

Butterflies of The Kaçkars

15th - 24th July 2025

Led by Ben Greenaway, Göze Konuralp & Mertcan Gulben



Greenwings Wildlife Holidays

Tel: 01473 254658

Web: www.greenwings.co.uk

Email: enquiries@greenwings.co.uk

Linktree: <https://linktr.ee/greenwingstours>

Butterflies of the Kaçkars

15th - 24th July 2025

Led by Ben Greenaway, Göze Konuralp and Mertcan Gulben

Introduction

This Greenwings tour took us to the far northeast of Turkey, where the Kaçkar Mountains rise steeply between the Black Sea and the high plateau of Erzurum. This is a landscape shaped by deep valleys, fast rivers, and slopes carpeted with flowers that seem to go on forever. The mix of climates and habitats here makes the region one of the richest butterfly areas anywhere in Europe or Asia Minor.

The diversity is staggering. Dry steppe, wooded valleys, lush river meadows, and high alpine pastures are all found within a relatively short distance of each other, each holding its own assemblage of species. The result is a butterfly list that comfortably exceeds two hundred for the provinces of Erzurum and Artvin combined. On a well-timed summer trip we can realistically expect to approach 150 species — something that would be virtually impossible anywhere else in Europe, where even in exceptional areas the same overall diversity is spread across different seasons. Here, however, the overlap of habitats and flight periods makes such totals achievable. Just as importantly, this is also the realm of regional endemics and true Caucasian specialities, the kinds of butterflies that cannot be seen anywhere else in Europe.

For the naturalist, this part of Turkey offers something more than just species numbers. Life in the villages and summer pastures continues at a pace that feels unchanged in generations, and the abundance of butterflies and wildflowers gives a tantalising glimpse of how much of Europe might once have looked.

Joining us for the trip were: Ralph & Claudette, Claire, John, Ingo, Johan & Valérie, Emily, Neil, and Dave. Guiding the group were Ben, Göze, and Mertcan, with Refik skilfully handling the driving throughout the trip.

Itinerary

- **Day 1, 15th July:** Arrival at Erzurum. Exploration of steppe and mountain steppe habitats around Palandöken.
- **Day 2, 16th July:** Higher altitude exploration of Palandöken and afternoon excursion to the area around Konaklı.
- **Day 3, 17th July:** Morning trip to Güngörmez followed by afternoon transfer to Barhal in the Çoruh Valley, with multiple stops through varied habitats.
- **Day 4, 18th July:** Exploration of Bıçakçılar Valley.
- **Day 5, 19th July:** Exploration of Pişankara Valley.
- **Day 6, 20th July:** Exploration of Barhal Valley.
- **Day 7, 21st July:** Olgunlar in the Hastaf Valley.
- **Day 8, 22nd July:** Return towards Erzurum with stops at Dereici, Tortum and Şenyurt.
- **Day 9, 23rd July:** Morning at Palandöken and afternoon at Şenyurt.
- **Day 10, 24th July:** Departure from Erzurum airport.

What follows is a daily diary for the week, followed by species lists and a gallery:

Day 1 – 15th July: Arrival and Mount Palandöken

We collected everybody from Erzurum airport early in the morning. Some guests had stayed the previous night in Istanbul and made the short internal flight that morning, whereas others had flown from their home towns throughout the night. For this reason many guests were tired, and so we always stay local on the first day and explore the incredibly rich butterfly habitat directly behind our hotel. This gives guests the opportunity to opt in or out of the day as they see fit.

Despite the lack of sleep, the group did not want to waste any time in the hotel and, once Göze had secured the possibility for us to check into our rooms early, we were ready to explore the

flowery slopes of Mount Palandöken. First, we had a brief meeting where Ben introduced everyone and set out the approach that he would take in leading the trip.

We achieved a remarkable 50 or so species on the slopes that afternoon — a quite incredible number to have within just a short walk from the hotel. There were some superb highlights, including phenomenal numbers of Black-veined Whites (*Aporia crataegi*). These were puddling in groups of 50+ on the floor right behind the hotel, and floating gracefully up and down the hillside in every direction we looked. Later, they were roosting on the flower heads of Giant Scabious (*Cephalaria gigantea*) and, as the sun softened in the late afternoon, the subtle pink tones of the females were highlighted and provided superb photo opportunities. They would roost on the scabious flower heads, perhaps half a dozen to each — an amazing spectacle.



Throughout the afternoon, all of the group climbed a considerable distance up the slope, with some particularly energetic individuals making it all the way to a rocky peak where they enjoyed spectacular views across Erzurum and to the mountains beyond.

Very close to the hotel, we found a territorial male Fiery Copper (*Lycaena thetis*) — a much sought-after species that we had not encountered here on previous trips. Ben had also discovered a superb colony of the endangered Alcon Blue (*Phengaris alcon*) the previous day and enthusiastically led several members of the group up the hillside to find them. The Alcon Blue lays its eggs on various gentian species (*Gentiana* spp.), and the young plants were carefully pointed out to the group. After feeding briefly on gentians, the caterpillars drop to the ground, where they are adopted by certain *Myrmica* ants. Once inside the ant nest, they are fed and cared for as if they were the ants' own brood until pupating and finally emerging the following summer. This extraordinary parasitic relationship highlighted the fragility of the species' life cycle and served as a reminder of why it was so important to tread carefully and to keep the welfare of the wildlife foremost in mind, even when tempted by photographic opportunities.

Other highlights included a roosting Apollo (*Parnassius apollo*). This is one of Europe's most celebrated mountain butterflies, and with good reason. The species' large, pale wings reflect sunlight and help it to regulate temperature on the open slopes, while the bold red eyespots serve as a deterrent to predators — a combination of adaptations well suited to its rocky mountain habitats. The Apollo is closely tied to warm, open areas where its larval foodplants, Stonecrops (*Sedum* spp.) grow. Across much of Europe, it has disappeared from former strongholds, but here on the slopes of Mount Palandöken it still flourishes, a reminder of what intact mountain habitats can support.



All of the group were delighted by further highlights including Gerhard's Black Hairstreak (*Satyrrium abdominalis*), Balkan and Scarce Coppers (*Lycaena candens*, *Lycaena virgaureae*), the magnificent Aedon Blue (*Polyommatus aedon*) and Turkish Furry Blue (*Polyommatus menalcas*), as well as Balkan and Esper's Marbled Whites (*Melanargia larissa*, *Melanargia russiae*) flying together. Cardinals (*Argynnis pandora*) that particularly appealed to Ralph and Claudette were located in one particular corner of the track where some thistles were growing in a sunny patch. Claire, with her focus on bumblebees, was also well rewarded for her efforts in navigating the steep terrain. Although the season was later than when she had previously visited the area and there were fewer queens on the flowery slopes, she still found much of interest and had just as rewarding a first day as the butterfly-focused guests.

This was an exceptional start that we reflected on over a few drinks in the evening back at the hotel, before completing our daily checklist and heading off to a buffet dinner.

Day 2 – 16th July: Mount Palandöken and Konaklı

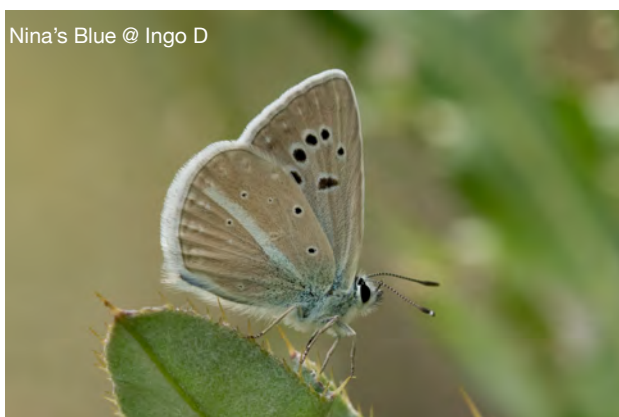
In the morning Mertcan (our superb botanist) accompanied the group to a site a little further up Mount Palandöken. This was an excellent site for coppers, with the much-admired Balkan Copper (*Lycaena candens*) stealing the show alongside Scarce Copper (*Lycaena virgaureae*) and Purple-shot Copper (*Lycaena alciphron*). Apollo (*Parnassius apollo*) was once again present. Queen of Spain (*Issoria lathonia*) and Twin-spot Fritillary (*Brenthis hecate*) were also seen here alongside various Clouded Yellows (*Colias* spp.), possibly including the local speciality Menetries' Clouded Yellow (*Colias thisoa*).



Balkan Copper @ Dave G

After a buffet lunch back at the hotel we moved on to a site to the south-east of Mount Palandöken near the village of Konaklı. There was some mixed weather in the area with thunderstorms and downpours breaking out in the afternoon, so our afternoon site was chosen to avoid the worst of these. It was a good choice, as although the weather remained fairly cloudy and we were sure that the site around Konaklı would have been spectacular had the sun shone, we were still able to find much of interest.

Particularly notable was an impressive colony of Dusky Large Blue (*Phengaris nausithous*), spotted by Dave, who waded across the river to inspect the lush flowery meadows that looked so enticing. There were excellent photo opportunities in the cloudier weather, as the butterflies, although harder to find, were calm and easier to photograph while basking under the grey skies. A particularly fine example of Nina's Blue (*Polyommatus ninae*) posed beautifully, and most of the group were able to obtain excellent photos of both upper and undersides — crucial for attempting to identify this difficult group.



Nina's Blue @ Ingo D



Nina's Blue @ Valérie G

These so-called *Agrodiaetus* blues (now taxonomically subsumed within *Polyommatus*) are a fascinating example of chromosomal speciation. Many species are nearly indistinguishable in appearance, yet differ strikingly in chromosome number — a trait that may contribute to reproductive isolation. The *Agrodiaetus* group exhibits one of the widest ranges of karyotype diversity among animals (haploid numbers from ~10 to ~134), and chromosomal fissions and fusions are thought to have played a key role in the radiation of this group. Because some rearrangements appear to incur limited fitness cost when heterozygous, they may accumulate across populations, facilitating speciation even without obvious ecological divergence.

Although the weather wasn't perfect, we still made the most of the day and added several new species to our evening checklist. We went to bed excited about the prospect of visiting Güngörmez and travelling north to Barhal the next day.

Day 3 – 17th July: Güngörmez and Transfer to Barhal

After breakfast we packed up, loaded the vans with our luggage (as it was a transit day), and headed to Güngörmez — the first stop on our journey north to Barhal. It is always a pleasure to return to this timeless village, where traditional ways of life still persist. Our bus was expertly guided through the narrow streets by Refik before coming to a stop where the road ends and the track becomes too steep and rocky to continue.

Although it was still early, the blues had already started puddling among the rocks of a small stream that trickled down the hillside and crossed the path. There were many interesting species present, with some fine specimens of Aedon Blue (*Polyommatus aedon*) and a trio of closely related species — Anatolian Zephyr Blue (*Kretania modica*), Loew's Blue (*Plebejidea loewii*), and Eastern Brown Argus (*Kretania eurypilus*) — puddling together and providing excellent opportunities for Ben to point out some of the subtle identification features.

Dave led a group down a tricky path to a damp area near the river, where he located a colony of Dusky Large Blue (*Phengaris nausithous*). This species is closely related to the Alcon Blue (*Phengaris alcon*) that we had observed on Mount Palandöken and has a similar life cycle involving a remarkable parasitic relationship with ants.

Other highlights here included Chelmos Blue (*Polyommatus iphigenia*), Odd-spot Blue (*Turanana taygetica*), Sandy Grizzled Skipper (*Pyrgus cinarae*), and Aegean Skipper (*Pyrgus melotis*). Ingo went to search for rare hairstreaks that can be found in this area and was rewarded with a highly prized species — Rebel's Hairstreak (*Satyrium armenum*).

Göze, Mertcan, and Refik prepared a fantastic picnic lunch that we enjoyed in the shade of some trees, where local villagers were cutting meadow grass by hand with traditional scythes — a scene that felt like stepping back in time. Just before we left, a huge bird was spotted circling above us: an unmistakable Lammergeier (*Gypaetus barbatus*), harassed by a Kestrel (*Falco tinnunculus*), the size difference between them emphasising the vulture's vast wingspan.

After lunch we drove north into a steep-sided valley and stopped by a fast-flowing river. Here we explored a track along the water and added several species to our list. This gorge is always productive for satyrids, and we found several graylings (*Hipparchia* spp.) as well as Amasian Satyr (*Satyrus amasinus*). We searched hard for Orange Hermit (*Chazara bischoffi*) and White-bordered



Southern White Admiral @ Emily N

Grayling (*Hipparchia parisatis*), but they eluded us on this occasion. Fortunately, we knew we would have further chances for these specialities later in the week.

A pair of Southern White Admirals (*Limenitis reducta*) posed beautifully in low vegetation near the van, while Johan and Valérie located a local speciality — the beautiful Hopffer's Blue (*Polyommatus hopfferi*). Perhaps the highlight of the stop, however, was a perfectly fresh Scarce Swallowtail (*Iphiclides podalirius*), which posed superbly beside the track and was much admired.

Continuing our journey north, we passed through a series of recently constructed tunnels built to accommodate hydroelectric power projects. These developments are part of a major government investment in the region, but they have been highly controversial due to their environmental impacts. Entire valleys have been flooded, and the town of Yusufeli has been rebuilt higher up the mountainside, with residents relocated before their

old homes were submerged. It is an impressive feat of engineering — but one that comes at a considerable ecological cost.

The group was amazed by the scale of the new infrastructure — the network of high-speed roads, tunnels, and bridges linking valley to valley — and there was much reflection on the changes taking place in these once-remote mountain landscapes.

By late afternoon, we arrived in Barhal at our welcoming, family-run pension. While we waited for our luggage to be hoisted up the steep slope via an ingenious pulley system, a tremendous wind suddenly swept down the valley, sending chairs and tables clattering across the terrace. It seemed a fittingly dramatic welcome to this magical new area. As quickly as it had appeared, the wind subsided, and we were able to settle into our rooms.

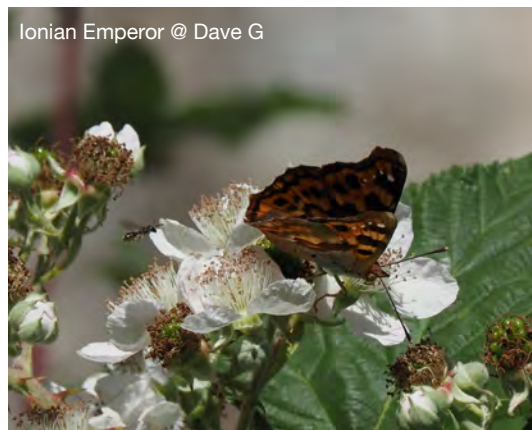
We concluded the day with our usual evening meeting — completing the checklist, discussing the highlights, and outlining the plan for the next day — before enjoying a wonderful home-cooked meal prepared by Mehmet, the hotel owner, and his family.

Day 4 – 18th July: Biçakçılar Valley

We took a relatively short drive to the beautiful Biçakçılar Valley. Halfway up, we stopped at a bridge that we would later use for our lunch. We wanted to make a brief search along the riverbanks, where Dwarf Elder (*Sambucus ebulus*) grew, for one of the key species of the trip – the Ionian Emperor (*Thaleropsis ionia*).

After an initial fruitless search, Valérie let out an excited cry: she had located one nectaring on the anticipated plant a little further up the path. All those who wanted to photograph this species hurried to the scene, and excellent photographs were obtained. This was a relief for the guides, as although this species can be encountered in any of the river valleys around Barhal, success often depends upon the timing of the season; there have been years when it has eluded us entirely.

We then wound our way higher up the mountain, where the trees began to thin and the slopes became covered in wildflowers. Here, Mertcan pointed out several interesting wildflower species and answered many questions from the enthusiastic group. This was also our first taste of the exceptional mud-puddling that is characteristic of the area, and this valley in particular. Stunning assemblages of blues gathered where trickling streams intersected the path, with many guests lying on the ground to capture the best photographs. Among the



Ionian Emperor @ Dave G



False Chalkhill Blue @ Valérie G

highlights were False-Chalkhill Blue (*Polyommatus corydonius*) and Turquoise Blue (*Polyommatus dorylas*), with Turkish Blue (*Polyommatus turcicus*) representing a new addition from the tricky *Agrodiaetus* group.

Many other species were discovered as we ambled gently down the mountain road, the bus following behind – an excellent arrangement allowing people to walk at their own pace and rest on the bus if necessary. As lunch approached, the bus gradually picked everyone up along the way back to our

bridge site, where we planned to have lunch. Emily had walked an impressively long way while the rest of us made slower progress, stopping repeatedly to take photographs. She was the last to be picked up by the bus, having made it almost to the bridge. Whether this was due to her love of striding out and covering ground, or the fact that the bumpy bus ride was uncomfortable because of her back issue, we weren't entirely sure!

Back at the bridge site, we enjoyed another fantastic picnic before spending more time observing the excellent variety of butterflies. As the hot afternoon wore on, it was time to board the bus and head back to our pension. We paused in Barhal for well-earned ice creams before returning to our pension for ice-cold drinks and our usual evening routine.

This was a tremendous day of butterflying, resulting in an impressively long list of species. Another superb meal followed, and we went to bed feeling highly satisfied.

Day 5 – 18th July: Pisenkaya Valley

We made the short drive to the beautiful Pisenkaya Valley, gradually winding our way up to around 1,600m, where we stopped to investigate a spot that had been exceptional for mud-puddling in previous years. Although there were some butterflies present, the spectacle was nothing like the mass gatherings we had experienced before, so we cut the stop short and headed back to the van.

At this point Johan and Valérie spotted a medium-sized nymphalid flicking and gliding past them. They were convinced it was a Hungarian Glider (*Neptis rivularis*) – a rare and excellent sighting for this area. Many of us lingered in hope of relocating it, scanning the riverside vegetation carefully. Unfortunately, it did not reappear, but we noted the extensive stands of its larval

foodplant, Goat's Beard (*Aruncus dioicus*), and although we lacked photographic proof, both habitat and behaviour gave us confidence in the identification.

We continued higher, reaching about 1,800m, at which point the track became too narrow and treacherous to navigate safely. Refik, ever the competent driver, made the sensible call to stop there. Although Ben had been hoping to get a little higher, he knew better than to question Refik's authority when it came to mountain roads.

Most of the group decided to continue on foot, hoping to find some altitude specialists further up where the trees began to thin. The area around our stopping point was already rich in butterflies, however, so those who preferred a gentler pace still had plenty to enjoy. Emily spent time watching a pair of Southern White Admirals (*Limenitis reducta*) gliding elegantly along the path, while a nectaring Large Blue (*Phengaris arion*) drew much attention and was well photographed.

Those who continued higher up were rewarded with ever more spectacular scenery. Although no new altitude specialists were found, the combination of butterflies, wildflowers, and breathtaking landscapes created an intoxicating experience. The mixture of thin air, bright sunlight, and physical exertion left some of us in a kind of reverie — a reminder of what a privilege it is to explore these remote mountains on foot.

Ben located several communal webs of Camberwell Beauty (*Nymphalis antiopa*) larvae along the fast-flowing mountain stream. As is often the case, the willows preferred by this species for egg-laying were overhanging the water, making good photographs a challenge. Many guests were keen to see the striking black and red spiny caterpillars up close, but none more so than Ingo, whose personal website is dedicated entirely to this species.



Camberwell Beauty larvae @ Ingo D

The Camberwell Beauty is one of the most remarkable butterflies in the Palearctic. Its eggs are laid on willows (*Salix* spp.), often growing beside fast-flowing streams, and the larvae live gregariously in silken webs in early instars. Adults overwinter in sheltered crevices or tree hollows and require a prolonged cold period to remain viable — one reason the species struggles to survive in the milder climate of the UK. Here in the mountains of north-eastern Turkey, where winters are long and harsh, the species thrives, perfectly adapted to the rhythm of these alpine valleys.

We climbed to just over 2,000m before deciding it was time to head back to the bus for lunch — once again superbly prepared by Göze, Refik, and Mertcan.



Balkan Clouded Yellow @ Ben Greenaway

While lunch was being served, there was sudden excitement as a very brightly coloured clouded yellow flashed past the group. It was unmistakably a Balkan Clouded Yellow (*Colias caucasica*), and Ben and Dave, with several interested guests, set off up the track to keep it in view. Fortunately, it seemed content to patrol the same section of the path where we were eating, occasionally pausing to nectar. Later, when reviewing photographs, Dave realised there had in fact been two individuals — a fantastic lunchtime sighting. Despite settling down in a comfortable spot for lunch, John's photographic instinct never truly turns off, and he could often be seen experimenting with unusual subjects and angles - creating something he would later describe as his own particular brand of 'artistic insect photography'. The results were fantastic and appreciated by all in exchanges after the trip.

After lunch, we adopted the same relaxed routine as the previous day, with the group slowly descending the valley while the bus trundled along behind. Towards the end of the afternoon, just as the sun dipped behind the imposing valley wall, another highlight appeared — a beautiful Brown Hairstreak (*Thecla betulae*) feeding on the Dwarf Elder lining the riverbanks.

Another fantastic day came to an end as we made the short journey back to Barhal for well-earned drinks on the terrace and another superb home-cooked meal.

Day 6 – 20th July: Barhal Valley

Our final day based in Barhal began with the familiar and much-loved routine of exploring one of the beautiful valleys nearby, before we would move further afield to Olgunlar the following day. We followed the same approach as the previous two days, winding slowly up the Barhal Valley and stopping wherever the habitat looked promising.

We paused at around 1,600m, where two paths intersected before a bridge over a fast-flowing stream. There was excellent mud-puddling activity here, although no new species were added to our list, as the habitat was similar to that of the previous days. We searched the Dwarf Elder for White-letter Hairstreak (*Satyrium w-album*), as Ben had noted several suitable-looking elms beside the track, but despite careful checking, we were unsuccessful.

As we planned to remain in the same location all morning, everyone had the option to spend their time as they wished. Claire was keen once again to hike higher, up to around 2,000 m, where she had discovered some superb wildflower meadows on her previous visit to the area. Most guests also chose to gain altitude, eager to make the most of another spectacular valley. The walk was fairly strenuous at first, zigzagging along a dusty track that appeared to offer little reward — the lack of flowers along the roadside meant there was limited insect activity. However, perseverance paid off: from about 1,800m the mountainside opened out into extensive alpine meadows alive with butterflies.

Most notable here was an Alcon Blue (*Phengaris alcon*) spotted at altitude, but otherwise the mix of species was similar to that of the previous days. As the morning went on, the group gradually made their way back down towards the bus, where Göze, Refik, and Mertcan were preparing another excellent picnic lunch. By this time, the puddling activity had built nicely, and Ben took the opportunity to go through the identification features of the various blues and skippers gathered on the track in front of us.

After lunch, we continued descending the valley, some guests choosing to walk, while others joined the bus for a more relaxed return journey. As we passed the elms noted earlier, we stopped once again to check for White-letter Hairstreak — and were delighted to locate one at last. We debated rounding up the rest of the group to share the sighting, but the weather was rapidly deteriorating. Within minutes, the heavens opened, sending the butterflies into hiding and bringing our fieldwork to an abrupt but atmospheric close.

The White-letter Hairstreak (*Satyrium w-album*) has long been a challenging species to monitor, as the adults spend much of their time in the canopy and the larvae are well camouflaged at all stages. In recent years, however, a new survey technique has transformed our ability to locate them. The larvae fluoresce vividly under ultraviolet (UV) light, and night-time searches using UV torches have proven to be the most effective way to map their presence. The ecological advantage of this fluorescence remains a mystery, but Ben has studied the phenomenon in detail and shared his novel theory with interested members of the group.

He explained that while UV radiation can be harmful to most organisms, many plants have evolved the ability to absorb it safely. The invertebrates that feed on these plants generally lack such defences and must either reflect or somehow manage the incoming UV. Reflecting it, however, makes them highly visible to birds, which can see in the UV spectrum. Ben's theory is that the larvae's fluorescence offers a unique solution to this problem: by absorbing the UV radiation and re-emitting it as visible light, they effectively eliminate the strong UV reflection that would otherwise betray them to predators. This elegant "absorb and re-radiate" mechanism may therefore represent an evolutionary compromise between avoiding cellular damage and remaining hidden from UV-sensitive eyes.

Back at the pension, we reviewed the checklist and discussed plans for the following day. Spirits were high as we looked forward to travelling to Olgunlar — a legendary butterfly hotspot and one of the highlights of the entire trip.

Day 7 – 21st July: Olgunlar and the Upper Kaçkar Valley

We made an early start, as it was a longer drive to reach Olgunlar. Passing through a series of tunnels — none of which existed just a few years ago — we followed the valley road that wound

alongside the river. Frequent construction works lined the route, with heavy plant machinery and materials stacked in great piles. One such site had appeared directly on top of an area that had once provided exceptional mud puddling in previous years. Although these gatherings draw on butterflies produced throughout the surrounding hillsides and will inevitably relocate elsewhere, the speed of change in these valleys is sobering indeed.

Olgunlar lies at the very end of the road, sitting at 2,100 m. Although this is only a few hundred metres higher than our starting points in the valleys around Barhal, the difference in feel is striking — we were now largely above the tree line, and the landscape had a true alpine character.

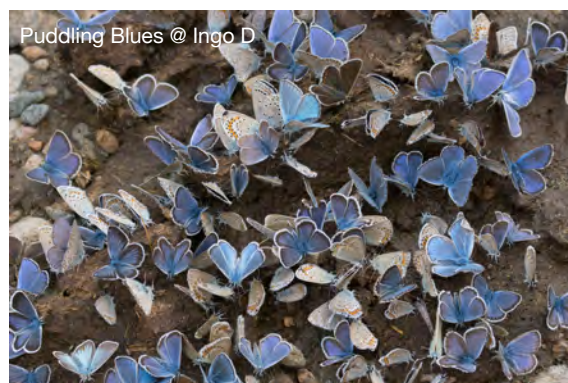
The plan was to spend the whole day here, and Göze and Mertcan had prepared packed lunches so that everyone could explore freely without the need to reconvene at a set time. As usual, the most energetic members of the group set off immediately to gain further altitude, following the well-trodden route from Olgunlar (2,100 m) to the climbers' base camp at around 2,900 m. This is the camp used by those attempting to summit Kaçkar Dağı, the highest peak in the range at 3,937 m (12,917 ft).

The route follows the valley and gains altitude gradually. It is not especially strenuous, but a full day is needed to reach base camp and return. In practice, most of the high-altitude specialists can be found lower down — perhaps with the exception of a rare Apollo (*Parnassius nordmanni*) rumoured to occur around 3,000 m, though we have never managed to locate it. The more relaxed approach of ascending slowly, stopping regularly to enjoy both butterflies and alpine flora, proved the most rewarding — and under Mertcan's guidance, this was exactly the approach taken by those at the head of the group. Ben followed at a slower pace with those preferring a gentler walk, returning earlier to spend more time with the phenomenal assemblies of butterflies puddling around the damp patches of cow dung lining the rough tracks through the village.

With the change in habitat came several new species for the trip. Along the path up the valley, the group recorded Mountain Green-veined White (*Pieris bryoniae*), Caucasian Ringlet (*Erebia graucasica*), and Woodland Ringlet (*Erebia medusa*). Around Olgunlar itself, the puddling butterflies included Pontic Blue (*Polyommatus coelestina*), Bosnian Blue (*Agriades dardanus*), Alpine Ringlet (*Erebia melancholica*), and Large Grizzled Skipper (*Pyrgus alveus*). But it wasn't only the new additions that impressed — the sheer abundance and diversity were mesmerising. As a



Pontic Blue © Dave G



Puddling Blues @ Ingo D

group of us photographed a spectacular cluster of blues by the bridge just outside the village, the distant call to prayer echoed through the valley, heightening the sense that we were experiencing something utterly unique — a day in another world, far removed from anywhere else in Europe.

The spell was broken when the weather turned. Clouds that had been building since lunchtime suddenly merged into something more threatening, and within minutes we were being pelted with hailstones. Although exhilarating, the storm caused some concern, as we were spread out across the valley with limited shelter in this open, high-altitude terrain. Thankfully, everyone managed to return safely to Olgunlar and once reunited, we shared stories of our various scrambles for cover and compared notes on the sudden change in conditions.

Although the sun tried to reappear, it was already late in the afternoon, and the butterflies, forced into deep roosting spots during the storm, were reluctant to emerge again. With that, we concluded a fabulous day in a truly magical setting and boarded the bus for the return journey to Barhal to enjoy one final evening meal — once again cooked to perfection by Mehmet and his family.

Day 8 – 22nd July: Return Towards Erzurum – Dereici, Tortum and Şenyurt

After breakfast we said our fond farewells to our hosts, whose warmth and hospitality had made our stay in Barhal so memorable. With luggage loaded and the minibus packed, we began our journey southwards, sad to be leaving Artvin behind but excited by the prospect of new habitats as we returned gradually towards Erzurum.

Our first stop was at Dereici, a steep-sided, rocky valley where a wooded river follows the base – excellent habitat for graylings. In previous years, this site had been particularly productive, with several species feeding on fallen mulberries along the track. Sadly, one of the most reliable mulberry trees had been removed since our last visit, but there was still plenty to see as we made our way slowly down the road with the bus following behind.

It was not long before we found one of the real jewels of the area – the exquisite, diminutive Little Tiger Blue (*Tarucus balkanicus*), delicately nectaring on roadside flowers. Soon after, a flash of vivid orange betrayed the presence of an Orange Hermit (*Chazara bischoffi*), giving only fleeting but unmistakable views. Other highlights included further encounters with the handsome Ionian Emperor (*Thaleropsis ionia*), down on the track, and a pristine Southern Comma (*Polygonia egea*) basking on warm rocks.

Ben had been particularly keen to locate one of the target species for the site – the elusive White-bordered Grayling (*Hipparchia parisatis*) – but for some time it eluded him. Not for the first time, Valérie came to the rescue, discovering several individuals feeding on mulberries that had fallen onto a roadside wall. The butterflies were perched conveniently at chest height, allowing everyone to take excellent photographs without the usual contortions or close encounters with the gravelly road surface.



White-bordered Grayling @ Valérie G

Not far away, we made another curious discovery: a dead specimen of Freyer's Grayling (*Hipparchia fatua*) that had become trapped between sheets of plastic inside a roadside greenhouse. Although we would have liked to stay longer to search for a live individual, our itinerary for the day was full, and we reluctantly pressed on towards our next stop near Tortum.

The landscape around Tortum at first appeared harsh and arid – a dry, rocky expanse that seemed almost devoid of life. Yet, as so often in Turkey, appearances were deceptive. A closer look revealed a remarkable diversity of flowering plants, and with them, a lively butterfly fauna. The heat was intense, and the butterflies were extremely active and challenging to photograph, but the site proved to be an excellent one for coppers and Agrodiaetus blues.

Although several individuals resisted definitive identification, the spectacle was enthralling. In such situations, researchers conducting formal surveys may be licensed to net butterflies for close examination and release. However, our ethos on Greenwings tours is to observe without intrusion. For us, the goal is not to pin down every uncertain identification, but to appreciate the beauty of these butterflies behaving naturally in their habitats. The challenge of photographing/identifying fast-flying insects under hot, bright conditions becomes part of the experience – a reminder that a clear view is a privilege, not a right.

Despite these challenges we were able to confirm some interesting species. Many Persian Skippers (*Spialia phlomidis*) and Tessellated Skippers (*Muschampia tessellum*) were recorded, but two hoped-for highlights – the Orange-banded Hairstreak (*Satyrium ledereri*) and Turkish Fiery Copper (*Lycaena ochimus*) – escaped us, despite both species having been seen here just a week earlier during a reconnaissance visit. Even so, no one felt disappointed; the abundance and variety were more than enough reward.

Our departure was delayed for a delightful reason. Among the rocks, a bumblebee nest had been uncovered – an unusual and fascinating sight. Claire provisionally identified the inhabitants as Garden Bumblebees (*Bombus hortorum*), explaining that the nest had likely been built in a disused burrow and later disturbed. We watched the activity for some time, captivated by this unexpected glimpse into their hidden world, before finally moving on.

Our final stop before reaching Erzurum was at Şenyurt, where we hoped to witness the spectacular mud-puddling gatherings that Ben had been promising. Although the afternoon light

was already softening when we arrived, the scene did not disappoint. Vast congregations of blues carpeted the damp patches alongside the stream — perhaps twenty species in all. We spent a magical hour crouched among them, carefully scanning for particular targets while trying not to spook any individuals that might then set off a chain reaction that could send clouds of butterflies off to find their evening roosts elsewhere.

Reluctantly, we tore ourselves away, comforted by the plan to return the following day for a longer session, weather permitting. We arrived back at our hotel in Erzurum just as the sun slipped behind Mount Palandöken, casting long shadows across the steppe. A few guests, still full of energy, dashed behind the hotel to photograph butterflies settling to roost in the golden light.

Over drinks that evening we reflected on what had been a superb transit day — a journey that had taken us from the lush valleys of Artvin to the high plateaux of Erzurum, through an ever-changing mosaic of landscapes, colours, and species. With one final full day ahead, spirits remained high and anticipation keen for what the morning might bring.

Day 9 – 23rd July: Palandöken and the Plains of Şenyurt

With so much fine habitat surrounding our hotel, and with everyone now familiar with the area, we decided that the final day should be spent according to individual preference. The plan was to return later to Şenyurt to enjoy once again its extraordinary mud-puddling spectacle, but the morning was left open — a choice between exploring the flowery hillside behind the hotel at a gentle pace, or joining a group venturing higher up Mount Palandöken to search for high-altitude specialists and coppers.



Cardinal @ Emily N

Both options proved rewarding. Neil elected to climb the slopes behind the hotel and was greeted by a rich diversity of butterflies and bumblebees among the profusion of summer flowers. Black-veined White (*Aporia cretaegi*) once again dominated but the number of Cardinals (*Argynnis pandora*) had grown since our time here a week earlier, and Neil was able to achieve a truly remarkable set of photographs. The group ascending the mountain encountered a wealth of montane species and achieved much sought-after photographs of stunning coppers. From above, the wide plains of Erzurum stretched far into the haze, while overhead a series of eagles patrolled the thermals. Johan identified a pair of Lesser Spotted Eagles (*Clanga pomarina*) circling close to the hotel, and several Booted Eagles (*Hieraetus pennatus*) appeared through the morning, their pale forms glinting in the sunlight.

The atmosphere was wonderfully relaxed — a day for quiet appreciation rather than urgency — and several guests chose simply to sit among the flowers, taking in the sweeping views across the valley and the distant mountains beyond. It was the perfect conclusion to a journey that had celebrated both the thrill of discovery and the pleasure of stillness within wild places.

After lunch, the majority of the group re-boarded the bus for the short journey back to Şenyurt, eager to revisit the unforgettable mud-puddling site. Once again, we were dazzled by the numbers and diversity gathered there. The ground shimmered with movement as hosts of blues crowded the damp patches: Odd-spot Blue (*Turanana taygetica*), Eastern Brown Argus (*Kretania (Plebejus) eurypilus*), Bosnian Blue (*Agriades dardanus*), Anatolian Zephyr Blue (*Kretania modica*), Taurus Blue (*Aricia isaurica*), False Chalkhill Blue (*Polyommatus corydonius*), Damon Blue (*Polyommatus damon*), Chelmos Blue (*Polyommatus iphigenia*), Turkish Blue (*Polyommatus turcicus*), Aedon Blue (*Polyommatus aedon*), Meleager's Blue (*Polyommatus daphnis*), and Turquoise Blue (*Polyommatus dorylas*) among them. Several members of the group spent most of the



Bosnian Blue @ Ingo D

Butterflies			15th	16th	17th	18th	19th	20th	21st	22nd	23rd
			July	July	July	July	July	July	July	July	July
Sightings are marked with a ✓			day	day	day	day	day	day	day	day	day
			1	2	3	4	5	6	7	8	9
8	Persian Skipper	<i>Spialia phlomidis</i>								✓	
9	Hungarian Skipper	<i>Spialia orbifer</i>	✓		✓	✓	✓	✓	✓	✓	
10	Mallow Skipper	<i>Carcharodus alceae</i>	✓		✓	✓	✓			✓	✓
11	Tessellated Skipper	<i>Muschampia tessellum</i>								✓	
12	Marbled Skipper	<i>Carcharodus lavatherae</i>			✓	✓	✓	✓	✓	✓	✓
13	Tufted Marbled Skipper	<i>Carcharodus flocciferus</i>				✓			✓		✓
14	Dingy Skipper	<i>Erynnis tages</i>						✓	✓	✓	✓
15	Yellow-banded Skipper	<i>Pyrgus sidae</i>	✓								✓
16	Olive Skipper	<i>Pyrgus serratulae</i>		✓	✓	✓	✓	✓	✓	✓	✓
17	Large Grizzled Skipper	<i>Pyrgus alveus</i>							✓		✓
18	Sandy Grizzled Skipper	<i>Pyrgus cinarae</i>		✓	✓						
19	Aegean Skipper	<i>Pyrgus melotis</i>	✓		✓		✓		✓		
Family Pieridae											
20	Eastern Wood White	<i>Leptidea duponcheli</i>			✓					✓	✓
21	Wood White	<i>Leptidea sinapis</i>				✓	✓	✓			
22	Brimstone	<i>Gonepteryx rhamni</i>					✓				
23	Berger's Clouded Yellow	<i>Colias alfacariensis</i>	✓	✓	✓	✓	✓		✓	✓	✓
24	Clouded Yellow	<i>Colias croceus</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓
25	Balkan Clouded Yellow	<i>Colias caucasica</i>					✓				
26	Menetries' Clouded Yellow	<i>Colias thisoa</i>	✓							✓	
27	Black-veined White	<i>Aporia crataegi</i>	✓	✓		✓	✓	✓	✓		✓
28	Eastern Bath White	<i>Pontia edusa</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓
29	Large White	<i>Pieris brassicae</i>	✓	✓	✓	✓	✓	✓	✓		✓
30	Small White	<i>Pieris rapae</i>	✓	✓	✓	✓	✓	✓		✓	✓
31	Southern Small White	<i>Pieris mannii</i>				✓					
32	Mountain Small White	<i>Pieris ergane</i>			✓		✓	✓			✓
33	Mountain Green-veined White	<i>Pieris bryoniae</i>							✓		
34	Green-veined White	<i>Pieris napi</i>				✓	✓	✓		✓	✓
Family Lycaenidae											
35	Purple-shot Copper	<i>Lycaena alciphron</i>		✓	✓	✓	✓	✓	✓	✓	✓
36	Fiery Copper	<i>Lycaena thetis</i>	✓							✓	✓
37	Lesser Fiery Copper	<i>Lycaena thersamon</i>								✓	
38	Balkan Copper	<i>Lycaena candens</i>	✓	✓	✓	✓		✓	✓		✓
39	Small Copper	<i>Lycaena phlaeas</i>	✓		✓		✓	✓		✓	✓

Butterflies			15th	16th	17th	18th	19th	20th	21st	22nd	23rd
			July	July	July	July	July	July	July	July	July
Sightings are marked with a ✓			day	day	day	day	day	day	day	day	day
			1	2	3	4	5	6	7	8	9
40	Scarce Copper	<i>Lycaena virgaureae</i>	✓	✓	✓		✓	✓	✓		✓
41	Sooty Copper	<i>Lycaena tityrus</i>				✓	✓	✓	✓	✓	✓
42	Brown Hairstreak	<i>Thecla betulae</i>					✓				
43	Purple Hairstreak	<i>Favonius quercus</i>				✓	✓				
44	Green Hairstreak	<i>Callophrys rubi</i>				✓					
45	Ilex Hairstreak	<i>Satyrrium ilicis</i>				✓	✓	✓			
46	White-letter Hairstreak	<i>Satyrrium w-album</i>						✓			
47	Sloe Hairstreak	<i>Satyrrium acaciae</i>					✓	✓			
48	Blue-spot Hairstreak	<i>Satyrrium spini</i>			✓	✓				✓	
49	Gerhard's Black Hairstreak	<i>Satyrrium abdominalis</i>	✓		✓						
50	Rebel's Hairstreak	<i>Satyrrium armenum</i>			✓						
51	Long-tailed Blue	<i>Lampides boeticus</i>								✓	✓
52	Holly Blue	<i>Celastrina argiolus</i>		✓		✓	✓	✓		✓	✓
53	Little Tiger Blue	<i>Tarucus balkanicus</i>								✓	
54	Alcon Blue	<i>Phengaris alcon</i>	✓					✓	✓		
55	Large Blue	<i>Phengaris arion</i>					✓	✓	✓		✓
56	Dusky Large Blue	<i>Phengaris nausithous</i>		✓	✓						✓
57	Odd-spot Blue	<i>Turanana taygetica</i>			✓					✓	✓
58	Eastern Baton Blue	<i>Pseudophilotes vicrama</i>				✓	✓		✓	✓	✓
59	Short-tailed Blue	<i>Cupido argiades</i>			✓	✓					
60	Osiris Blue	<i>Cupido osiris</i>			✓				✓	✓	✓
61	Small Blue	<i>Cupido minimus</i>	✓	✓					✓	✓	
62	Silver-studded Blue	<i>Plebejus argus</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓
63	Idas Blue	<i>Plebejus idas</i>		✓	✓	✓	✓	✓	✓	✓	✓
64	Reverdin's Blue	<i>Plebejus argyrognomon</i>			✓	✓					
65	Bosnian Blue	<i>Agriades dardanus</i>		✓					✓		✓
66	Loew's Blue	<i>Plebejidea loewii</i>		✓	✓					✓	
67	Geranium Argus	<i>Eumedonia eumedon</i>								✓	
68	Eastern Brown Argus	<i>Kretania eurypilus</i>			✓	✓				✓	✓
69	Anatolian Zephyr Blue	<i>Kretania modica</i>			✓	✓	✓	✓	✓	✓	✓
70	Mazarine Blue	<i>Cyaniris semiargus</i>	✓		✓	✓	✓	✓	✓	✓	✓
71	Anatolian Blue Argus	<i>Aricia crassipunctus</i>		✓		✓	✓	✓		✓	✓
72	Mountain Argus	<i>Aricia artaxerxes</i>					✓	✓	✓		
73	Brown Argus	<i>Aricia agestis</i>	✓		✓	✓	✓	✓	✓	✓	✓

Butterflies			15th	16th	17th	18th	19th	20th	21st	22nd	23rd
			July	July	July	July	July	July	July	July	July
Sightings are marked with a ✓			day	day	day	day	day	day	day	day	day
			1	2	3	4	5	6	7	8	9
74	Taurus Blue	<i>Aricia isaurica</i>								✓	✓
75	Pontic Blue	<i>Neolysandra coelestina</i>							✓		
76	Adonis Blue	<i>Lysandra bellargus</i>			✓					✓	
77	False Chalkhill Blue	<i>Lysandra corydonius</i>		✓	✓	✓	✓	✓	✓		✓
78	Chapman's Blue	<i>Polyommatus thersites</i>	✓	✓	✓	✓				✓	
79	Meleager's Blue	<i>Polyommatus daphnis</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓
80	Amanda's Blue	<i>Polyommatus amandus</i>		✓	✓	✓	✓	✓	✓	✓	✓
81	Turquoise Blue	<i>Polyommatus dorylas</i>			✓	✓			✓	✓	✓
82	Common Blue	<i>Polyommatus icarus</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓
83	Eros Blue	<i>Polyommatus eros</i>				✓	✓	✓			
84	Damon Blue	<i>Polyommatus damon</i>	✓	✓	✓	✓	✓	✓	✓		✓
85	Anomalous Blue	<i>Polyommatus admetus</i>			✓						
86	Ripart's Anomalous Blue	<i>Polyommatus ripartii</i>		✓					✓		✓
87	Chelmos Blue	<i>Polyommatus iphigenia</i>			✓				✓	✓	✓
88	Turkish Furry Blue	<i>Polyommatus menalcas</i>	✓	✓							
89	Aedon Blue	<i>Polyommatus aedon</i>	✓		✓	✓		✓	✓		✓
90	Hopffer's Blue	<i>Polyommatus hopfferi</i>			✓						
91	Nina's Blue	<i>Polyommatus ninae</i>		✓							
82	Turkish Blue	<i>Polyommatus turcicus</i>				✓		✓	✓	✓	✓
Family Nymphalidae											
93	Hungarian Glider	<i>Neptis rivularis</i>					✓				
94	Southern White Admiral	<i>Limenitis reducta</i>			✓	✓	✓	✓		✓	
95	Queen of Spain Fritillary	<i>Issoria lathonia</i>	✓	✓	✓	✓	✓	✓			
96	Twin-spot Fritillary	<i>Brenthis hecate</i>	✓	✓	✓			✓	✓		✓
97	Lesser Marbled Fritillary	<i>Brenthis ino</i>									✓
98	Marbled Fritillary	<i>Brenthis daphne</i>				✓	✓	✓		✓	
99	Silver-washed Fritillary	<i>Argynnis paphia</i>			✓	✓	✓	✓		✓	
100	Cardinal	<i>Argynnis pandora</i>	✓		✓	✓		✓		✓	✓
101	Dark Green Fritillary	<i>Speyeria aglaja</i>	✓		✓	✓	✓	✓	✓		✓
102	Niobe Fritillary	<i>Fabriciana niobe</i>	✓	✓	✓	✓	✓	✓			✓
103	High Brown Fritillary	<i>Fabriciana adippe</i>				✓	✓	✓			
104	Pearl-bordered Fritillary	<i>Boloria euphrosyne</i>					✓	✓			
105	Ionian Emperor	<i>Thaleropsis ionia</i>				✓	✓			✓	
106	Painted Lady	<i>Vanessa cardui</i>	✓		✓		✓	✓	✓	✓	✓

Butterflies			15th	16th	17th	18th	19th	20th	21st	22nd	23rd
			July	July	July	July	July	July	July	July	July
Sightings are marked with a ✓			day	day	day	day	day	day	day	day	day
			1	2	3	4	5	6	7	8	9
107	Red Admiral	<i>Vanessa atalanta</i>	✓		✓	✓	✓	✓	✓	✓	✓
108	Southern Comma	<i>Polygonia egea</i>				✓				✓	
109	Comma	<i>Polygonia c-album</i>				✓	✓	✓		✓	
110	Camberwell Beauty	<i>Nymphalis antiopa</i>					✓				
111	Marsh Fritillary	<i>Euphedryas aurinia</i>				✓		✓	✓	✓	
112	Spotted Fritillary	<i>Melitaea didyma</i>	✓	✓	✓	✓		✓		✓	✓
113	Caucasian Spotted Fritillary	<i>Melitaea interrupta</i>				✓	✓	✓	✓		
114	Glanville Fritillary	<i>Melitaea cinxia</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓
115	False Heath Fritillary	<i>Melitaea diamina</i>				✓	✓	✓	✓	✓	✓
116	Heath Fritillary	<i>Melitaea athalia</i>	✓			✓	✓	✓	✓		
117	Nickerl's Fritillary	<i>Melitaea aurelia</i>	✓								
Family Libytheidae											
118	Nettle-tree Butterfly	<i>Libythea celtis</i>				✓		✓			
Family Satyridae											
119	Small Heath	<i>Coenonympha pamphilus</i>	✓	✓	✓					✓	✓
120	Russian Heath	<i>Coenonympha leander</i>	✓	✓					✓	✓	✓
121	Lederer's Heath	<i>Coenonympha symphita</i>					✓	✓	✓		
122	Lesser Lattice Brown	<i>Kirinia climene</i>			✓						✓
123	Speckled Wood	<i>Pararge aegeria</i>			✓	✓	✓	✓			
124	Large Wall Brown	<i>Lasiommata maera</i>			✓	✓	✓	✓	✓		
125	Wall	<i>Lasiommata megera</i>				✓					
126	Esper's Marbled White	<i>Melanargia russiae</i>	✓	✓	✓	✓					✓
127	Balkan Marbled White	<i>Melanargia larissa</i>	✓	✓	✓						✓
128	Marbled White	<i>Melanargia galathea</i>				✓		✓			
129	Freyer's Grayling	<i>Hipparchia fatua</i>								✓	
130	Eastern Rock Grayling	<i>Hipparchia syriaca</i>				✓					
131	Eastern Grayling	<i>Hipparchia pellucida</i>								✓	
132	White-bordered Grayling	<i>Hipparchia parisatis</i>								✓	
133	Great Banded Grayling	<i>Brintesia circe</i>			✓	✓	✓	✓			
134	Amasian Satyr	<i>Satyrus amasinus</i>			✓						
135	Orange Hermit	<i>Chazara bischoffii</i>								✓	
136	Grey Asian Grayling	<i>Pseudochazara geyeri</i>				✓					
137	Dusky Meadow Brown	<i>Hyponephele lycaon</i>	✓		✓			✓	✓	✓	✓
138	Oriental Meadow Brown	<i>Hyponephele lupina</i>	✓					✓	✓	✓	✓

Butterflies			15th	16th	17th	18th	19th	20th	21st	22nd	23rd
			July	July	July	July	July	July	July	July	July
Sightings are marked with a ✓			day	day	day	day	day	day	day	day	day
			1	2	3	4	5	6	7	8	9
139	Meadow Brown	<i>Maniola jurtina</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓
140	Woodland Ringlet	<i>Erebia medusa</i>	✓	✓					✓		✓
141	Scotch Argus	<i>Erebia aethiops</i>				✓	✓	✓	✓		
142	Caucasian Ringlet	<i>Erebia graucasica</i>							✓		
143	Alpine Ringlet	<i>Erebia melancholia</i>							✓		

Plants					
	Common Name	Scientific Name		Common Name	Scientific Name
	Acanthaceae		17	Downy Lesser Burdock	<i>Arctium minus</i> subsp. <i>pubens</i>
1	Bear's Breeches	<i>Acanthus dioscoridis</i> var. <i>lacinitaus</i>	18	Austrian Mugwort	<i>Artemisia austriaca</i>
	Amaranthaceae		19	Alpine Aster	<i>Aster alpinus</i>
2	Turkish Wild Beet	<i>Beta trigyna</i>	20	Musk Thistle	<i>Carduus nutans</i> subsp. <i>leiophyllus</i>
3	Leafy Goosefoot	<i>Blitum virgatum</i>	21	Caucasalia	<i>Caucasalia macrophylla</i>
4	Oak-leaved Goosefoot	<i>Oxybasis glauca</i>	22	Woad-leaved Knapweed	<i>Centaurea glastifolia</i>
	Anacardiaceae		23	A Knapweed	<i>Centaurea spectabilis</i>
5	Smokebush	<i>Cotinus coggyria</i>	24	A Knapweed	<i>Centaurea triumfettii</i>
	Apiaceae			A Knapweed	<i>Centaurea virgata</i>
6	Purple Angelica	<i>Angelica purpurascens</i>	25	Blue Sow-thistle	<i>Cicerbita racemosa</i>
7	Wild Angelica	<i>Angelica sylvestris</i>	27	Creeping Thistle	<i>Cirsium arvense</i>
8	Masterwort	<i>Astrantia maxima</i>	28	A Thistle	<i>Cirsium cephalotes</i>
9	West-Asian Sea Holly	<i>Eryngium billardieri</i>	29	A Thistle	<i>Cirsium echinus</i>
10	Hogweed	<i>Heracleum apiifolium</i>		Golden Marguerite	<i>Cota tinctoria</i>
11	Pimpinella	<i>Pimpinella rhodantha</i>	31	Stinking Hawksbeard	<i>Crepis foetida</i>
	Asteraceae			Armenian Globe Thistle	<i>Echinops pungens</i>
	Fern-leaf Yarrow	<i>Achillea filipendulina</i>	32	Great Globe-thistle	<i>Echinops sphaerocephalus</i>
12	Yarrow	<i>Achillea millefolium</i>	34	A Fleabane	<i>Erigeron acris</i> subsp. <i>pycnotrichus</i>
14	Yarrow	<i>Achillea wilhelmsii</i>	35	A Fleabane	<i>Erigeron caucasicus</i>
15	White Mat Chamomile	<i>Anthemis cretica</i>	36	Immortelle	<i>Helichrysum arenarium</i>
16	Burdock	<i>Arctium lappa</i> subsp. <i>platylepis</i>	37	Elecampane	<i>Inula helenium</i>

Plants

38	A Thistle	<i>Lophiolepis trachylepis</i>	65	Woad	<i>Isatis tinctoria</i>
39	Cotton Thistle	<i>Onopordum acanthium</i>	66	Heart-podded Hoary Cress	<i>Lepidium draba</i>
40	Soldier Thistle	<i>Picnomon acarna</i>	67	Ricotia	<i>Ricotia aucheri</i>
41	Hawkweed Oxtongue	<i>Picris hieracioides</i>		Campanulaceae	
42	Hawkweed	<i>Pilosella hoppeana</i>	68	An Asyneuma	<i>Asyneuma amplexicaule</i>
43	Purple Lettuce	<i>Prenanthes purpurea</i>	69	Birch-leaved Bellflower	<i>Campanula betulifolia</i>
44	Tansy	<i>Tanacetum argenteum</i>	70	A Bellflower	<i>Campanula collina</i>
45	Golden Buttons	<i>Tanacetum balsamitoides</i>	71	Clustered Bellflower	<i>Campanula glomerata</i>
46	Feverfew	<i>Tanacetum parthenium</i>	72	Milky Bellflower	<i>Campanula lactiflora</i>
47	A Yellow Ox-eye	<i>Telekia speciosa</i>	73	A Bellflower	<i>Campanula olympica</i>
48	Annual Everlasting	<i>Xeranthemum annuum</i>	74	Creeping Bellflower	<i>Campanula rapunculoides</i>
49	Paper Flower	<i>Xeranthemum cylindraceum</i>	75	A Bellflower	<i>Campanula saxifraga subsp. aucheri</i>
	Betulaceae		76	A Bellflower	<i>Campanula stevenii</i>
50	Silver Birch	<i>Betula pendula</i>	77	A Bellflower	<i>Campanula stricta</i>
51	European Hop-hornbeam	<i>Ostrya carpinifolia</i>	78	A Bellflower	<i>Campanula troegerae</i>
	Boraginaceae			Capparaceae	
52	Oriental Alkanet	<i>Alkanna orientalis</i>	79	Caper	<i>Capparis spinosa</i>
53	Anchusa	<i>Anchusa leptophylla</i>		Caprifoliaceae	
54	Smooth Honeywort	<i>Cerinthe glabra</i>	80	A Scabious	<i>Cephalaria aristata</i>
55	Lesser Honeywort	<i>Cerinthe minor</i>	81	Giant Scabious	<i>Cephalaria gigantea</i>
56	Viper's Bugloss	<i>Echium vulgare</i>	82	Cutleaf Teasel	<i>Dipsacus laciniata</i>
57	Prophet-flower	<i>Huynhia pulchra</i>	83	Widow Flower	<i>Knautia involucrata</i>
58	Alpine Forget-me-not	<i>Myosotis alpestris</i>	84	Morina	<i>Morina persica</i>
59	A Monkswort	<i>Nonea intermedia</i>	85	Small Scabious	<i>Scabiosa columbaria</i>
60	A Monkswort	<i>Nonea versicolor</i>	86	Mourningbride	<i>Sixalix atropurpurea</i>
61	Prickly Comfrey	<i>Symphytum asperum</i>	87	A Valerian	<i>Valeriana alliariifolia</i>
	Brassicaceae		88	Garden Heliotrope	<i>Valeriana erotica</i>
62	Greater Cuckooflower	<i>Cardamine raphanifolia</i>		Caryophyllaceae	
63	Oriental Sea Kale	<i>Crambe orientalis</i>	89	Corn Cockle	<i>Agrostemma githago</i>
64	An Isatis	<i>Isatis cappadocica</i>	90	An Atocion	<i>Atocion compactum</i>

Plants

91	A Pink	<i>Dianthus cruentus</i>	116	Milkvetch	<i>Astragalus ponticus</i>
92	Carnation	<i>Dianthus floribundus</i>	117	Chesneya	<i>Chesneya elegans</i>
93	A Pink	<i>Dianthus orientalis</i>	118	Anatolian Chickpea	<i>Cicer anatolicum</i>
94	A Baby's Breath	<i>Gypsophila glandulosa</i>	119	Armenian Bladder Senna	<i>Colutea armena</i>
95	Common Soapwort	<i>Saponaria orientalis</i>	120	Oriental Crownvetch	<i>Coronilla orientalis</i>
96	Italian catchfly	<i>Silene italica</i>	121	Pink Crownvetch	<i>Coronilla varia</i>
97	A Catchfly	<i>Silene saxatilis</i>	122	Bird's-foot Trefoil	<i>Lotus corniculatus</i>
98	Bladder Campion	<i>Silene vulgaris</i>	123	Sickle Alfalfa	<i>Medicago falcata</i>
	Celastraceae		124	Sweet Yellow Clover	<i>Melilotus officinalis</i>
99	Grass of Parnassus	<i>Parnassia palustris</i>	125	A Sainfoin	<i>Onobrychis armena</i>
	Convolvulaceae		126	Spiny Restharrow	<i>Ononis spinosa</i>
100	Field Bindweed	<i>Convolvulus arvensis</i>	127	False Acacia	<i>Robinia pseudoacacia</i>
101	A Bindweed	<i>Convolvulus galaticus</i>	128	Caucasian Clover	<i>Trifolium ambiguum</i>
102	Narrow-leaved bindweed	<i>Convolvulus lineatus</i>	129	Zigzag Clover	<i>Trifolium medium</i>
103	Large Bindweed	<i>Calystegia silvatica</i>	130	Red Clover	<i>Trifolium pratense</i>
	Crassulaceae		131	Tufted Vetch	<i>Vicia cracca</i>
104	A Stonecrop	<i>Phedimus spurius</i>	132	Hairy Vetch	<i>Vicia villosa</i> subsp. <i>villosa</i>
105	White Stonecrop	<i>Sedum album</i>		Gentianaceae	
106	Annual Stonecrop	<i>Sedum annuum</i>	133	Crested Gentian	<i>Gentiana septemfida</i>
107	Spanish Stonecrop	<i>Sedum hispanicum</i>	134	Spring Gentian	<i>Gentiana verna</i>
108	A Stonecrop	<i>Sedum tenellum</i>		Geraniaceae	
109	Armenian Houseleek	<i>Sempervivum armenum</i>	135	Asphodel Crane's-bill	<i>Geranium asphodeloides</i>
110	A Houseleek	<i>Sempervivum minus</i>	136	A Crane's-bill	<i>Geranium collinum</i>
	Cucurbitaceae		137	Caucasian Crane's-bill	<i>Geranium ibericum</i>
111	White Bryony	<i>Bryonia alba</i>	138	Hedgerow Crane's-bill	<i>Geranium pyrenaicum</i>
	Cuscutaceae		139	Wood Crane's-bill	<i>Geranium sylvaticum</i>
112	Alfalfa Dodder	<i>Cuscuta approximata</i>	140	Perforate St. John's Wort	<i>Hypericum perforatum</i>
	Euphorbiaceae			Iridaceae	
113	A Spurge	<i>Euphorbia grisophylla</i>	141	A Gladiolus	<i>Gladiolus kotschyanus</i>
	Fabaceae			Lamiaceae	
114	A Spiny Astragalus	<i>Astragalus</i> spp.	142	Ground Pine	<i>Ajuga chamaepitys</i>
115	Chickpea Milkvetch	<i>Astragalus cicer</i>	143	Black Horehound	<i>Ballota nigra</i> subsp. <i>nigra</i>

Plants

144	Betony	<i>Betonica officinalis</i> subsp. <i>haussknechtii</i>	172	Narrow-leaved Flax	<i>Linum tenuifolium</i>
145	Large-flowered Calamint	<i>Clinopodium grandiflorum</i>		Lythraceae	
146	Wild Basil	<i>Clinopodium vulgare</i>	173	Purple Loosestrife	<i>Lythrum salicaria</i>
147	Broad-leaved Hemp-nettle	<i>Galeopsis ladanum</i>	174	Purple Loosestrife	<i>Lythrum virgatum</i>
148	A Lallelantia	<i>Lallemantia canescens</i>		Malvaceae	
149	White Dead-nettle	<i>Lamium album</i>	175	A Hollyhock	<i>Alcea apterocarpa</i>
150	Jarusalem Sage	<i>Phlomis linearis</i>	176	Hemp-leaved Mallow	<i>Althaea cannabina</i>
151	Rush Horse Mint	<i>Mentha longifolia</i> subsp. <i>typhoides</i>	177	A Hollyhock	<i>Alcea hohenackeri</i>
152	Catmint	<i>Nepeta betonicifolia</i>		Moraceae	
154	Round-leaved Oregano	<i>Origanum rotundifolia</i>	178	Red Mulberry	<i>Morus rubra</i>
153	Wild Oregano	<i>Origanum vulgare</i>		Onagraceae	
156	Cut-leaved Selfheal	<i>Prunella laciniata</i>	179	Rosebay Willowherb	<i>Epilobium angustifolium</i>
155	Selfheal	<i>Prunella vulgaris</i>	180	Great Willowherb	<i>Epilobium hirsutum</i>
157	Mediterranean Sage	<i>Salvia aethiopsis</i>	181	Hoary Willowherb	<i>Epilobium parviflorum</i>
159	Sticky Sage	<i>Salvia glutinosa</i>		Orchidaceae	
160	Lulling Sage	<i>Salvia limbata</i>	182	Eurasian Marsh Orchid	<i>Anacamptis palustris</i>
158	Clary	<i>Salvia sclarea</i>	183	An Orchid	<i>Dactylorhiza incarnata</i> subsp. <i>cilicica</i>
161	Iranian Sage	<i>Salvia staminea</i>	184	Urville's Marsh Orchid	<i>Dactylorhiza urvilleana</i>
162	Whorled Clary	<i>Salvia verticillata</i>		Orobanchaceae	
163	Southern Meadow Sage	<i>Salvia virgata</i>	185	Field Cow-wheat	<i>Melampyrum arvense</i>
164	Yellow-flowered Skullcap	<i>Scutellaria orientalis</i>	186	Crested Lousewort	<i>Pedicularis comosa</i>
165	Whitish Skullcap	<i>Scutellaria albida</i>	187	Greater Yellow-rattle	<i>Rhinanthus major</i> var. <i>major</i>
166	Stachys	<i>Stachys iberica</i>	188	A Rhynchospora	<i>Rhynchospora stricta</i>
167	Woolly Germander	<i>Teucrium polium</i>		Papaveraceae	
168	Germander	<i>Teucrium orientale</i>	189	Great-flowered Horned Poppy	<i>Glaucium grandiflorum</i>
169	Mother of Thyme	<i>Thymus praecox</i>	190	A Poppy	<i>Papaver lateritium</i>
170	A Thyme	<i>Thymus pubescens</i>		Pinaceae	
171	A Thyme	<i>Thymus nummularius</i>	191	Caucasian Fir	<i>Abies nordmanniana</i>
	Linaceae		192	Oriental Spruce	<i>Picea orientalis</i>

Plants

193	Scots Pine	<i>Pinus sylvestris</i>	214	Globe-flower	<i>Trollius ranunculinus</i>
	Plantaginaceae		215	Lesser Meadow-rue	<i>Thalictrum minus</i> var. <i>minus</i>
194	Rusty Foxglove	<i>Digitalis ferruginea</i> subsp. <i>ferruginea</i>		Resedaceae	
195	Broadleaf Toadflax	<i>Linaria genistifolia</i>	216	Mignonette	<i>Reseda lutea</i>
196	Large-flowered Toadflax	<i>Linaria grandiflora</i>		Rhamnaceae	
197	Broadleaf Plantain	<i>Plantago major</i>	217	Christ's Thorn	<i>Paliurus spina-christi</i>
198	Hoary Plantain	<i>Plantago media</i>	218	Alder Buckthorn	<i>Frangula alnus</i> subsp. <i>pontica</i>
	Poaceae			Rosaceae	
199	Rough Dog's-tail	<i>Cynosurus echinatus</i>	219	Creeping Grover	<i>Agrimonia repens</i>
200	Needle Grass	<i>Stipa capillata</i>	220	Snowy Mespilus	<i>Amelanchier rotundifolia</i>
	Polygonaceae		230	A Rock Jasmine	<i>Androsace armeniaca</i>
201	An Atraphaxis	<i>Atraphaxis billardieri</i>	221	Goat's Beard	<i>Aruncus dioicus</i> subsp. <i>dioicus</i>
202	Common Bistort	<i>Bistorta officinalis</i>	222	European Cotoneaster	<i>Cotoneaster integerrimus</i>
203	Alpine Knotweed	<i>Persicaria alpina</i>	223	Dropwort	<i>Filipendula vulgaris</i>
204	Sheep's Sorrel	<i>Rumex acetosella</i>	224	A Geum	<i>Geum coccineum</i>
205	Monk's-rhubarb	<i>Rumex alpinus</i>	225	Wild Cherry	<i>Prunus avium</i>
206	French Sorrel	<i>Rumex scutatus</i>	226	Syrian Pear	<i>Pyrus syriaca</i>
	Polygalaceae		227	Burnet Rose	<i>Rosa pimpinellifolia</i>
207	A Milkwort	<i>Polygala supina</i>	257	A Bramble	<i>Rubus canescens</i>
	Primulaceae		228	Great Burnet	<i>Sanguisorba officinalis</i>
208	Whorled Loosestrife	<i>Lysimachia verticillaris</i>	229	European Dewberry	<i>Rubus caesius</i>
	Plumbaginaceae			Rubiaceae	
209	Prickly Thrift	<i>Acantholimon caryophyllaceum</i> subsp. <i>caryophyllaceum</i>	231	Taurus Crosswort	<i>Cruciata taurica</i>
	Ranunculaceae		232	Lady's Bedstraw	<i>Galium verum</i>
210	Narcissus-flowered Anemone	<i>Anemonastrum narcissiflorum</i>	233	Common Madder	<i>Rubia tinctorum</i>
211	A Columbine	<i>Aquilegia olympica</i>		Salicaceae	
212	Old Man's Beard	<i>Clematis vitalba</i>	234	Black Poplar	<i>Populus nigra</i> subsp. <i>caudina</i>
213	Larkspur	<i>Delphinium flexuosum</i>	235	White Willow	<i>Salix alba</i>

Plants					
236	A Willow	<i>Salix excelsa</i>		Solanaceae	
237	A Willow	<i>Salix wilhelmsiana</i>	246	Black Henbane	<i>Hyoscyamus niger</i>
	Sapindaceae		247	Egyptian Henbane	<i>Hyoscyamus reticulatus</i>
238	Montpellier Maple	<i>Acer monspessulanum</i>		Tamaricaceae	
239	A Maple	<i>Acer platanoides</i>	248	German tamarisk	<i>Myricaria germanica</i>
	Saxifragaceae			Urticaceae	
240	Paniculated Saxifrage	<i>Saxifraga paniculata</i>	249	Stinging Nettle	<i>Urtica dioica</i>
241	Siberian Saxifrage	<i>Saxifraga sibirica</i>		Viburnaceae	
	Scrophulariaceae		250	Dwarf Elder/Danewort	<i>Sambucus ebulus</i>
242	Dwarf Snapdragon	<i>Chaenorhinum minus</i>	251	European Elder	<i>Sambucus nigra</i>
243	A Figwort	<i>Scrophularia cinerascens</i>		Violaceae	
244	Caucasian Mullein	<i>Verbascum pyramidatum</i>	253	Field Pansy	<i>Viola arvensis</i>
245	Showy Mullein	<i>Verbascum speciosum</i>			

Other Notable Species

Birds

Lesser Spotted Eagle	<i>Clanga pomarina</i>
Booted Eagle	<i>Hieraaetus pennatus</i>
Lammergeier	<i>Gypaetus barbatus</i>
Kestrel	<i>Falco tinnunculus</i>
Ortolan Bunting	<i>Emberiza hortulana</i>

Insects

A Thread-waisted Wasp	<i>Ammophila spp.</i>
Pine Beauty Moth larva	<i>Pannolis flammea</i>
Slender Scotch Burnet	<i>Zygaena loti</i>

Mammals

Anatolian Chamois	<i>Rupicapra rupicapra subsp. asiatica</i>
-------------------	--

Photo Gallery





Campanula trogerae @ Mertcan Gulben



Black-veined Whites @ Emily N



Polygala supina @ Mertcan Gulben



Alpine Ringlet @ Valérie G



Ortolan Bunting @ Ingo D



Cardinal @ Dave G



Female Meleager's Blue @ Ben Greenaway



Rebel's Hairstreak @ Dave G



Thread-waisted Wasp with Pine Beauty Larva @ Ingo D



Anatolian Blue Argus @ Ben Greenaway



Convolvulus lineatus @ Mertcan Gulben



Fiery Copper @ Ingo D



Asyneuma amplexicaule @ Mertcan Gulben



Anatolian Blue Argus puddling @ Ben Greenaway



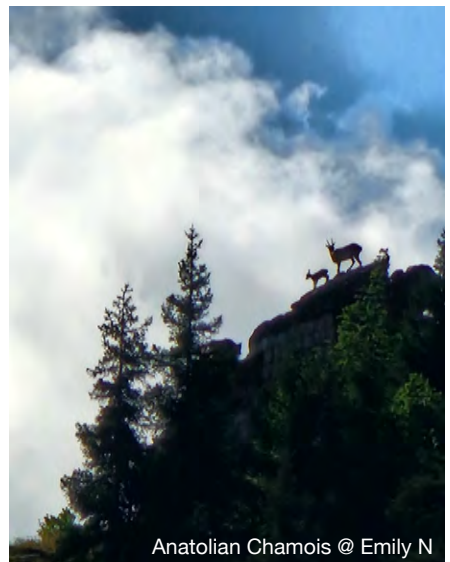
Apollo & Slender Scotch Burnet @ Valérie G



Betonica officinalis @ Mertcan Gulben



Sanguisorba officinalis
@ Mertcan Gulben



Anatolian Chamois @ Emily N

Camberwell Beauty Larvae @ Dave G

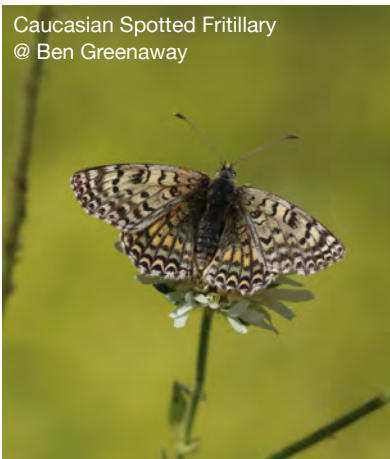


Anatolian Zephyr Blue @ Valérie G

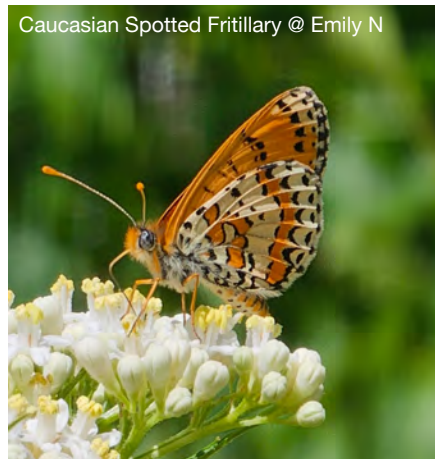
Balkan Clouded Yellow @ Dave G



Caucasian Spotted Fritillary @ Ben Greenaway



Caucasian Spotted Fritillary @ Emily N



Sambucus nigra @ Mertcan Gulben



Fiery Copper @ Valérie G



Eros Blue @ Dave G



Southern White Admiral @ Emily N



@ Emily N



High Brown Fritillary @ Ben Greenaway



Loew's Blue & Eastern Brown Argus @ Valérie G



Morina persica @ Ingo D



Geranium sylvaticum @ Mertcan Gulben



Osiris Blue @ Valérie G



Mentha longifolia @ Mertcan Gulben



Delphinium flexuosum
@ Mertcan Gulben



Purple-shot Copper @ Emily N

Fiery Copper @ Dave G



@ Emily N

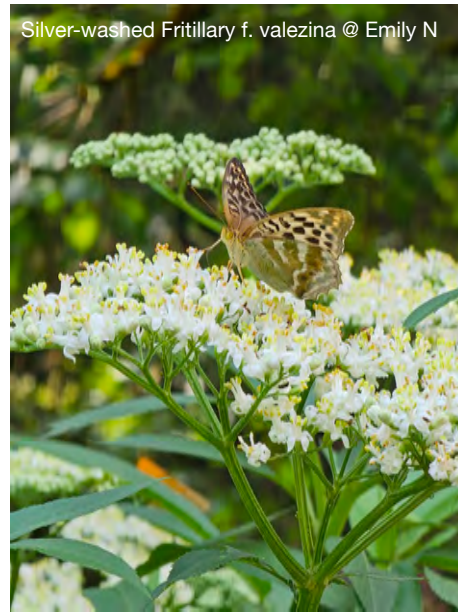
Campanula lactiflora @ Mertcan Gulben



Delphinium flexuosum @ Mertcan Gulben



Silver-washed Fritillary f. valezina @ Emily N



Hatched eggs of Camberwell Beauty @ Ben Greenaway



Anatolian Zephyr Blue aberration puddling @ Ben Greenaway

Pontic Blue @ Valérie G



Yellow-banded Skipper @ Ingo D



Origanum rotundifolium
@ Mertcan Gulben



Ononis spinosa @ Mertcan Gulben



Queen of Spain Fritillary @ Emily N



Campanula glomerata @ Mertcan Gulben



Scotch Argus @ Dave G



Southern Comma @ Dave G



Wood White @ Ingo D



Acantholimon caryophyllaceum @ Mertcan Gulben



Acantholimon caryophyllaceum @ Mertcan Gulben



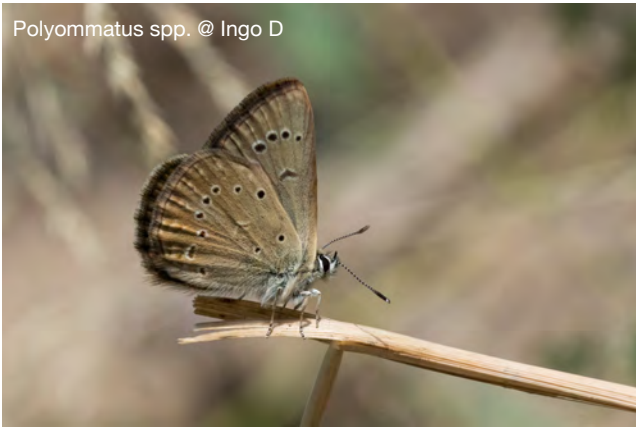
Digitalis ferruginea @ Mertcan Gulben



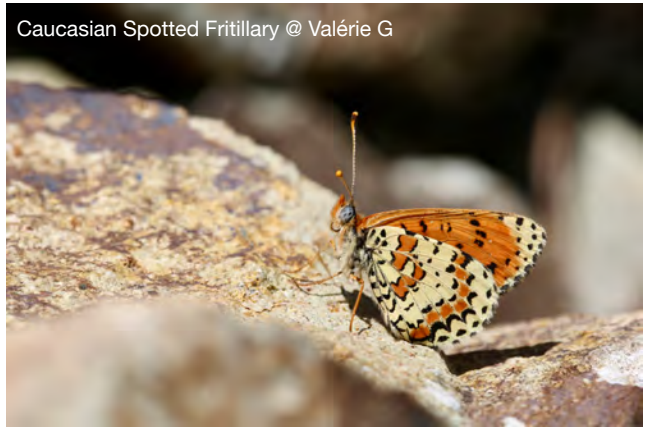
Dactylorhiza urvilleana @ Mertcan Gulben



Prenanthes purpurea @ Mertcan Gulben



Polyommatus spp. @ Ingo D



Caucasian Spotted Fritillary @ Valérie G



Reverdin's Blue @ Dave G