

The Garden in the Sky – Schachen Alpengarten

By Connor Smith

On a cold day in Perth, Scotland, I was sitting with my former boss from America and his wife in a lovely warm French restaurant. The 'Beast from the East' (a cold weather front which delayed the season and brought snow) had just passed. I had longed to see a small nearby garden and, with darkness upon us, I decided to phone the garden and chance my luck to arrange a visit that night. A very kind lady answered and informed me that the head gardener lived on site and was happy to show us the garden. After sprinting there, we were met with a figure holding a torch in the darkness – our guide. The light bounced from the whites of the *Galanthus* and the cinnamon undersides of Rhododendrons. The gardener began to tell us a story of a garden surrounded by mountains in the Barvarian alps. He had worked there as a young man under one of the great alpine gardeners: Dieter Schachet. Before we left, he showed us a *Saxifraga* hybrid in a trough which I managed to capture before my phone died. Since then, Jim Jermyn and I have stayed in touch and Jim has become a good friend. Branklyn Garden is one of my favourites and I visit as often as I can. Yet, the story of the garden in the sky stayed with me. A year had passed before I was fortunate enough to encounter the Merlin Trust who offer the chance to work at the garden for up to three weeks. I jumped at the chance.

Upon route

There are many great gardens in the Alpine world, but few have attained the level of fame that the Schachen has over its 118-year history. Despite being so well respected, an air of mystery surrounds the garden. Few have made the journey south of Munich to see the garden in person. The three-hour drive south to Garmisch-Partenkirchen is just the beginning of the trip to one of the most remote gardens in the world. This hidden oasis can only be accessed on foot via one of the forestry trails. The three-hour hike makes it even more special once you reach the garden resting at 1860m. The hike sounds daunting, but one is occupied with the rich surrounding flora. Upon ascension *Saxifraga mutata* was in full flower. The flower spike reaches a height of 40cm with orange flowers painted on green stars. These were either found growing in groups with the next generations rosettes or individual plants growing on steep, exposed hills. *Saxifraga caesia* and **Campanula scheuchzeri** could be found clinging onto crevasses of the rock. *Prenanthes purpurea* can be found on the grass verges by the road. Its graceful arching stems along with *Aquilegia atrata* both flower in a vivid purple. As the vegetation changes to the forestry plantations of *Picea abies* into the native *Pinus cembra* a small attractive plant I have longed to see in Scotland was found growing under *Pinus cembra*. *Moneses uniflora* was growing in a mossy layer of topsoil in a well shaded position. I was surprised by the diminutive stature as in photos it has always appeared larger, standing at only 5-10mm tall. The small pendulous flower hangs low to the grass nodding approval as you continue towards the Schachen.

The Schachen

When I reached the Schachen, I was met by Jenny Wainwright-Klein, the Zambian born horticulturist has been based at Kirstenbosch Botanic Garden, Kew Botanic Garden and now Munich Botanic Garden. Jenny has worked in many areas of horticulture including garden centres, nurseries and

botanic gardens. She has been on many collecting trips to Lesotho, - the most recent one co-funded by SRGC and Hamburg BG – Caucasus, and the native plant areas of Germany. Thomas Heller, an experienced horticulturist, greeted me at the doorway of the house. He has an excellent knowledge of the surrounding vegetation and the locations of the most prized plants. He also attributes his cooking skills to the purchase of food supplies two weeks at a time at the Schachen. Kenton Seth, a fellow temp worker from Colorado, USA had joined the team a week or so prior to learn additional skills as he paves the way for crevice gardens of the future.

Both Jenny and Thomas have been coming to work at the Schachen for the last 26 years or so during the 12 weeks the garden is open. Both have a tremendous knowledge of the garden past and present, the area and the plants. The garden was started in 1901 by Botanischer Garten München Nymphenburg and is very close to the Schachenschloss of King Ludwig. If the name sounds familiar, it is because he was responsible for building many palaces in Germany, most notably the palace featured in Disney's famous emblem. The surrounding area is filled with native meadows with mountains (Alpspitze, Zugspitze and Kreuzeck to name a few) either side.

If you asked most gardeners what their most used gardening tool is, most responses would be along the lines of secateurs, a watering can, or a trowel. At the Schachen, you prepare for battle. You are armed with a **pickle**, a pickaxe for the very stony beds, and a **Hackle**, a metal hook which is perfect for getting into the small gaps between the rocks to unearth weeds, and small knife to swiftly deadhead plants to contain the spread.

It is a difficult task to pick only a few plants in a garden which contains gems from all over the world and do them justice. *Primula* is a well represented genus in the garden and out of the many beautiful plants, if I had just three, I would first say *Primula involucrata*. This plant was collected in the wild by the great Dieter Schacht. Its elegant habitat of pure white flowers and notched petals are enticing. In the same subsection of Sibirica growing close by is *Primula yargongensis* with pink to mauve flowers and deeper lobes. *Primula reidii* (var *williamsii*, a smaller robust form) is another wonder from Asia, coming from north western Himalaya, but was brought to the Schachen by Jim Jermyn in the 1990s. While it is thought to be monocarpic or at least very short lived, it has been successfully overwintered in areas. It is always best to keep seed, just in case. The final choice (despite mentioning more than agreed) is down to timing. I missed the various different types of *Primula clusiana* in flower by being later in the season so I must mention the *Primula sikkimensis*, specifically the white form often with a cream to pale yellow centre of *Primula sikkimensis* var. *hopeana*. *Primula sikkimensis* var. *pubibunda* is also in the garden but is said to be more difficult to grow as it requires stricter alpine conditions than the other sturdier members.

Meconopsis has a proud tradition in my home country of Scotland. Many stunning cultivars have been grown and originate from Scotland due to our appropriate moderate climate for growing such Himalayan plants. The climate and passion for this group of plants is shared with the Schachen. I always gain a great sense of pride when I see how well our wee country has done, walking past 'Huntfield' in all its glory, a plant obtained by Allan Jamieson in the Scottish borders. *Meconopsis intergifolia* subsp *souliei* stayed in flower for the duration of my time at the Schachen (2.5 weeks) which is much longer than the type species. This is more difficult to grow than its woodland edge cousin *Meconopsis sulphurea* but is equally as beautiful. The lovely enveloped yellow flower can make it difficult to photograph the beautiful dark stigma in the centre. Perhaps some breeding work could be done to further display the floral parts of the species, like the chosen parent - ***Narcissus cyclaminus*** of many daffodils cultivars - to breed in the reflexed characteristic. *Meconopsis balangensis* var *atrata* is a stunning dark purple flower due to its growing in iron rich soils. *Meconopsis racemosa* is a lovely light blue which grows deeper in colour toward its centre with

crinkled petals and deceptively sharp stems. A deep blood red flower of a possible *Meconopsis staintonii* also joins this group, although we are not 100% convinced in this categorisation, due to frequent hybridization and many coloured forms being introduced as *M. napaulensis*. Regardless it is a lovely not so blue poppy.

Much to the surprise of many visitors, the beloved *Gentiana lutea* does come in other colours and not just the characteristic blue plants we have grown to love. Despite the reluctance to include the 'yellow gentian' with the rest of the 'better-looking' family, it has been adored by herbalists for years (some even say since second century BC). The fact it can be made into an alcoholic drink is a great asset of botanical interest. The bitter taste reaches dizzying heights while its appearance bears some resemblance to something from a wizard's cupboard. The plant itself is a good addition to an herbaceous border where it typically reaches 1m in cultivation. I have seen slightly taller in the moist meadows which it frequently inhabits. Propagation by seed is advised as the root does not divide or transplant well. Despite having read that the root reached the length of 30cm, having been trying to dig them out as they sporadically form clumps in the wrong places in the garden, I can testify that the roots can easily reach 1m in length.

As much as I adore the dainty little plant that is *Campanula pulla*, it does pose a danger to its neighbours. Having adapted to strong competition in its native habitat it can easily become rampant in the rock garden. It is strongly advisable to contain its spread as its thread like rootlets will find home in any available space in the garden regardless of soil type. This must not put you off growing the reliable species as its little violet coloured bells are a wonder to see as it meanders in and out of the yellow Potentillas and *Primula yargongensis*. Another of the reliable genus is the monocarpic (meaning it dies after flowering) species *Campanula thrysiodes*. It differs from the smaller blues of the typical *Campanula* with its tall spike of tightly packed cream coloured flowers to a height of 30cm. A mix of both is that of *Campanula barbata* which has the height of *C.thrysiodes* and the typical blue bells on an elegant stem.

It sounds odd to mention weeds when talking about a garden but bear with me because the Schachen has no ordinary weeds. Since the garden is surrounded by a protected nature reserve, lots of the native flowers creep into the garden. Considered a prized ornamental practically everywhere else, such beautiful plants as *Lillium martagon* must be removed. *Gymnadenia conopsea*, a native orchid has sown itself in and among plants throughout the garden. An observation of the roots reveals a swollen hand for a root system.

The plant *Moraea alpine* was wild collected in Lesotho in 2013 by Jenny. The colour is more intense at the Schachen due to UV light. It grows in basalt rock soils in its native lands which are kept wet through frequent – near daily – thunderstorms. An early summer emergent which is good due to the short growing season at the Schachen. A *Moraea alpine* flower lasts only a day but puts up multiple flowers for a period of around 10 days. The plant in question makes seed at the Schachen which is sown at 18 degrees; in 4-5 weeks germination should occur. Interestingly, it flowered during the day (a nice prize at the end of lunch) with the leaves unlike *M.stricta* which flowers before the leaves.

Castilleja elmeri is a member of the *Orbanchaceae* family (a parasitic group of plants) and will come into flower three or four years from seed if successfully attached to its host - in this case an *Erigeron bloomeri* (*Asteraceae*). Last year was a good summer at the Schachen as it was not too dry, leading to the production of two strong flowers which it has again this year.

Megacarpa polyandra is one of the more unusual plants in the garden. The monotypic (the only plant in the genus) oddity comes from China. It will flower 10 years from seed, forming a large umbel

with a rosette of deeply divided leaves. Although plants do not produce a lot of seed, it does germinate easily.

Wulfenia carinthiaca is one of the true relics of the garden. It was planted in 1907, just six years after the garden was built. The dense mat of purple flowers has engulfed a rock just by the entrance to the Schachen living quarters. The similar plant *Horminum pyrenaicum* quickly became one of my new favourites in the garden. Given the sprinkling of plants outside of the garden in the protected zone, it had clearly also been another gardener's favourite. Despite the allure of these exotics, they can pose a great threat to the protected vegetation which surrounds the garden. However, the perfusion omitted when removing the flowering stems is so enchanting that I chose to collect them into a vase alongside *Pulsatilla alpina subsp alpina*.

Nomocharis seems to be a plant that keeps on giving. Regardless of which one of the 10 or so species you have chosen, it tends to result in a stunning plant. *Nomocharis oxypetala* downward facing flowers were tucked in one of the Himalayan beds. Its pink shade with a light white streak through the centre of the petal is accompanied by the pink/white speckling individual to every plant. *Nomocharis aperta* is the other highly variable plant which seems to change its patterning from white with pink blotches to light pink with deeper blotches.

I thought I was spoiled for choice within the realms of the garden, but a simple step outside revealed there was much more to find.

Hike to Meilerhütte

The Meilerhütte is situated at the top of the trail, right on the Austrian border and to the south east of the garden. It is a gorgeous ninety minute hike as you move through meadow with *Gentiana lutea*, *Adenostyles alliariae*, *Crepis aurea*, *Phyteuma orbiculare* and into the wind torn *Pinus mugo*. One of the most interesting plants in the meadow for me was an orchid by the name of *Traunsteinera globosa* which seemed to have perfected the art of imitation. Mimicry has been used by orchids (and other plant groups) to trick unsuspecting pollinators, in this case a clover (*Trifolium* sp.) which at first glance works perfectly. It is only when looking closer you see the difference. *Rhododendron ferrugineum* can be found growing under pines while *Rhododendron hirsutum* is clinging to life against the rocks. The pair are easily distinguished for *R.hirsutum* has hairy foliage which is often a lighter colour of green and smaller in size. The flowers are often in a paler pink while *R.ferrugineum* has a deeper pink. If one is in any doubt, a simple rub of the leaves of *R.hirsutum* will release a pungent odour which I cannot quite place, sometimes reminding me of paint stripper. As I step into the new level of the hike *Sesleria varia* and *Carex sempervirens* are the dominant grasses in the area. *Dryas octopetala* flows over rocks while *Pedicularis rostratocapitata* and *Androsace chamaejasme* could be found poking out of rocky outcrops with *Tofieldia calyculata*. *Gentiana verna* and *Gentiana barvarica* (var *subacaulis* in some literature). I found the latter typically darker in flower, but this is a highly variable characteristic. When looking at the leaves, the difference is clear: *Gentiana barvarica* has small almost *Sedum* like leaves neatly arranged in a bundle. I found a small patch bursting with *Primula farinosa*, *Pingicula alpina*, *Anthyllis vulneraria*, *Primula auricula* and Gentians. A plant I never tire of is *Silene acaulis*, a simple plant which forms over rocks beautiful dense carpets covered in light pink flowers. While the *Silene* found a home on the rocks, *Saxifraga caesia* could be found tucked away in small gaps in them. Its distant relative *Saxifraga aizoides* also seemed to prefer shader spots, I had only seen one plant in flower which was under a step. Its light orange/yellow flowers are strikingly similar to *Saxifraga mutata* found at the beginning of the hike.

Kenton my hiking partner (sadly only for a few days before he returned to the States) spotted some Soldanellas in flower by some snow in a small deposit. *Soldanella pusilla*, identified by the venation on the leaves, are delightful small alpines. I wandered slightly off path towards a patch of snow and was rewarded for my trouble with a *Saxifraga oppositifolia* in full flower in the middle of July. It is always nice to have a fond memory of home follow you on your travels. *Saxifraga oppositifolia* (dark form) does not seem to be performing as well in Scottish gardens as in years gone by, likely due to the extra heat we have experienced in summer, so it was satisfying to see this one flourishing. As you near the summit *Papaver sendtneri* greets you in full flower as you settle in the cabin for some food and a well-deserved pint. Prost!

Austrian Side

A week later I found myself curious; Jenny had mentioned that the Austrian side was much warmer due to the south facing slopes, allowing different plants to thrive. After some breakfast, some advice from Jenny on plants and the usual generous helping of factor 50 sun cream (the highest one can get) to protect my pale Scottish skin, I was ready. The last of which was required due to the warm weather of July 2019, with record setting temperatures recorded across Europe and at the point of writing a new record of 31° in Edinburgh. I slowly ventured down the steep slope as the small rocks tumbled down with each step. I was attentively watching a couple in front of me to maintain a clear path down. My plan was to go down to Söller but the path was too steep and, without adequate equipment or experience, I decided against it and continued forward down the mountain. By doing this, I inadvertently added about three hours to my total hike time.

Viola biflora was much more apparent on the Austrian side, growing everywhere but preferring the shadier spots out of the sun's gaze. I have a deep affection for *Globularia cordifolia* with its small blue pom-pom flowers. I found it rare as I began the hike down, but my descent later brought me to large clumps. I was on the hunt for arguably the most iconic plant in Germany: Edelweiss (*Leontopodium alpinum*). Both have the tendency to rot away in the damp, mild winters of the west coast of Scotland, so it was to no surprise that they prefer to bake in the heat of the Austrian sun. The same was to be said for those in cultivation at the Schachen. The taller Asiatic steppe species from the likes of Mongolia and China perform much better than the stricter alpine Edelweiss due to the summer wet. Sadly, the sheep knew I was coming to look for the plant and decided to have a nibble on the fresh foliage on every plant I found. The further hike down to the *Betula* forest didn't reveal anything of great botanical interest so I began to march back up to return to the garden with a well-earned sun burn. A 9-hour hike from 1860m to 2300m to around 800m metres and back.

In the southern hemisphere section, there are some plantings of *Zaluzianskya* (*Z. ovata* and *Z. oreophila*), a genus endemic to South Africa that produces a scent at dusk to attract pollinators like the night flying hawk moths and hummingbird hawk moths. I heard a quote some years ago which has stuck with me: 'History never repeats but it does rhyme.' Over a year after my first trip to Branklyn Gardens where I first heard about the Schachen, I was fumbling about in the cabin ready to leave for another torchlit tour.