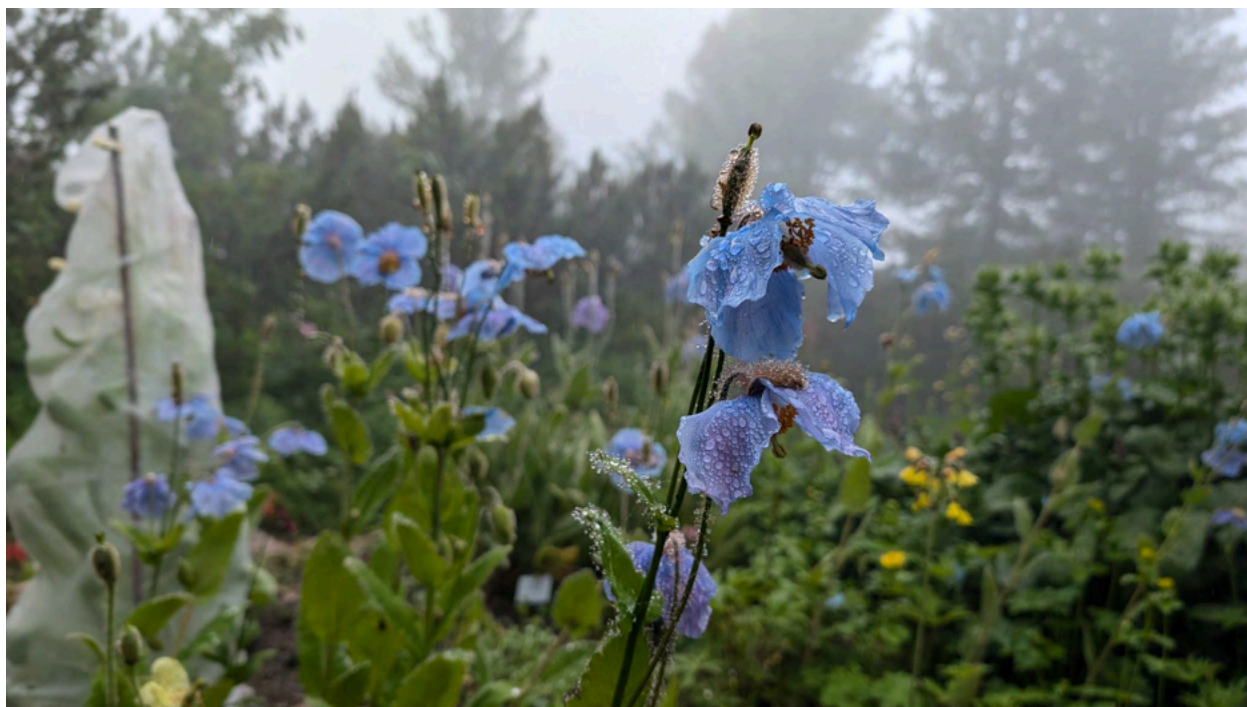
Rhododendron campylogynum



Massonia saniensis



Cicerbita alpina - a plant which I had done conservation work on back in the UK



Meconopsis in the rain



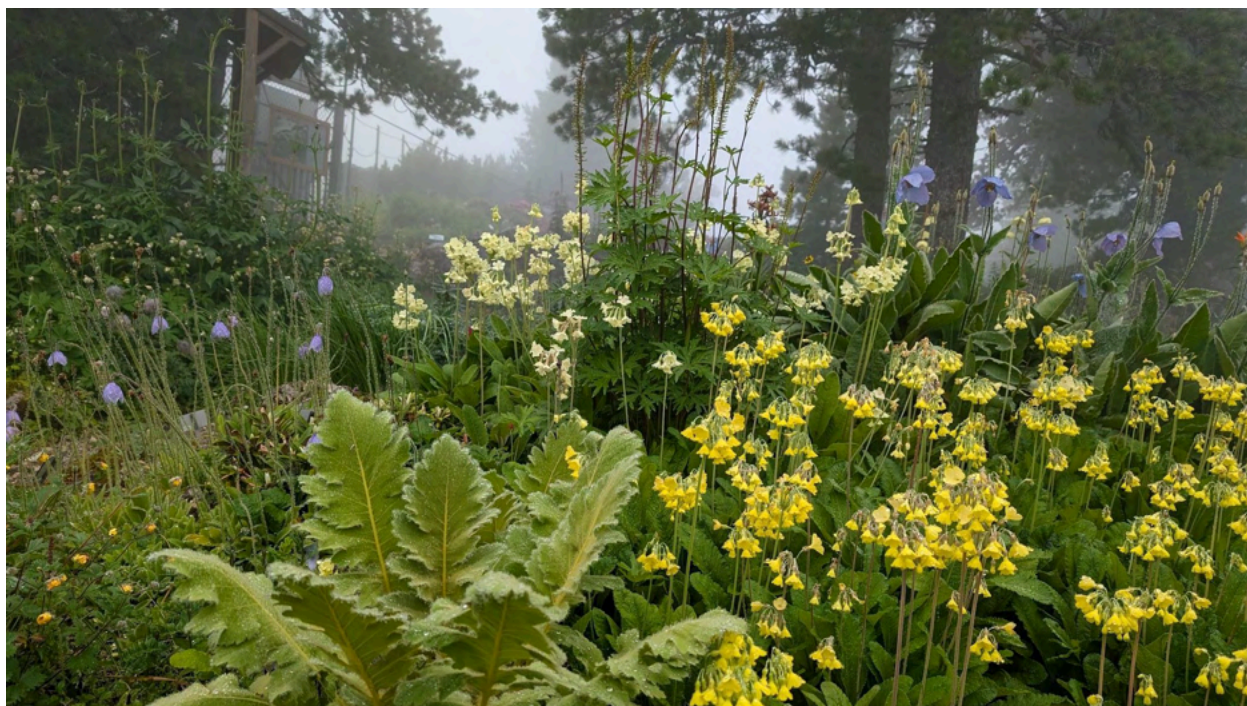
Penstemon fruticosus var. scouleri



Potentilla nitida thriving on a rock



Heuchera pulchella



Meconopsis and Primula looking glorious in the mists



Meconopsis punicea

Planting

My first task after arriving at the garden was to plant different *Meconopsis* - *M. punicea*, *M. sulphurea*, *M. galydiana*, and *M. racemosa*. It was interesting to find out that due to the changes in climate certain plants, like *Meconopsis*, that used to thrive at Schachen, now have to be planted in places that have protections from the worst heat of the sun and utilise the rocks for cool root spots.



Freshly planted Meconopsis

Elsewhere in the garden, there was an area of congested *Meconopsis x cookei* so I was tasked with lifting, dividing, and tidying up the plants. The area of the border was then weeded and other creeping plants were taken back to open up more space for the *Meconopsis*. They were then replanted with a freshly made mix and watered in generously. During the first few days after planting, the plants were covered with branches or crates to create shading to protect them from the worst of the sun whilst they established themselves.



Partway between tidying up M. x cookei plants



Pruned branches are used as makeshift protection for newly planted areas against the intensity of the sun whilst they become established

Maintenance of a public garden

As in any garden, weeding and deadheading are essential tasks. There are many plants which like to freely set seed and are considered weeds if in the wrong bed. With such a short window of the summer to get the work done, certain beds were focussed on as priorities that hadn't had as much attention the year prior.



Much needed shade is provided via parasols when working on the beds

The compost bay is located just out of the front of the garden. When someone is next due to head to Munich in the 4x4, the compost is loaded into the trailer to take back to the Botanic Garden. One of the tricky things is to not overload the trailer to make sure that you can safely traverse back down the mountain road.



Probably the most scenic compost bay in the world!





It was interesting to observe some members of the public attitudes to the garden. The price for entry recently went up to €3.50, a steal when compared to UK entry costs to most public gardens, but some people seem to think it is too expensive. Some cheeky people like to sneak in with the excuse to “only take one photo”. On the flip side, Jenny often offers tours to various groups, one of which whilst I was there was a teenage group of students who all seemed very interested in the plants which was encouraging to see.

Phenology is recorded each Monday, Wednesday, and Friday on a specific set of plants which are all denoted in the garden with green labels. The date is recorded for each different life stage of the plants with the information being used for research towards the effects of climate change. Some of the plants included in this research are *Lonicera alpigena*, *Arnica montana*, *Dianthus alpinus*, *Rhodiola rosea* and *Saxifraga paniculata* (pictured below).



One of the phenology plants, *Saxifraga paniculata*, with its green label.

Phänologieprojekt: **Alpengarten auf dem Schachen**

Höhenmessung

Messung zweier markierter Blütenstände

Zwei markierte Blütenstände sind ab dem oberen Rosettende zu messen. Datenerhebung bis zum Öffnen der ersten Blüte.

1. Stadium

Erste Blüte geöffnet

Die erste Blüte aller Phänologiepflanzen (!) ist geöffnet, wenn die weißen Blütenblätter sternförmig abstehen.

2. Stadium

Vollblüte des ersten Blütenstandes

Der Blütenstand blüht vollständig, sobald mehr als die Hälfte der Blüten (>50%) geöffnet sind.

3. Stadium

Erste Kapsel reif und geöffnet

Die erste Kapsel ist reif, wenn sie dunkelbraun ist und sich oben mittig öffnet. Die erste reife Kapsel befindet sich in der Mitte des Blütenstands.

M. Breier / A. Gröger 2011

Phänologieprojekt: **Alpengarten auf dem Schachen**

Saxifraga paniculata für das Jahr: 2024.....

| | | | | | | | | | | | |
|------------------|----|----|----|----|----|----|----|----|----|----|----|
| Datum | | | | | | | | | | | |
| Beobachter | | | | | | | | | | | |
| Höhe Blütenst. 1 | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| Höhe Blütenst. 2 | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| Stadium 1 | | | | | | | | | | | |
| Stadium 2 | | | | | | | | | | | |
| Stadium 3 | | | | | | | | | | | |

Anmerkungen:

© 2012

The phenology pages for the previously pictured *Saxifraga paniculata*.

One of my favourite local Bavarian common names was taught to me by Claudia, one of the gardeners, which was for *Pulsatilla vulgaris*. Claudia told me how the local hunters used to go out for long days into the mountains and woodland but with the unpredictable weather would come back home empty-handed and looking very dishevelled with their hair at every angle. This is where the *Pulsatilla* comes in, with their fluffy seedheads they resemble a very comical vision of the aforementioned 'grumpy hunter'. As common names go, grumpy hunter might be my new favourite.



'Grumpy hunters' in the Schachen sunshine

Crevice garden build

I was very fortunate to cross over my time at Schachen with Dominique and Susan Turnbull who came over from Colorado, USA. Dominique is well known for his crevice-building skills and has built many crevice beds and troughs. Not only were they two of the friendliest people, but they shared so many stories and photos from rock gardens they had visited and built. Dominique had previously led a crevice build in a section of the Schachen, to which plants now grow very happily (as seen below).



Plant roots thrive in the cool, long channels that the crevice beds provide them

Another area of the garden had been chosen by Jenny to be refreshed to become the new crevice beds with the build to be led by Dominique. First, any plants of note were lifted to be saved and the area was weeded. Limestone rocks were taken from other beds within and around the outskirts of the Schachen to be utilised for the new crevice bed.



Rock moving with Dominique - photo courtesy of Susan



Before the 'crevicing' begins

Dominique started the first line of the rocks to create the strata to follow with the next sections of the build. The rocks were laid on their sides, sometimes flipped a few times to find the best fit. The main rule was to follow the strata and maintain slim gaps between rocks for decent planting crevices.

Once Dominique and Jenny were happy with the final positioning of rocks, a compost mix was created to fill in all the many gaps between the rocks. The mix had to be tamped down using thin implements or handles of tools to make sure it was pushed down into the crevices and not leaving any large air pockets.



My section of the crevice bed coming together at the forefront heading to the right

Mountain life

Part of living in the small community in the mountains is helping out with making sure the culverts along the road down are clear of rubble and soil (example in image below). With the heavy downpours of rain, this needs doing fairly regularly to make sure the road isn't damaged and is safe to use. I was tasked to do this on two different occasions which kept me fighting fit and meant I could admire local flora along the way. I particularly became very firm friends with the *Rhododendron ferrugineum* and *hirsutum* who, according to Jenny, were having a very strong flowering year.





Rhododendrons in the mist

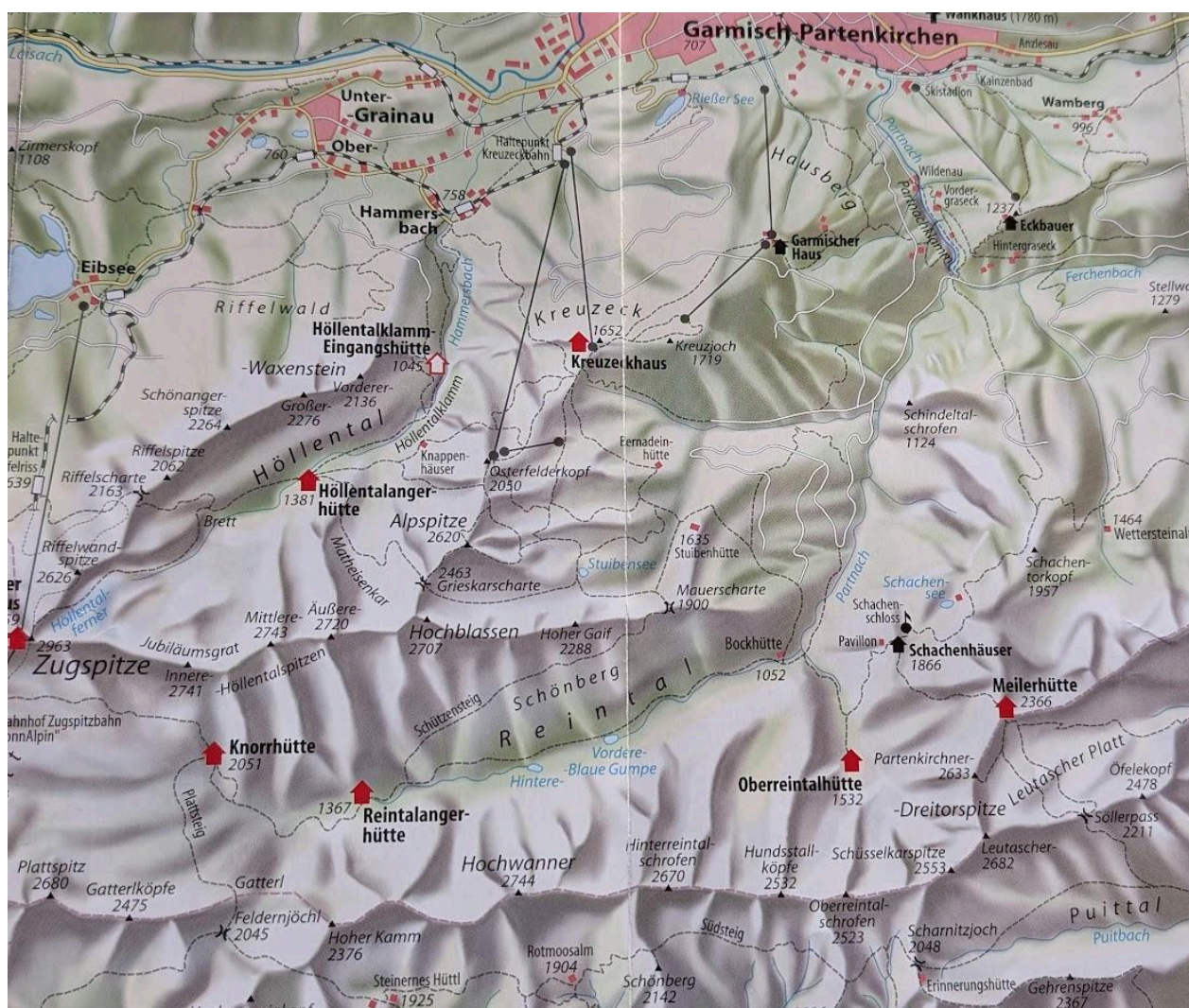
I got to be involved in the collection of *Pinus cembra* cones for Schachenhaus, the garden's neighbours and where I stayed during my time there, where they use them to make their own schnapps. It was fun trying to spot and harvest the cones that hadn't already been nabbed by the local birds. I even got to try some previously made schnapps one evening at the Schachenhaus!



The collected cones ready for Schachenhaus schnapps

Hiking

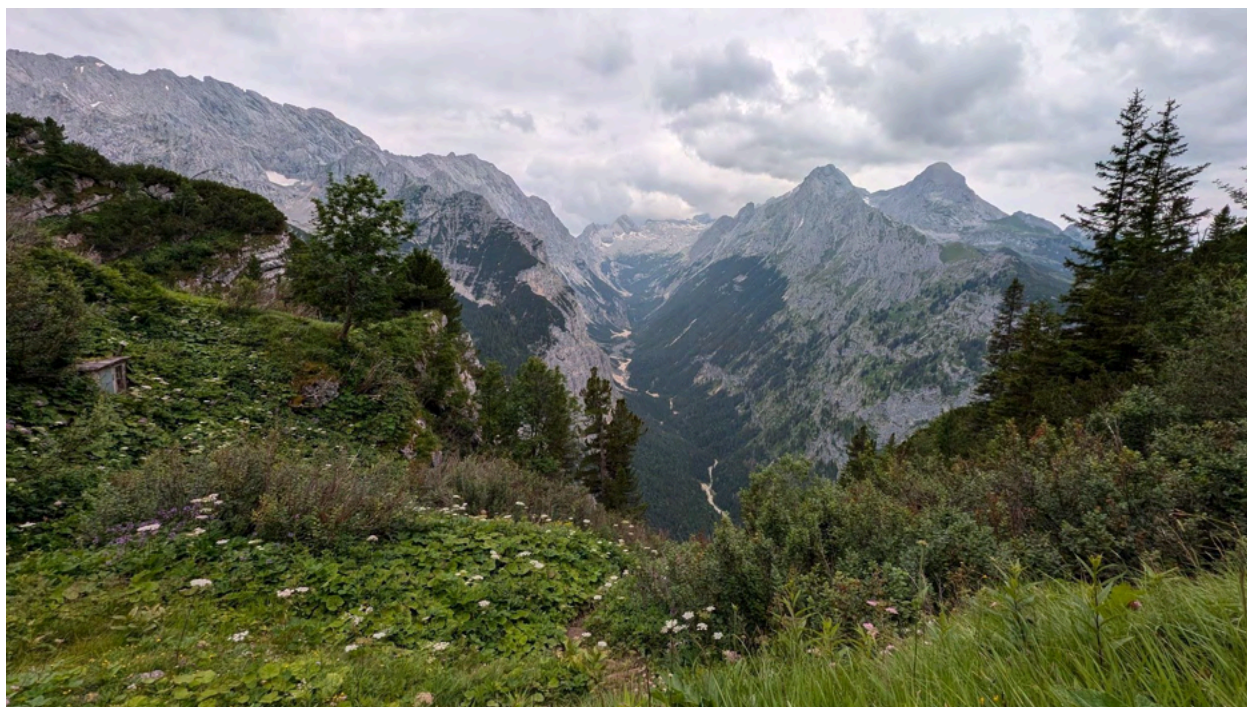
I studied the hiking maps that are stored in the Gardeners Hut at the Schachen and decided that I wanted to experience the biggest range of flora possible. I had spent hours across a few evenings down at the pavilion which is a short walk away from the garden that gives you the most heavenly view over the Reintal. Therefore, I knew I wanted to hike down into the valley and explore the forest and river below as well as hike as high to the well-known Meilerhütte. Again, there is sadly not enough room for the amount of photos I had taken so please do get in touch if you would like to see more!



Trail map of the surrounding area, Schachen located to the right-hand side just below the centre

Down to Bockhütte and the Reintal

On my first free day, I was gifted with great weather so decided to hike down into the Reintal to discover the native plants along the way. It was astounding to see the difference in plants going from the Schachen's 1860m down to the Reintal's 1052m - it's quite a steep walk but so very worth it. I saw many different plant combinations including ones that I never would have thought of such as *Pinguicula sp.* and *Primula auricula* growing side by side on wet cliff faces which was a stand-out treat. It really made me appreciate what we try to replicate and deliver in public gardens back in the UK, in regards to providing visitors an experience of plants from the mountains down to the forests and rivers below. I couldn't wait to share with my then colleagues at Harlow Carr, as we had recently become an Alpines and Streamside department - the perfect combination as relived on this hike! You can also reward yourself with fantastic Bavarian food and drink offered at Bockhütte, situated at the base of the Reintal.



Looking down into the Reintal from near the start of the hike from Schachen



Parnassia palustris



Epipactis sp.



After writing about Melampyrum in my dissertation that I submitted just before this trip, it was absolutely fantastic to see so much of this hemiparasitic plant



I was over the moon to see my first wild Hepatica!!



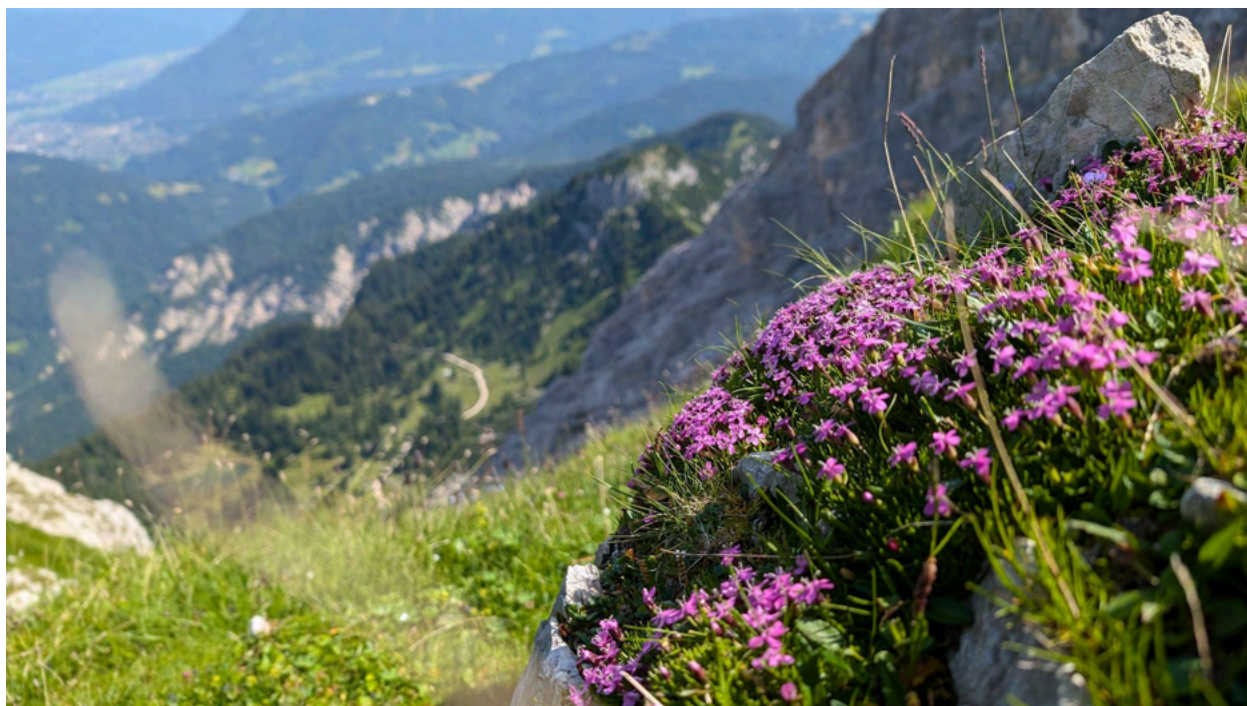
Perspective looking back up to those central peaks where my hike started plus Bockhütte bottom left

Up to Meilerhütte

For my second free day I also had decent weather so seeing as I had such fun enjoying the flora change going down into the woodlands to the river, it made sense to hike up in the opposite direction. Meilerhütte sits atop mountains amongst the clouds at 2372m. The sight of seeing the Meilerhütte near the end of this hike was so magically surreal as you look up at the building with hundreds of *Oreomecon alpina* like a flowing skirt of whites and yellows. What a place to stop for food and drink with ample views to both Austria and Germany.



Saxifraga aizoides



Silene acaulis



Botrychium lunaria



Saxifraga caesia



Gentiana bavarica



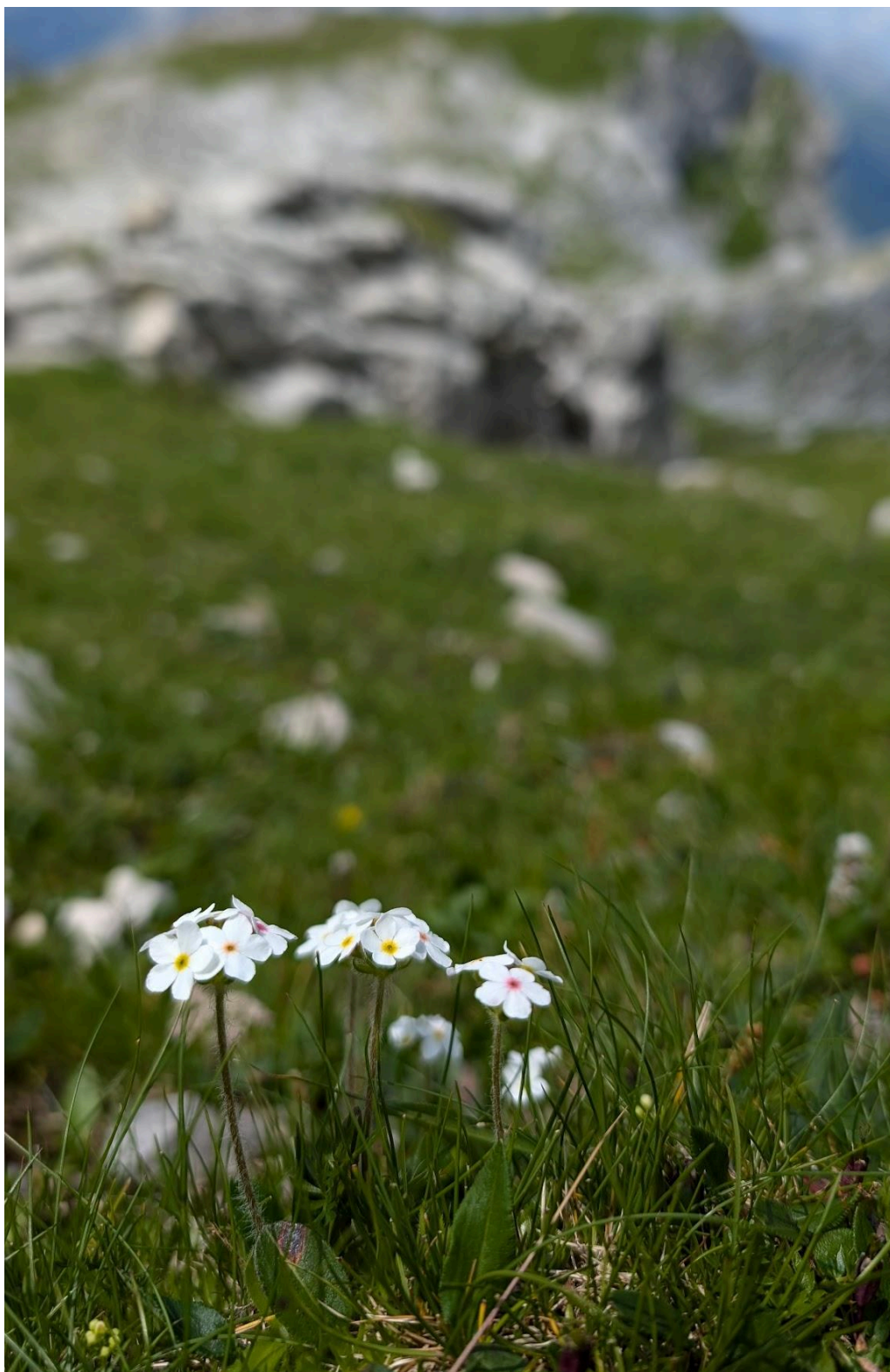
The skirt of Oreomecon alpina lining the way to the Meilerhütte at the top



Looking out to Austria from Meilerhütte



Summer snow - I couldn't resist!



Androsace chamaejasme



A carpet of Gymnadenia nigra and Dryas octopetala

Conclusions and looking to the future

Overall, this has been an outstanding experience for me both personally and professionally. I not only have gained a valuable insight into the management of a historic public garden and new alpine horticultural skills but I have also gained so much more confidence. In particular, in my plant identification skills, it was beyond rewarding to be able to recognise so much alpine flora. With my newfound understanding, skills, and confidence, I feel even better armed for my horticultural future ahead of me.

Unfortunately, my Schachen trip was cut short as I had to travel home for a family emergency. On the upside of this, I have discussed with Jenny to spend more time with her at the Schachen next year to make up for my lost time. I'm very much looking forward to revisiting this magical garden and this dreamlike landscape again.



The exit view from the Schachen, "thank you for your visit" with the King's house in the background

Appendix 1 - Further photos and video

I posted to my Instagram @bertieaceae with many more photos than you see in this report, as well as a short video in which I tried to capture the magic of the experience which can be found here - https://www.instagram.com/reel/C_p0-EyqeH-/

Appendix 2 - Costs

| | |
|--|-----------------|
| Flights (Manchester - Munich return) | £394.20 |
| Fuel (home - airport return) | £90 |
| Hotel in Munich (1 night) | £64.78 |
| Public transport (Airport, Munich, Garmisch) | £50.23 |
| Sustenance | £200 |
| Schachenhaus (8 nights) | £257.22 |
| Total | £1056.43 |