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AGS/Merlin Trust – French Alps.

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## **Introduction:**

I have to apologise now for the amount of photographs used in this report. It just seemed right, whilst describing the plants, to show them as well! I do not pretend to be a geologist or specialist – I have just started on my alpine journey, after years of appreciation – therefore I have tried to add bits of information found out during the trip about the geography and geology of the places we visited, but this report will mainly be a journal of things seen and rather a lot of enthusing. Wherever possible, I have noted the altitudes at the various stops made.

## **Background info:**

A true alpine is defined as a plant growing above the treeline. Some plants I am enthusing about within this report are not true alpine, but wildflowers. Many times, they cohabit, but it is at the higher altitudes that the separation between what we call a “rock plant” and a true alpine is made clear.

In the alpine zone, the temperatures are immediately cooler (0.5 degrees less with every 100 metres further up) with more air movement and often frosts overnight, despite a warm and sunny day. Light intensities are also much higher at these altitudes compared to lower ground, especially in the UV spectrum and many snow beds still lay in the hollows of the mountains, retaining their snow much later than the ridges, making the landscape more stark and interesting in its contrasts.

The plants growing amidst this harsh environment may look small and delicate, but they have to be tough and extremely well adapted, taking advantage of the growing season no matter how short, and plunging their roots deep into the rocks to extract the necessary nutrients and moisture. Despite this tough build, they are, as indicated, some of the more delicate-looking and beautiful plants in this vast world of flora. Their flowers are huge in comparison with their stature, and shout out to every rarely passing insect, pollinate me! They cleverly keep out of our way in the most awkward of places and altitudes, but we still trek and fight to visit them and pay our respects to these inspiring little gems.

This is a little diary of my trek, with thanks to the funding of the Merlin Trust and Alpine Garden Society, visiting the flora of the French Alps on my first ever Alpine Tour.

## Journal

### Day 1: Monday 16th

My flight arrived into Lyon. A bus to Grenoble and a further bus from Grenoble to Villar d'Arene (Col du Lautaret) got me to the Hotel Le Faranchin at 19:30 before the rest of the team and gave time to unpack and settle.

We introduced ourselves over a good meal and headed to bed early to prepare for the exertions to come.

The Group: Øystein Normann, Gotye Hunke, Erica Larkcom, Vicky Matthews, Cara Smith, Emily Smith, Russell Parry, Richard Wilson, Iain & Jean Stowe, and Tour Leader Christopher Grey-Wilson ("Kit").

### Day 2: Tuesday 17th

Breakfast at 8, leave at 9.

Travelled out in the morning to La Grave, which is the main ski resort in the Dauphiné Province. It sits in the shadow of the Meije, one of the most impressive summits of the Ecrins Massif and famous for its spectacular views, peaks and glaciers. A cable car is the best way to make it to the top and enjoy the flora of the Meije without taking all day and getting puffed out! The cable car only opened at 10am though, so we ambled around the car park whilst we waited and enjoyed the alpine flora even here!



The cable car took us up halfway to the Peyron d'Amont Plateau to an altitude of 2,400m.

On the way up we saw wonderful meadows of yellow Gentians and Violas below us but didn't have time to walk down amongst them. The Plateau was almost pure rock with rivers of grass and what

looked like moss. On closer inspection, it was mossy Saxifrages, *Silene acaulis*, *Minuartia sedoides* and *Sempervivum arachnoideum* that actually covered the rocks.



There were a few sparse sprays of *Daphne mezereum* nestled at the base of higher rocks but they didn't look like they were thriving in this environment. *Geum* and *Alchemilla* were very common and I found a beautiful *Carex* with rubber-like flower heads (male stamens) which is possibly *Carex ericetorum*. I'll admit though, my plant of the day was *Minuartia sedoides*. I saw wonderfully large clumps thriving on the rocks with ants drinking the nectar.



There were some wonderful lichen patternations and I also glimpsed my first *Soldanella alpina*.



*Primula villosa*





Gotye and I headed further up the scree to the side of the Plateau and happened upon a beautiful patch of *Pulsatilla vernalis* in flower. They were beautifully fluffy with an iridescent blue sheen to the buds and underside of the petals.

Stunning scenery and a glorious morning weather wise. Up at the Plateau the weather suddenly turned chillier and the clouds moved in with short showers of hail. Eventually (thankfully once back down in the car park) a thunderstorm broke out. This put a small spanner in the plans and we went back to the hotel to meet up with 2 other members of the tour who didn't fancy the cable car, for a cup of tea and to research the plants already seen.

At around 3:30 we took the cars up the road to a series of wonderful alpine meadows just opposite the hotel. The rain continued and made it difficult for photography but I couldn't help but snap away! We saw an array of orchids and meadow communities that were like nothing I've ever seen.

The meadows were punctuated with *Gentiana lutea*, which I thought were *Veratrum* at first. Apparently, they differ in the leaf arrangement - leaves are oppositely arranged on the *Gentiana lutea*, and alternately arranged on the *Veratrum*.





It still rained slightly as we explored these lowland alpine meadows and it made photography difficult. However, it was hard not to get the camera out as there were so many beautiful wildflowers which I'd never seen before! For example, *Aster alpinus*, *Pulsatilla alpina*, many orchids such as *Nigritella*, *Orchis mascula* and *O. militaris* and *Dactylorhiza majalis* as well as an elegant stand of *Asphodelus albus*.

### Day 3: Wednesday 18<sup>th</sup>



Today consisted of a number of stops whilst we wound our way towards our next hotel in the Col d'Izoard (La Ferme d'Izoard).

Before reaching our first stop at a Botanic Garden, a stand of *Campanula thyrsoides* caught our eyes out of the car windows. It was another damp day but the weather held thankfully. It was my first time seeing these Campanulas or anything like them! Rare in many countries, but obviously not here, they bore very striking pale-yellow spikes of hairy flowers and are apparently a protected species.

At an altitude of 2,100m, the Lautaret Alpine Botanic Garden contains more than 2000 species from the alps and the world's major mountain areas sited at the crossroads of the northern and southern alps. The Col itself has a wealth of natural flora, which were also present. Information boards were placed near the Chalet amongst raised beds entitled 'Botanical School' and explained the adaptations of true alpine plants and their characteristics. The majority of the garden consisted of bigger swathes of grassland with areas of scree and rock garden along the perimeters, some following the run of a stream. These areas represented differing habitats from around the world, with some also displaying plants only in the Caryophyllaceae family for example, or medicinal/toxic plants etc. A wide range of habitats was covered leading to a very diverse garden indeed! Apparently, the peak flowering season is July so we were a bit too early to see it at its best, however it was a wonderfully informative place, raising the profile of alpinism and alpine conservation.



On the way to Col d'Izoard, we got a bit lost driving through Briançon, but made up for it with a little botanising about one third of the way up a mountain in the Col du Galibier. There were rich meadows with yellow rattle (*Rhinanthus alectorolophus*) and a new *Campanula* species (*C. rhomboidalis*) which was exciting! Areas of scree and large rocks tickled the meadows edges with large and impressive swathes of *Dryas octopetala* (calcicole), colonies of *Genianella*, *Sedum acre*, *Silene vulgaris* and *S.italica* and some *Saxifragas*.



*Dryas octopetala* favours limestone boulders

Another necessary stop further to the top, where the land became more wooded with *Larix decidua*, showed meadows dominated by *Pulsatilla vernalis* and *P. alpina*, *Viola calcarea* (recognised by the long style) and the odd *Gentiana alpina*. 3 bends in the road higher up, the woods and meadows ceased, replaced with deeper scree of hard limestone with much less noticeable vegetation as a result.



*‘Remorselessly the weather and the power of gravity shatter the cliffs and spread wreckage down the slopes. These screes play a major part in the wild magnificence of the mountain scene – huge slides of rocks and shingle streaming downwards and outwards below the greater crags. From afar such stony tumbles may look utterly barren; yet when you get there they can be full of interesting plants.’<sup>i</sup>*

### Casse Déserte:



A final stop up at 2,360m at the Casse Déserte, where the scree took over, looked quite barren until we ventured amongst the scree itself. The amazing rock formations are often called ‘ruiniform’ due to their ruin-like appearance. There were gems hidden! *Daphne cneorum* and *Petrocallis pyrenaica*, *Viola calcarata*, *Jasione montana*, *Salix serpyllifolia*, *Gentiana verna*, *Antennaria dioica* and *Valeriana salinca* (mauve and white forms).



Not too far down on the other side of the hill as we were descending the north-facing side, we stopped to take in the scenery (glimpsing the top of Mont Blanc) and ventured into a shaded Larch woodland to the side of the steep road. It was so strange to see *Soldanella*, *Gentiana verna*, *Ranunculus pyrenaicus* and even *Sempervivum montanum* nestled amongst grass under trees! It was obviously a mountain forest with free draining rocks below the surface soil but the contrast of the forest with the alpine gems was strange and just showed how adaptable some of them are to different conditions.

We continued to the bottom of the Col into the Arvieux Valley, surrounded by the mountains of the Massif du Queyras, and through to our second hotel in the village of La Chalpe.

#### Day 4: Thursday 19th



As yesterday involved long car journeys, it was decided we would spend more time walking and exploring today. We took a trip just up the road from La Chalp, with the obligatory 2 stops along the way. The first stop was about half way up an incline to a patch of Fragrant Orchids (*Gymnadenia conopsea*) by the roadside. There was also a

Crab Spider (*Misumena vatia*), bright yellow, nestling in one of the flower heads, which made for a great picture.

The second stop was near a picnicking area with fabulous views. Here, I ran back to where we passed a bend in the road to find a group of *Cynoglossum officinale* (Boraginaceae), which bore flowers of intense, deep velvety red and purple. From the road I could clearly tell this was a plant we hadn't come across until now and, although common and not of particular interest to some others, I thought it was quite special.



The main stop took us up higher into the mountains of Arvieux to the artificial lake, Lac de Roue. We walked the perimeter of the lake and explored the surrounding meadows and Larch forest. Around the waters edge were dense patches of Bogbean (*Menyanthes trifoliata*) in full flower.



A lot of species in the meadow were the same as we had seen before. It was teeming with wildlife and insects sprang from every foot placed amongst the grass. I found a wonderful wasp nest at the edge of the lake attached to the stems of plants. It looked empty and was possibly from last year.

Meadow species (not all):

- *Cerinthe glabra*
- *Dianthus carthusianorum*
- *Dianthus deltoids*
- *Euphorbia polychroma*
- *Gentiana lutea*
- *Gentianella campestre*
- *Hieracium* sp.
- *Linum perenne*
- *Onobrychis viciifolia*
- *Ornithogalum umbellatum*
- *Persicaria bistorta* (lots)
- *Phyteuma orbiculare*
- *Rhinanthus minor*
- *Salvia pratensis*
- *Scabiosa columbaria*
- *Silene nutans*
- *Veronica chamaedrys*





Travelling up from the lake, we took a narrow path following a stream toward Souliers. Huge anthills dotted the sides of the trodden path and the ants trooped along the path underneath our feet. We came across a tiny patch of *Clematis alpina* (2 flowers worth) by the streamside. Sadly at this point, my camera battery was beginning to dwindle... An unusual, glaucous sedum, *Sedum anacampseros*, also clung to very fine muddy scree lining the top of the meadow sloping up to the path.

A little further along, Gotye spotted a mass of *Paradisea* in the lower meadow and went to explore. We decided to follow, as there was not much else of interest along the path. The meadow was stunning. It opened into an expansive meadow surrounded by Larch trees to one side and beautiful mountain views to the other, with a large colony of *Paradisea liliastrum* polka-dotting the top half.





Further down the meadow, we came across *Aquilegia alpina* - a rarity and real find! There were approximately 4-5 small groups and many of the flowers were spoilt from the rain but we eventually found some good ones. Compared to *A. vulgaris*, *Aquilegia alpina* is much shorter with a larger flower head and more protruding, solid central cone of pale blue.



Russell located one specimen of *Troussteinera globosa* orchid, which was a lighter pink than the *Gymnodenea cenopcea*, (also present and in greater numbers). It was very pyramidal in shape with the upper flowers not yet open.



Returning to the car park, we explored a boggy meadow, which at first seemed rather insignificant but upon closer inspection contained *Dactylorhiza majalis*, *Pinguicula vulgaris*, *Primula farinosa* and the odd clump of *Eriophorum latifolium*, which is a particular favourite of mine! I think this is my favourite habitat we've visited so far, containing some beautiful species. Naturally, it was here that my camera battery entirely refused to go on. Typical!

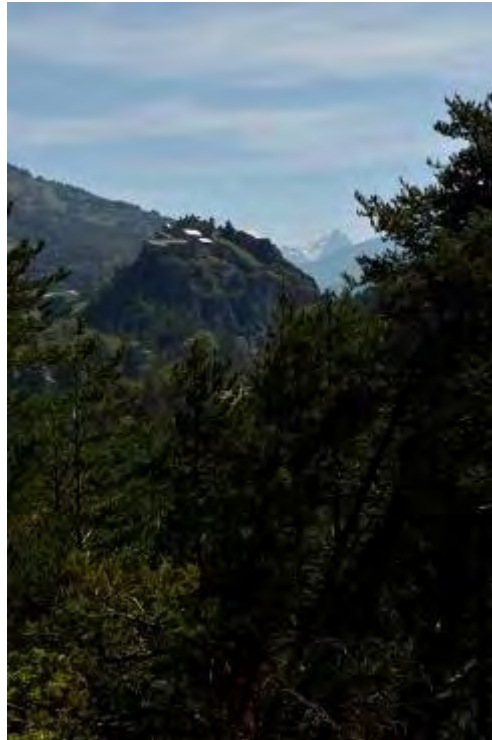
I first came across *Pinguicula vulgaris* in the Cairngorms but lost my photographs and was delighted to see it again. I was promised more sightings of it later in the week to regain those lost photos.

On the way back to the hotel, we caught sight of a huge *Orchis mascula* at the roadside. There were only 2 flowering stems, but one was already over, and the leaves were unspotted which is unusual.

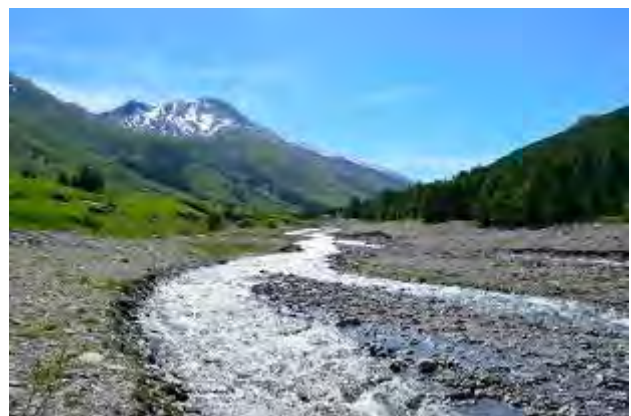
Back at the hotel, we had a coffee break and some ventured out again around the hotel, but they got caught in a heavy rainstorm. I took the chance to get some well-needed sleep, as it was already quite late.

### Day 5: Friday 20th

Today saw us travelling up to the French/Italian border, through the Chateau-Ville-Vielle, a commune in the Queyras, Hautes-Alps and passing the 17<sup>th</sup> Century Queyras Fort.



Our first stop took us to a stream with incredible views of the mountains near a meadow just outside of the village. It is said that here, the fields are full of *Fritillaria*, so we went exploring.



Sadly, no *Fritillaria*'s were found here. The meadow was, however, full of thick swathes of *Centaurea montana* in full flower. The pictures below show the two colour forms seen and the seed heads, which were particularly lovely.



The beautiful red *Adonis annua* (“Pheasant’s Eye”) and *Narcissus poeticus* (“Pheasant’s Eye”! Oh, the confusion of the common names) were also found. Down by the stream in the Valley, we saw our first Sand Lizards (*Lacerta agilis garzoni*) and came across a very unusual *Campanula alpestris*, which was pinky-purple with hairy rosettes.

Not too further along the road, spectacular views were garnered of the Queyras National Park. The striking rock feature below is known as a “Fairy Chimney”, or “Demoiselle coiffée” (“Lady with a hat”!). The tower has evolved due to the harder cap of rock protecting the more friable, sedimentary rock that sits below it from the weathering process.



Finally, we reached the top of the Col Agnel with its peak, the “Pain de sucre”. The high alpine meadows below the peak were sprinkled with *Ranunculus pyrenaicus*, the Pyrenean Buttercup, which flowers after the snow melts. There were still patches of thick snow lying in the creases of the land.



Also in abundance were *Potentilla aurea* and *Gagea reverchonii*.

Beautiful cushions of Moss Campion clung to the rock, forming beautifully smooth, rounded cushions. Hiding in the sheltered crag of a large group of rocks we found *Primula marginata*. It's a new one for the tour and they were beautiful specimens in the full flush of flower. One plant was so encrusted with farina that it had even reached the flowers! It was a beautiful sight and such an intense, deep purple. Further down was the largest drift of *Pulsatilla vernalis* we'd seen, but sadly the flowers were already over.



The very top of the Col Agnel took us to an altitude of 2,744m. It is in the Cottian Alps and is the highest border crossing in Europe and one of the three highest mountain passes in France. There was an intense blue sky and sun but it was very windy up at that height! I just about put my shorts on... We saw the best drape of *Saxifraga oppositifolia* just looking out onto the French side of the border.



Below is a further selection of sweeties found below the peak at the Col Agnel. The area I explored was only quite small here, but you needn't go too far to see beautiful plants, and the variety of large and pristine cushions kept me happily busy.



From the top left, anticlockwise: *Silene acaulis*, *Gentiana verna*, *Ranunculus pyrenaicus* and *Vitaliana primuliflora*. There were also many more *Minuartia sedoides*, which I love.



On the way back down, in the valley of some impressive mountains, we stopped by another area of alpine meadow. At an altitude of 2,300m, this one was striking with its short, dense yellow spires of *Pedicularis foliosa* amongst the blue of *Gentiana verna*. There were *Viola calcarata* of all colours and the odd stately group of *Anemone narcissiflora*.



In a boggy area along the incline where the meadow meets the mountain, and where glacial melt water trickles down the slopes, we noted mainly *Primula farinosa*, *Tulipa australis*, *Alchemilla sp.*, *Viola calcarata*, *Gentiana verna*, *Sedum acre*, *Sempervivum arachnoideum*, *Myosotis alpestris*, *Primula veris* and *Bartsia alpina*. The colour yellow dominated these meadows, with the surroundings of *Geum*, *Potentilla* and *Trollius* in addition. *Salix* seemed sparse here and the ground was full of grassy hummocks standing proud of the mud and shingle, which direct the water down the meadow. The water finally accumulated in a small natural pond full of tadpoles.



Back near the cars and right by the roadside, there was a dip in the lower meadow leading to a rushing river in the crease of the valley. 10 *Fritillaria burnatii*'s were dotted along the top of the descent; 2 groups and a few stragglers satelliting them. They were also surrounded by beautiful specimens of *Gentiana acaulis* grouped in large numbers along the higher ground.



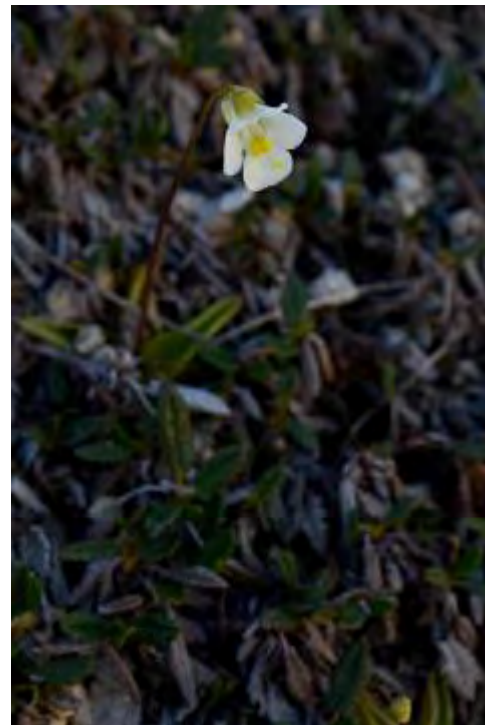
The next and final stop of the day was here, at Saint-Véran, the highest inhabited village in Europe at an altitude of 2,040m. This visit was purely touristic and allowed for a lovely cold beer in the intense sun with a fantastic view. Below is a picture of the Protestant Church of Saint-Véran, built in 1804, whose steeple is very striking and dominates the views from the streets.



**Day 6: Saturday 21<sup>st</sup>**

Today we headed to our third hotel in Valloire, back in the Col du Galibier. It is situation between the Vanoise and Ecrins National Parcs. We stopped again at the Casse Deserte and passed the Jardin Alpine du Lautaret.

At our first stop on the ascent of the Col d'Izoard, we found a very pale blue *Gentiana verna*, as well as lovely examples of *Salix reticulata* and *retusa*, *Pinguicula alpina* growing where the glacial melt collects and runs down the scree, and *Viola cenisia* just by the roadside.



Again at the top at the Casse deserte, we decided to explore in the other direction this time, away from the more obvious walks. Here we found *Pulsatilla alpina ssp. cottianaea*, more *Soldanella alpina* (which seemed to glisten) and pink carpets of *Thymus serpyllum* and *Daphne cneorum*.

We stopped briefly just south of the tunnel in the Col du Galibier, which is often closed due to the severity of the snow cover in winter. It is one of the highest passes in France. Groups of *Ranunculus glacialis* clung to the steep and loose scree on the windy path up to a viewpoint. The panoramic views of the mountains were incredible and we even caught a glimpse of Mont Blanc!







Before leaving, Kit and I noticed an unusual stand of yellow daisies, *Tussilago farfara*, by the road. They were very striking with leafless stems of bright, upward facing daisies.



Our next pause was at our main stop for the day, still on the descent of the Col du Galibier. There were areas of marsh/bog by the roadside, which were almost completely dry now and *Crocus albiflorus* studded the perimeters. Up on the higher ground around the ponds, we quickly came across other plants of note. Sights of *Linaria alpina*, *Leucanthemopsis alpina*, *Silene acaulis ssp. longiscapa*, *Anemone baldensis* and tiny *Pulmonaria longifolia*'s to name a few, kept us happy.



Walking back down the slopes surrounding where the water pools in the valley, we saw beautiful Soldanellas emerging above the snow layer.

Jean and I spotted a wonderful clustered rock full of tiny plants. We took a few minutes to count how many different species we could find and came up with more than 15! A very diverse rock indeed.



We took a final botanising stop near a stretch of boulders where spiders stretched their webs between the rocks – you had to be careful when walking! The extensive maze of rock eased off in the centre, where two small ponds had formed. Despite the beautiful habitats, nothing new or overly exciting was found here but there were record-breaking swathes of *Globularia cordifolia* and striking heads of *Ajuga pyramidalis*.

We arrived at the Hotel de la Poste in La Valloire mid-evening. After unpacking, we went for a lovely pizza after a stroll around the village. Round 3 of the Enduro World Series mountain bike race waited for us in the centre of the village. Needless to say, it was very busy!

### Day 7: Sunday 22<sup>nd</sup>



*Rhododendron ferrugineum*



We travelled to Mont Cenis and Petit Mont Cenis. First stop took us near the Lac du Mont Cenis to look at a rocky outcrop by the roadside. Our first frog orchid (*Coeloglossum viride*) was seen as we were arranging ourselves for a group photo. *Helianthemum canum* was flowering in abundance all over the lower rocks and we saw *Viola calcarata* of every colour. Little crevices adorned themselves with *Sempervivum arachnoideum*, looking just like they've been planted in a home crevice garden!

Then another stop east of the lake where there are meadows to the right of the road and Rhododendron heaths to the right. Lime-loving *Dryas octopetala* thrived in large drifts along raised rocks by the

road verge. *Rhododendron ferrugineum* in flower covered the tops of the hills further into the heathland. Billberries (*Vaccinium uliginosum* and *myrtillus*) grew alongside, meaning there was no room here for the smaller gems. These grew on the other rocky hill and in the lays of the valley.

*Gentiana acaulis* was in profusion in the furthest valley. Its flowers, which had gone over, had elongated pedicels and a faded colour. *Nigritella rubra* and *rhellicani*, and *Homogyne alpina* were the standout plants for me though at this stop. *Geum montanum* was also very common and looked beautiful with its fluffy seed heads.



We continued along the windy road further away from the lake where we reached our next stop and immediately found a spot for lunch. We gave ourselves an hour and a half to explore the alpine pastures here, which were at an altitude of 2,200m.



different stages of growth and were mesmerising.

Quite quickly, I found the tiny *Gentiana nivalis* again actually in flower. *Sempervivum montanum* was also flowering the best we've seen it here. Below the dried mounds where the Gentian and Sempervivums grew, Pine Prosessionary Moth caterpillars caught the eye, dancing and squirming around. There were many nests of them all at

*Veronica serpilifolia* subsp. *humifusa* grew by the edge of a little pond, which had formed in the valley. It was very delicate and stood out with its profusion of tiny, ice-blue flowers.

A little further down, following the crease between the hills, I found Jean, Emily and Russell on their knees peering into some rocks and then settling down with their identification guides. As I went to see what they'd found, a red blob came into view. It was a galled



*Sempervivum montanum* (Endophyllum sempervivi). So striking, it's a shame really that this isn't a desired characteristic of a unique *Sempervivum* flower! Just up from this was another *Primula pedemontana*, which was nestled amongst some *Geum montanum*.



As I followed the land between the hills, the ground became more and more moist and purple spikes of *Dactylorhiza majalis* started appearing. More *Nigritella nigra ssp. rhellicani* was also dotted between the specimens and eventually the ground became a marsh full of *Primula farinosa*, *Valeriana salianca*, *Bartsia alpina* and *Eriophorum*. There were rivers of *Caltha paulstris* amongst yellow *Trollius europaeus* and the purple *Dactylorhiza* grew in abundance. I finally found my *Pinguicula vulgaris* again! I had forgotten how difficult it was to photograph this plant. With the tiny stems and floating flower heads, you have to make a decision to get only the flower heads in focus, OR the basal rosette – one or the other. This habitat was dreamy and I could have stayed all day.



Pink Pedicularis, Vitelliana and Helianthemum on the higher slopes with *Pinguicula alpina*, *Nigretella rubra*, *Coeloglossum viride* spotted the higher ground around the marsh. *Primula pedimontana* appeared on drier pockets of rocks and there were also more areas of *Rhododendron ferrugineum*.



Tearing ourselves away from these magical spots rewarded us with an incredible display of both colour forms of *Dactylorhiza sambucina*. Apparently these are fairly easy to grow in a garden setting with a well-drained position. A lone butterfly orchid (*Platanthera bifolia*) stood below them, easy to mistake for another *Dactylorhiza*, but its height and brighter flowers were a giveaway. Really dreamy day!





Lower down again to the side of the Lake amongst a roadside meadow, *Veratrum album* was finally in flower. Purple candy-floss heads of *Thalictrum aquilegifolium* was also further down amongst the meadow. Opposite were some grazing cattle wearing large bells around their necks. The head heifer also wears a different, larger and more ornate bell, which gongs at a different pitch to the others. Their movements resulted in a memorable soundtrack to the day.



This photo shows the many differing colour variations seen in *Viola calcarata*.

Today was an amazing day for flora and the boggy ground gave more sightings of my favourite plants.

**Day 8: Monday 23<sup>rd</sup>**

A not-too-taxing day today. We travelled back to the top of the Col above the Valloir commune, where the road follows a river. *Lamium maculatum* was seen just by the roadside alongside *Scrophularia canina*.

*Plantago media* was flowering in profusion along the riverside meadows. Although classed as a weed, time had to be taken to appreciate its flowers.



Further along, away from the road and on higher ground, we found two spires of the *Bearded Bellflower*, *Campanula barbata*, with its hairy petals. *Viola biflora* was found again sheltering in a cave at the base of a large rock with its back to the river.



*Botrychium lunaria* (Moonwort) made quite an impression on me today. Strangely a type of fern, the fruiting bodies (sporangia) look like spikes of yellow pearls or moons! They can get bigger than this but as these were growing in a miniscule amount of “soil” on a rock, its size was much diminished, but it was not diminished in beauty.



Further up the valley we took another stop and clambered up the steepest scree yet, where we found *Clematis alpina*, *Campanula alpestris*, *Lotus alpinus*, *Scutellaria alpina*, *Daphne cneorum*, *Globularia cordifolia*. This scree was particularly loose and steep, making the climbing more slow and considered, and the descent even more so!



*Pulsatilla alpina* ssp. *cottianaea* was seen again below the scree. The photos below show the flowers in bud and open and also gives an idea as to the sheer amount of flowers there were in this area.



We took lunch and then drove a little further down the road to a colony of *Campanula thyrsioides* on a rocky ledge at the roadside. It's hard to believe this is actually a *Campanula* at all looking at it. We also saw *Centaurea uniflora* here, which was a shocking pink colour, as well as the architectural spikes of *Phyteuma spicatum*.



Then, back to the village for a relaxing rest of the day with a chance for some time to ourselves, which was well needed I think! There's a long drive to the next hotel coming tomorrow. I will feel sad leaving this "commune" in La Valloire, it was such a friendly place and I felt very much at home here.

Gotye and I saw a flash of yellow and purple through the car window just as we re-entered the village for the evening and went back to investigate. It turned out to be *Melampyrum nemorosum*, a semi-parasitic annual. It was growing in impressive sized groups in semi-shade below Birch trees, which are its host plant.



**Day 9: Tuesday 24th**

Travelled to our final hotel, Auberge & Chalets sur la Montagne, in La Thuile with stops along the way. We had just left the village and begun the descent down the mountain from La Valloire, but couldn't resist a stop to see *Gentiana lutea* and *Digitalis ambigua* in flower. Just by the roadside, they were both very striking with their tall yellow spikes. Also alongside *Salvia pratensis*, the blue and yellow colour combination was very tasteful.



Black-veined White Butterflies (*Aporia crataegi*) were all over the *Knautia arvensis*, as well as lovely little Brown Fritillary (*Fabriciana adippe*).

Another stop further along the long journey to La Thuile, we saw a Swallowtail Butterfly that had been stunned slightly by a



car, plus a wasp on its nest, which had been made in a hole in glistening rock!



*Saxifraga paniculata* was finally in flower today having seen its leaves many times last week. Martagon Lily was in bud with a Lily Beetle resting on it! I considered squishing it (even though I do hate to do that), but thought there'd just be plenty more to replace it anyway.



The next and main stop took us higher into the mountains with an amazing waterfall and views above the pretty village of Bonneval-sur-Arc (Rhone-Alps) for lunch. *Gentiana punctata* and *Campanula spicata* seen along the roadsides on the way but nowhere to stop! We managed to track down some closer groups of *Gentiana punctata* though, luckily.



*Thalictrum aquilegifolium* with its fluffy, cloud-like heads grew well amongst the higher meadows. Where the little river wound its way down the valley, accumulating in a series of spectacular waterfalls, the seepage surrounding it contained moisture dwellers such as *Primula farinosa* again, *Salix reticulata* and *S. retusa*, *Pinguicula alpina*, *Saxifraga stellata* and the odd Marsh Orchid again (*Dactylorhiza majalis*). I especially love this habitat, and seeing the plants growing in such close proximity to one another made for a picture that is sure to go on my wall!



Another sand lizard was found clinging onto a rock crevice, sunning itself amongst *Sedum album*, and I found the most comical looking group of *Sempervivum* flowers.



*Dianthus carthusianorum* looks strangely like a rush of some sort rather than a Dianthus. Those pink tips to the buds however are a bit of a giveaway to the flowers to come.



Before leaving, as we were rushing back to the patient group, Oystein pointed out a wonderful alpine meadow grass, *Poa alpina vivipara*, which is ‘pseudoviviparous’. It has adapted to the



harsh conditions by reproducing asexually, meaning that where the seeds normally form on the inflorescence, leafy spikelets grow instead. These are already fully formed little grasses able to settle into the environment at a much quicker speed. Incredible!



On the descent to the village of La Thuile de Saint Foy, we took a brief stop to look at an amazing marsh of *Ranunculus glacialis*. The ground was very moist with shallow streams trickling down the rock, which was seepage from the glacial melt higher up. Doubtless they would be unable to grow without this water source. The *Ranunculus* flowers turn differing shades of pink as they mature and “go over”. They looked very beautiful.

*Linaria alpina*, *Soldanella alpina*, *Primula farinosa* *Saxifraga stellaris*, *S. oppositifolia* grew around the *Ranunculus*. On large rocks lower down were more cushions of *Silene acaulis*.



Another stop at the Col de l'Iseran, where we crossed over into Val d'Iserre (2,770m). We passed through the communes of Maurienne and climbed upwards, gaining fantastic views. *Petrocallis pyrenaica*, beautiful mats of *Minuartia sedoides*, *Linaria alpina*, a few *Ranunculus glacialis* and *Artemisia genepi* could be observed within a few inches of each other in places. The leaves of the *Artemisia* smelt wonderful, like sweet Rosemary, and this is used to make the local Genepi alcoholic speciality!



I saw another garden-worthy, natural "Rock Garden" today. It really was stunning – full of *Saxifragas* - but it is the structure and character of the rocks that make it so special:



### Day 10: Wednesday 25th

We had an easy day today with a woodland walk near the Auberge at La Thuile to see another kind of habitat - another no-car day. The weather was very warm and humid.



*Aruncus dioicus* looked very elegant with its branched, cream-coloured panicles. The Woodland was a mixture of *Betula*, *Larix*, *Fagus*, *Picea abies* and *Acer* could be discerned.

As this woodland is on the slope of the valley, there is a large amount of rock present still, predominantly mica schist.

*Sedum acre*, *Saxifragas paniculata*, *umbrosa* and *rotundifolia* could be found clinging to the sheer and steep rock by the side of the path. *Lilium martagon* was finally seen in flower here, but at a rather inaccessible point near a small waterfall.



*Lactuca perennis*, *Aquilegia atrata*, *Aconitum vulparia*, *Astrantia major*, *Geranium phaeum* and *Dactylorhiza fuchsii* were highlights along the way. *Paris quadrifolia*, an unassuming beauty, is an indicator of ancient woodland in Britain, and of good soil!



*Carduus carlinifolius* has beautiful flower buds. But the best purple seen today is the magnificent *Cicerbita alpina*.



At the woodlands edge, before the meadows and agricultural fields began, an ancient orchard could still be made out. The meadows on the woodland edge were dry and beginning to seed but some lovely Campanulas could still be seen in flower. Below is *Campanula rapunculoides*, and *C. glomerata*.



We were back at the Chalet by early afternoon and spent a relaxing time indoors as a thunderstorm played outside.



Day 11: Thursday 26<sup>th</sup>

The Little St Bernard Pass (Col du Petit Saint Bernard) connects the Aosta valley in Italy with France and the Savoy region. The pass is an altitude valley forged by glaciers and is composed of schist. The

delicate *Luzula lutea*, small and yellow, was prolific here.



Just below the border point sat the Chanousia Alpine Botanical Gardens, founded in 1897, and was apparently world famous. A wonderful plaque sat next to the impressive gates poetically stating how it was '*destroid by the madness of men and is now growing again in the name*

*of brotherhood*'. Obviously ruined during the wars, they plaque also asks us not to expect too much of the garden but as it is slowly restored to its '*ancient splendour, housing thousands of alpine plants from all over the world, for the delight of eyes and spirit*' to merely join in appreciating and respecting the plants growing within. My personal opinion of the garden is that the framework laid out and preserved is stunning and has so much potential. A few of our group, including me, were very interested in returning to help in the restoration at some point. Their honest work for the plants is very commendable, and understandable to all else who love and admire these plants and landscapes.

Ascending the hill behind it were some of the best *Soldanella alpina* colonies so far! *Pulsatilla alpina* ssp. *apiifolia* occurred in a few groups to the side of the glacial melt run where the *Soldanella* grew. They were sulphur yellow and very lovely. *Pseudorchis albida* hid, unassuming amongst the lower pastures.



*Lycopodium alpinum* and *Loiseleuria procumbens* (a sign of acidic conditions) grew on the top of the mountain to one side of a glacial pool, which was azure blue and crystal clear. If it wasn't for Oystein, I would have walked straight past them, but they turned out to be some of the most interesting plants of the day for me.



Walking back down past the walls of the Alpine Garden, I found a white Primula, which I can only guess is *Primula marginata* f. *alba*. It was refreshing to see a white primula after all the pinks and purples.



Back down in the valley, opposite the Alpine Garden entrance, was a damp meadow with swathes of *Caltha palustris* and *Ranunculus aconitifolius*. The ground was almost impossible to walk on here, but I finally made it across to where the rest of the group were already scaling the mountainside which was steep but mainly grass-covered. I decided to climb up the one area of sheer, smooth rock/scree and soon regretted it. The steep, unrivined surface of the rock became wet with moss and algae towards to top where my feet began to slip. I finally scrambled myself to a safe place and ran to join the others before realising my near miss! *Cirsium spinossissimum* was my reward.



At our fourth stop of the day, the ground was densely covered with *Juniperus*, *Rhododendron ferrugineum*, *Vaccinium* sp., *Loiseleuria* and the delicate *Astrantia minor*! Exactly as it sounds, a miniature version of *Astrantia major*, but not a lesser one. There was also *Polygonatum verticillata* piercing the shrub layer.



Mont Blanc was closer than ever, being just a few peaks away opposite the Botanical Garden. Its famous peak was hidden under cloud cover upon arriving, but as we got ready to leave, the clouds magically cleared and gave us a great view of the infamous highest mountain in the Alps, with its ultimate altitude of 4,810 m.



Past the Chapelle Saint-Michel and back on the road to La Thuile, we looked out of the window travelling down the windy roads from the Col a Golden Eagle soared through the valley to our right and exactly at eye level. It was too quick for the camera but a unique and wonderful way to end our final botanising day of the tour.

### Day 12: Friday 27<sup>th</sup>

We had hoped to do some more botanising on the way to the airport today, but a group of us had to leave earlier to catch flights, including me. As a result, it ended up being just a travelling day. I returned to Birmingham Airport by late afternoon, happy but exhausted and (almost) all planted-out.

Finally, there was no sign of *Ophrys* along the way. Kit says we were at too high an altitude for it to be seen here. It needs more Mediterranean heat and dry conditions, found at lower altitudes away from the Alps. You often see them around gravelly car parks as they thrive in poor soil and dry conditions with little or no competition. They are mainly a coloniser species. No *Leontopodium* either as it is too early for them to be in flower. Mid July-August is the best time to see them, sadly! We saw their leaves at the Jardin Alpin du Lautaret but they were nowhere near flowering. I'll just have to go back next year in late July!

### End word:

I am aware that a lot of the plants seen, photographed and enthused about are often common, well-known advocates of the alpine flora, whose images we see everywhere. However, for me, who had never before seen these plants in the flesh, their pristine and exuberant beauty amidst a harsh environment is inspiring. The images of alpines I had seen before this trip fed an image of magic and mystery. Now having experienced them in their wild, I feel my eyes have opened up so much more now to wildflowers and our own native flora. I contribute a lot of my love of alpines to my holidays to the Welsh north coast, where *Armeria maritima* and *Sedum acre* thrive and I am excited to look deeper into this local environment. I am excited to find and work with the “alpines” that do well in the UK, as there is nothing worse than buying a plant and seeing it struggle! It is hard to accept in this modern day, but I believe some things should be left in the Mountains.

Almost every picture I took, it seems, had an insect of some kind hidden in it. It just goes to prove how full of wildlife the meadows were, which is an advocate in itself for nurturing our own meadows! Meadows aside, I feel that the difference in the landscape surrounding the alpine plants in the wild and at home is that at home, we are afraid to let the rock speak for itself. There can be a surprising amount of space between plants in the wild, but this makes it even more exciting when you come across one, and the colours and forms can express themselves without influence from others nearby but allowing its relationship with the rocks speak loudest. The moments where plants do sit alongside and amongst each other create lovely moments of contrast and combination, which can be appreciated. Also, the integration of “rock garden plants” into borders with more lush perennials, shrubs and trees should be encouraged as nature has proven this can also be successful and I’m sure beautiful in a garden setting.

As the last tour led by Christopher Grey-Wilson, I was honoured to be present and able to meet a great group of friends who shared their love of plants, and with whom I hope to continue a relationship of support and friendship on my continued alpine journey.

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AGS Tour Party at St Veran

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<sup>i</sup> Page 30, The Natural History of Wales, William M. Condry. 1981. William Collins Sons & Co Ltd.

**AGS/Merlin Tour French Alps, June 2014.**  
**Complete Plant Lists:**

**Tuesday 17th:**

**Car Park Flora:**

- *Campanula trachelium*
- *Dianthus sylvestris*
- *Lactuca perennis*
- *Lotus corniculatus*
- *Melilotus officinalis*
- *Salvia officinalis*
- *Sanguisorba officinalis*
- *Saponaria ocymoides*
- *Sempervivum grandiflorum*
- *Stachys recta*
- *Tragopogon pratensis* subsp *orientalis*

**Others:**

- *Acinos alpinus*
- *Alchemilla hybrida*
- *Alchemilla nitida*
- *Androsace carnea* subsp *carnea*
- *Androsace carnea* subsp. *carnea*
- *Anemone narcissiflora*
- *Antennaria dioica*
- *Anthericum liliago*
- *Arnica montana*
- *Artemisia genipi*
- *Asphodelus albus*
- *Aster alpinus*
- *Buphthalmum salicifolium*
- *Bupleurum stellatum*
- *Campanula thyrsoides*

- *Carex ericetorum* (possibly)
- *Cerintho glabra*
- *Cicerbita alpina*
- *Colchicum autumnale*
- *Crocus albiflorus*
- *Cystopteris fragilis* (fern)
- *Dactylorhiza majalis*
- *Daphne mezereum*
- *Draba fladnizensis*
- *Draba muscoides*
- *Erigeron alpinus*
- *Gentiana acaulis*
- *Gentiana alpina*
- *Gentiana brachyphylla*
- *Gentiana lutea*
- *Gentiana lutea*
- *Geranium sylvaticum*
- *Geum montanum*
- *Globularia cordifolia*
- *Gymnadenia conopsea*
- *Hieracium staticifolium*
- *Hugueninia tanacetifolium*
- *Jasione monata*
- *Leucanthemopsis alpina*
- *Leucanthemum atratum*
- *Meum athemanticum*
- *Minuartia sedoides*
- *Minuartia sedoides*
- *Murbeckiella pinnatifida*
- *Myosotis alpestris*
- *Narcissus poeticus*
- *Nigritella rhellicani*
- *Ononis cristata* (Mount Cenis)
- *Orchis militaris*
- *Orchis ustulata* (Neotinia)



- *Paradisea liliastrum*
- *Phyteuma orbiculare*
- *Plantago alpina*
- *Polygala alpina*
- *Polygala nicaeensis*
- *Polygala vulgaris*
- *Polystichum lonchitis* (fern)
- *Potentilla alba*
- *Primula farinosa*
- *Primula marginata*
- *Primula villosa*
- *Pulmonaria longifolia*
- *Pulsatilla alpina* subsp. *alpina*
- *Pulsatilla alpina* subsp. *cottiaea*
- *Pulsatilla vernalis*
- *Rhinanthus alectorolophus*
- *Rosa agrestis*
- *Rubus saxatilis*
- *Salvia pratensis*
- *Sambucus racemosa*
- *Saxifraga exarata*
- *Scabiosa columbaria*
- *Sedum album*
- *Sempervivum arachnoideum*
- *Silene acaulis*
- *Silene italica*
- *Silene nutans*
- *Soldanella alpina*
- *Taraxacum* sp.
- *Thalictrum minus*
- *Thymus serpyllum*
- *Trifolium alpinum*
- *Trifolium montanum*
- *Trollius europaeus*
- *Vaccinium myrtillus*

- *Veronica arvensis*
- *Viola calcarata*
- *Viola pyrenaica*
- *Vitaliana primuliflora*

**Wednesday 18th:**

- *Acinos alpinus*
- *Antennaria dioica*
- *Arenaria ciliata*
- *Asperugo procumbens*
- *Asphodelus albus*
- *Astragalus glycyphyllos*
- *Biscutella scaposa*
- *Campanula rhomboidalis*
- *Campanula thyrsoides*
- *Daphne cneorum*
- *Dryas octopetala*
- *Erigeron neglectus*
- *Galium megalosperum*
- *Gentiana brachyphylla*
- *Gentiana lutea*
- *Gentiana verna*
- *Gentianella campestris*
- *Gnaphalium supinum*
- *Jasione montana*
- *Linaria alpina*
- *Onobrychis viciifolia*
- *Ornithogalum umbellatum*
- *Pedicularis comosa*
- *Pedicularis gyroflexa*
- *Petrocallis pyrenaica* (Plant of the Day)
- *Phyteuma orbiculare*
- *Polygala alpestris*
- *Polygala chamaebuxus*
- *Pulsatilla alpina* subsp. *millifoliatus* (buttery yellow)
- *Pulsatilla vernalis*
- *Ranunculus pyrenaicus*
- *Rhinanthus alectorolophus*
- *Salix serpyllifolia*

- Trollius europaeus
- Valeriana salicina + white form
- Vincetoxicum hirundinaria
- Viola calcarata
- Viola cornuta

**Difference in Gentians:**

**Gentiana brachyphylla = short rounded leaves. Very narrow calyx, wingless.**

**Gentiana verna = elliptical longer leaves. Broad wings to the calyx.**

**Thursday 19th:**

- *Aquilegia alpina*
- *Aquilegia atrata*
- *Aquilegia vulgaris*
- *Aster bellidiastrum*
- *Bartsia alpina*
- *Berberis vulgaris*
- *Biscutella laevigata*
- *Bupleurum petraeum*
- *Carex hostiana*
- *Cerinth glabra*
- *Clematis alpina*
- *Cynoglossum officinale*
- *Dactylorhiza majalis*
- *Dianthus carthusianorum*
- *Dianthus deltoides*
- *Eriophorum latifolium*
- *Gentiana lutea*
- *Gentiana verna*
- *Gentianella campestre*
- *Geranium palustre*
- *Geranium pyrenaicum*
- *Geranium sylvaticum*
- *Gymnadenia conopsea* (fragrant orchid)
- *Helianthemum nummularium*
- *Hepatica nobilis*
- *Hippocrepis comosa*
- *Linum perenne*
- *Lithospermum arvensis*
- *Lotus corniculatus*
- *Luzula luzuloides*
- *Lychnis flos-jovis*
- *Melampyrum pratense* + *sylvaticum*

- *Menyanthes trifoliata*
- *Onobrychis viciifolia*
- *Orchis mascula*
- *Ornithogalum umbellatum*
- *Paradisea liliastrum*
- *Phyteuma orbiculare*
- *Pinguicula alpina*
- *Pinguicula vulgaris*
- *Polygala chamaebuxus*
- *Primula farinosa*
- *Rhinanthus minor*
- *Salvia pratensis*
- *Scabiosa columbaria*
- *Senecio deroenicum*
- *Silene nutans*
- *Stachys recta*
- *Traunsteinera globosa*
- *Trifolium pratense*
- *Trifolium spadiceum*
- *Trollius europaeus*
- *Veronica chamaedrys*
- *Viola calcarata*

**Friday 20th:**

- Adonis annua
- Androsace carnea subsp. brigantiaca
- Androsace carnea subsp. carnea
- Anemone baldensis
- Anemone narcissiflora
- Antennaria dioica (female pink, male white)
- Armeria alliacea
- Astragalus purpureus
- Bartsia alpina
- Campanula alpestris
- Carex ericetorum (?)
- Centaurea montana (and purple variation is the same)
- Cerastium tomentosum
- Crocus albiflorus
- Dianthus carthusianorum
- Draba dubia
- Draba hoppeana
- Erysimum humile
- Fritillaria burnatii (meleagris subsp burnatii)
- Gagea reverchonii
- Gentiana acaulis
- Gentiana brachyphylla
- Gentiana verna
- Geum montanum
- Gnaphalium supinum
- Hieracium
- Iris germanica
- Linum perenne
- Myosotis alpina
- Naricissus poeticus
- Nigritella rhellicani
- Pedicularis foliosa

- *Pedicularis gyroflexa*
- *Pedicularis verticillata*
- *Persicaria bistorta*
- *Primula farinosa*
- *Primula marginata*
- *Primula veris*
- *Pulsatilla vernalis*
- *Ranunculus glacialis*
- *Ranunculus pyrenaicus*
- *Rhinanthus electrololophus*
- *Saxifraga exarata*
- *Saxifraga oppositifolia* (Also at the top of the pass French/Italy border)
- *Sedum anacampseros*
- *Sempervivum arachnoideum*
- *Sempervivum montanum*
- *Silene acaulis*
- *Soldanella alpina*
- *Trollius europaeus*
- *Tulipa australis*
- *Viola arvensis*
- *Viola calcarata* (White, mauve pink, purple, yellow, bicolours!)
- *Viola lutea*
- *Vitaliana primuliflora*



**Saturday 21<sup>st</sup>:**

**Le Casse Deserte, 2,200m.**

- *Brassica repanda*
- *Pinguicula alpina*
- *Salix reticulata*
- *Salix retusa*
- *Saxifraga cochlearis*
- *Soldanella alpina*
- *Thlaspie rotundifolium*
- *Tofieldia calyculata*
- *Viola cenisia*
- (Light, pale blue *Gentiana verna*!)

**Up at the top again:**

- *Ajuga pyramidalis*
- *Androsace carnea* subsp *brigantiaca*
- *Anemone baldensis*
- *Antennaria dioica*
- *Asplenium viride*
- *Carex ericetorum*
- *Crocus albiflorus*
- *Daphne cneorum*
- *Draba hoppeana*
- *Erigeron alpinus*
- *Gentiana acaulis*
- *Gentiana bavarica* (tiny)
- *Gentiana brachyphylla*
- *Gentiana lutea*
- *Gentiana punctata*
- *Gentiana verna*
- *Globularia cordifolia*
- *Hugueninea tanacetifolia*

- *Leucanthemopsis alpina*
- *Linaria alpina*
- *Lloydia serotina*
- *Lotus alpinus*
- *Murbeckiella pinnatifida*
- *Petasites paradoxus* (finished flowering, now fruiting)
- *Plantago alpina*
- *Pulmonaria longifolia*
- *Pulsatilla alpina* subsp. *cottianae*
- *Pulsatilla vernalis*
- *Ranunculus glacialis*
- *Ranunculus pyraeneus*
- *Rhododendron ferrugineum*
- *Silene acaulis* subsp. *longiscapa*
- *Tussilago farfara*
- *Viola calcarata*

**Sunday 22nd:**

- *Alchemilla alpina*
- *Aster alpinus*
- *Athyrium felix-femina*
- *Bartsia alpina*
- *Caltha palustris*
- *Carex ferruginea*
- *Carex sylvatica*
- *Clematis alpina*
- *Coeloglossum viride*
- *Crepis aurea*
- *Dactylorhiza majalis*
- *Dactylorhiza sambucina* (both colour forms)
- *Dryas octopetala* (thousands!)
- *Eriophorum* sp.
- *Gentiana acaulis*
- *Gentiana brachyphylla*
- *Gentiana nivalis*
- *Gentiana verna*
- *Geum montanum* (mostly in fruit)
- *Gymnadenia conopsea*
- *Helianthemum canum*
- *Homogyne alpina*
- *Jovibarba* sp
- *Lilium martagon*
- *Luzula multiflora*
- *Luzula spicata*
- *Menyanthes trifoliata*
- *Minuartia verna*
- *Narcissus poeticus* (not many)
- *Nigritella rhellicani*
- *Nigritella rubra*
- *Oxytropis pilosa*
- *Pedicularis rostratospicata*

- *Pinguicula alpina*
- *Pinguicula vulgaris*
- *Platanthera bifolia*
- *Primula farinosa*
- *Primula pedemontana*
- *Pulmonaria montana*
- *Rhododendrum ferrugineum*
- *Saxifraga diapensioides*
- *Saxifraga exarata*
- *Saxifraga paniculata*
- *Sempervivum arachnoideum*
- *Sempervivum montanum*
- *Sibbaldia procumbens*
- *Silene acaulis* subsp. *longiscapa*
- *Silene saxifraga*
- *Thalictrum aquilegifolium*
- *Trifolium alpinum*
- *Trollius europeus*
- *Valeriana salicifolia*
- *Veratrum album*
- *Veronica serpyllifolia* subsp. *humifusa*
- *Viola biflora*
- *Viola calcarata* (all colours)

**Monday 23rd:**

- *Ajuga reptans*
- *Botrychium lunaria*
- *Campanula alpestris*
- *Campanula barbata*
- *Campanula glomerata*
- *Campanula persicifolia*
- *Campanula rhomboidalis*
- *Campanula thyrsoides*
- *Caryophyllum hirsutum*
- *Centaurea montana*
- *Centaurea uniflora*
- *Clematis alpina*
- *Coeloglossum viride*
- *Dactylorhiza majalis*
- *Daphne cneorum*
- *Daphne mezereum*
- *Dryas octopetala*
- *Euphorbia cyparissias*
- *Gentiana acaulis*
- *Gentiana brachyphylla*
- *Gentiana nivalis*
- *Gentiana verna*
- *Gentianella campestris*
- *Geranium palustre*
- *Globularia cordifolia*
- *Gymnadenia conopsea*
- *Helianthemum canum*
- *Lamium maculatum*
- *Leontodon pyrenaicus*
- *Luzula nivea*
- *Listera ovata* (Twiblade)
- *Melampyrum nemorosum*

- *Melica nutans* = Rare grass
- *Myrrhis odorata*
- *Nigritella rhellicani*
- *Dactylorhiza masculata*
- *Paradisia liliastrum*
- *Persicara viviparum*
- *Phyteuma orbiculare*
- *Phyteuma scheuchzeri*
- *Plantago media*
- *Polygala chamaebuxus*
- *Polygonum bistorta* (*Persicara*)
- *Pulatilla alpina* subsp. *cottianae*
- *Pulsatilla alpina*
- *Ranunculus aconitifolius*
- *Rhamnus pumilus*
- *Rhododendron ferrugineum*
- *Rosa caesia*
- *Saponaria ocymoides*
- *Scrophularia canina*
- *Scutellaria alpina*
- *Senecio doronicum*
- *Silene nutans*
- *Silene rupestris*
- *Soldanella alpina*
- *Traunsteinera globosa*
- *Vaccinium vitis-idaea*
- *Valeriana salianca*
- *Vicia cracca*
- *Viola biflora*

**Tuesday 24th:**

- *Alchemilla conjuncta* (silver-edged leaves)
- *Androsace carnea* subsp. *carnea*
- *Anemone baldensis*
- *Arabis alpina*
- *Artemisia genepi*
- *Botrychium lunaria*
- *Campanula glomerata*
- *Campanula spicatum* (only seen from car)
- *Carduus cardinifolius*
- *Carex maritime*
- *Cirsium spinosissimum*
- *Dianthus*
- *Digitalis ambigua* (*grandiflora*)
- *Doronicum grandiflorum*
- *Draba aizoides* (yellow)
- *Echium plantaginum*
- *Erigeron* sp. (pink daisy)
- *Gentiana acaulis*
- *Gentiana brachyphylla*
- *Gentiana lutea*
- *Gentiana nivalis*
- *Gentiana punctata*
- *Gentiana verna*
- *Gentianella campestre*
- *Geum montanum* (flower and fruit today)
- *Gymnadenia conopsea*
- *Lilium martagon*
- *Linaria alpina*
- *Linum perenne*
- *Lotus alpinus*
- *Minuartia sedoides*
- *Nigritella rhellicani*

- *Persicaria bistorta*
- *Petrocallis pyrenaica*
- *Phyteuma nigrum*
- *Pinguicula alpina*
- *Poa alpina vivipara*
- *Primula farinosa*
- *Pulmonaria angustifolia*
- *Pulsatilla alpina* subsp. *cottianae*
- *Ranunculus glacialis*
- *Rhodiola rosea*
- *Salix reticulata*
- *Salvia pratensis*
- *Saxifraga oppositifolia*
- *Saxifraga paniculata*
- *Saxifraga retusa*
- *Saxifraga stellaris*
- *Sedum acre*
- *Sedum alpestre*
- *Sempervivum tectorum* (galled)
- *Sempervivum arachnoideum*
- *Sempervivum montanum*
- *Silene acaulis* subsp. *acaulis*
- *Soldanella alpina*
- *Thalictrum aquilegifolium*
- *Traunsteinera globosa*
- *Trifolium alpinum*
- *Veronica spicata*
- *Vincetoxicum hirundinaria*
- *Viola biflora*



**Wednesday 25th:**

- *Aconitum vulparia*
- *Actaea spicata*
- *Ajuga vulgaris*
- *Ononis fruticosa*
- *Aquilegia atrata* (meaning “dark”)
- *Aruncus dioicus*
- *Astrantia major*
- *Campanula glomerata*
- *Campanula rhomboidalis*
- *Campanula rapunculoides* (tallest one)
- *Campanula scheuzeri* (ordinary hairbell but with very narrow leaves)
- *Campanula stenocodon* (meaning narrow bell)
- *Carduus carlinifolius*
- *Chamerion angustifolium*
- *Cicerbita alpina*
- *Cirsium palustre*
- *Colchicum autumnale* (leaves and fruit)
- *Dactylorhiza fuchsii*
- *Digitalis ambigua*
- *Filipendula vulgaris*
- *Galium rotundifolium*
- *Geranium phaeum*
- *Geranium robertianum*
- *Hieracium pilosella* = host to parasite.
- *Hypericum perforatum*
- *Knautia dipsacifolia*
- *Lapsana communis* subsp *intermedia*
- *Lilium martagon*
- *Luzula luzuloides*
- *Maianthemum bifolium*
- *Melampyrum sylvaticum*
- *Orobanche* = broomrape

- *Paris quadrifolia* (indicator of ancient woodland in Britain! And of good soil)
- *Petasites* sp. (*americanum*)
- *Phyteuma betonicifolia*
- *Polygonum verticillatum*
- *Potentilla argentea*
- *Pyrola minor*
- *Sambucus racemosa*
- *Saxifraga ambrosa*
- *Saxifraga paniculata*
- *Saxifraga rotundifolia*
- *Sedum acre*
- *Stachys recta*
- *Stachys sylvatica*
- *Verbascum*.
- *Veronica urticifolia*

**Ferns:**

- *Adiantum nigrum*
- *Asplenium trichomanes*
- *Athyrium filix-femina*
- *Cystopteris fragilis*
- *Dryopteris affinis*
- *Dryopteris dilatata*
- *Dryopteris filix-mas*
- *Polypodium vulgare*
- *Polystichum aculeatum*
- *Polystichum lonchitis*

**Thursday 26th:**

- *Ajuga pyramidalis*
- *Alnus viridis*
- *Androsace obtusifolia*
- *Anthyllis pilosa*
- *Aster bellidiastrum*
- *Astrantia minor*
- *Athyrium filix-femina*
- *Bartsia alpina*
- *Botrychium lunaria*
- *Caltha palustris*
- *Campanula barbata*
- *Campanula* sp. (not yet known)
- *Carduus calinifolius*
- *Cirsium spinosissimum*
- *Cryptogramma crispa*
- *Dactylorhiza majalis*
- *Dactylorhiza sambucina* (in total there are purple, pink, yellow and white forms)
- *Digitalis ambigua*
- *Digitalis lutea* (saw from car)
- *Doronicum grandiflorum*
- *Erigeron uniflorus*
- *Gentiana acaulis*
- *Gentiana brachyphylla*
- *Gentiana nivalis*
- *Gentiana verna*
- *Geranium cinereum* (from alpine garden)
- *Geum montanum* (fruit and flower)
- *Homogyne alpina*
- *Juniperus* sp.
- *Leucanthemopsis alpina*
- *Ligusticum mutellina*
- *Loiseleuria procumbens*

- *Lotus alpinus*
- *Luzula nivea*
- *Lycopodium alpinum*
- *Oxytropis pilosa*
- *Pedicularis verticillata*
- *Petasites paradoxus*
- *Polygonatum verticillatum*
- *Pseudorchis albida*
- *Pulsatilla alpina* subsp. *Apiifolia* (was *sulphurea*)
- *Ranunculus aconitifolius*
- *Ranunculus montanus*
- *Rhododendron ferrugineum*
- *Saxifraga aquatica*
- *Sedum album*
- *Sempervivum montanum*
- *Silene acaulis*
- *Silene dioica*
- *Soldanella alpina*
- *Vaccinium myrtillus*
- *Vaccinium uliginosum*
- *Vaccinium vitis-idea* (in flower)
- *Viola biflora* (3<sup>rd</sup> stop down)
- *Viola calcarata*
- *Viola tricolor*