

# Georgia

## The Caucasus

### A Greentours Reconnaissance Report

9<sup>th</sup> – 17<sup>th</sup> May 2008

by Ian Green

#### Day 1      May 9<sup>th</sup>      Departure

The evening flight from Heathrow took off just a tad early.

#### Day 2      May 10<sup>th</sup>      Gareji Steppe and to Gaudauri in the Central Caucasus

The plane touched down good and early in Tbilisi and formalities, currency exchange and baggage retrieval were all over so quickly it still wasn't even the scheduled landing time when I met up with Shamil and his son Tolka.

Dr Shamil Shetekauri teaches botany at Tbilisi University and a sign of the times in Georgia is that he seeks a way to make a good living from encouraging ecotourism so poor are the wages in Georgian academia. We set off right away, at the early but not yet quite so bright, five in the morning, our destination the Gareja steppe which borders Azerbaijan to the southeast of Tbilisi. Rain clouds hung disjointedly from hillsides, they were so low it was as if they were not of the sky, but now they were clearing. It brightened appreciably as we passed the rather industrial looking Rustavi, Georgia's third city. We were following the course of the Kura River, a river I knew well near its source a few hundred kms away in Turkey, for I had often led tours in the Ardahan area where the now substantial river was almost jumpable! Birds were abundant as we drove along. First a Night Heron flew over the flocks of Rose-coloured Starlings that sped past. Rollers and Bee-eaters were common and we saw the occasional Hoopoe. As we entered the steppe, less than an hour from the airport, suddenly Skylark and both Calandra and Crested Larks became common. Several Montagu's Harriers scooted back and forth in the strong winds.

Shamil stopped us near to Natlismtsemeli Church. We took a distance shot of said church and then headed up a steep gully. This took us through some wonderful steppe. On the sheltered north-facing slopes a rich shrubbery of species, including the lots of *Spirea hypericifolia*, held a marvellous collection of flowering spikes of *Dictamnus caucasicus*. This is a very large and attractive species, a pity it is so noxious! On the opposite side of the gully on the sticky muds was *Psefellus carthalinicus* (a *Centaurea*-like species), *Colutea lutea* and the rather gorgeous

*Verbascum formosum* with particularly large flowers. Several Griffon Vultures hung in the air above us. Red-backed Shrike and two Lesser Grey Shrikes appeared along with a pair of Barred Warblers. Black-headed Buntings were numerous as were Swallows which were migrating past almost continuously. Other birds seen were European Nightjar, Linnets, Blackbird and Chukar. Shamil found a large sloughed snake's skin. More plants kept us busy – *Linaria simplex*, *Stachys atherocalyx*, *Astragalus stevenianus*, the common *Nonea lutea*, *Zygophyllum fabago* and the large pink flowered *Salvia garejii*, a species known only from this area of steppe. Shrubs and small trees included *Ulmus georgicus*, *Pyrus salicifolius* and *Pistacia mutica*.

We drove down to within touching distance of the Azerbaijani border and visited the famous old church at David Gareja, one of the older churches about! The buildings had been renovated and all was spick and span. To my mind the location was almost more impressive than the buildings, though the priest who appeared suddenly and urged us to be quiet was pretty special too. Southern White Admiral eventually settled for photographs. No such trouble with the lovely female Agama in an old shrine. The flora held many species we'd seen earlier in the morning. *Campanula hohenackeri* was new as was *Silene viscosa* and *Centaurea recurva* and its close relative *Psefellus carthalinicus*. Best were definitely some fabulous plants of *Phelypaea coccinea*, a large red-flowered parasitic plant in the broomrape family, here eking sustenance from the *Psefellus*.

We drove back to Shamil's home village (Gamaldzveba) and had a rest and lunch. It was fun meeting the family and a very nice brunch was produced. Then we headed north past Tbilisi (ring road now!) and into the Caucasus proper. I have to admit to being pretty sleepy through this section and it was only when Shamil nudged me and pointed out a pretty reservoir on one side that I noticed the well-forested slopes on the other. We made a stop to explore briefly. *Cephalanthera caucasica* was not yet in flower but *Dactylorhiza urvilleana* was. *Polygala amoenissima* was in bloom and there were many ferns and a mix of trees including *Carpinus betulus*, *Fagus orientalis* and *Corylus avellana*.

We gained height and the hills became mountains. We took a side trip into the Khada Gorge, a summer fishing haunt of Shamil's. The canyon walls had many patches of *Draba bryoides* and below one I found a mat of blue *Anemone caucasica* along with just a few *Anemone ranunculoides*, *Corydalis marshalliana* (purple form) and *Corydalis angustifolia*. There were several violets, Alternate-leaved Golden Saxifrage, *Myosotis sylvatica* and lots of ferns including Oak Fern, Beech Fern, Ostrich Fern and Brittle Bladder Fern. Growing on some shale cliffs was *Saxifraga desoulavyi* just past flowering.

We reached Gudauri about six-thirty and settled into the very welcoming, warm, clean and really rather excellent Gelas Guesthouse. More of a small family run hotel really. There had been much snow here during the night before and the morning and even around the hotel there were still patches melting. Above, the world was pure sparkling white. Before dinner I walked downhill into a little valley. Lots of Griffon Vultures were coming in to feed on a dead cow out of sight further down the hill. A Peregrine flew over. Down in the woods by the stream was lots of *Anemone caucasica* growing with even bluer *Scilla armena*, yellow *Trollius patulus*, and some perfect little round scarlet elf cup fungi!

## Day 3      May 11<sup>th</sup>      Cross Pass, Kazbegi & Gweletti Valley

It looked a little murky outside at eight but by the time we got going it was looking a mite more promising with a little sun breaking through. However the freak snowfall (last experienced at this time of year in 1991) meant that all the land above Gudauri was snowbound. In fact there was almost half a metre of fresh snow on the pass which is only a few hundred metres above the village. It made for a spectacular sight but of course the *Galanthus platyphyllus* were all deep under the blanket! We stopped for many photos and saw some good birds too. A Honey Buzzard cruised past as we watched a superb male Rock Thrush at close range. There were plenty of Twite about and some Ring Ouzels too. The almost 4000m peaks off to one side of the Cross Pass were pure shining white, not even a rocky outcrop visible! A travertine spring made an interesting sight as its slightly warmed waters had kept the orange travertine terraces free of snow.

As we descended into the Terek Valley we soon left the snow behind us, though the peaks to either side were still draped in the white stuff and even more spectacular than those that went before. By the roadside we spotted some brilliant blue *Gentiana angulosus*, one of the spring gentian school, and then the first of the day's four species of primula, this one being the delicate pink *Primula algida*. Up above the snowy ridge squadrons of raptors, mainly Honey Buzzards but also a few Common Buzzards, drifted north. There were odd ones and groups of them, some of twenty or more. The first of the day's Griffon Vultures sailed past. Hardly farther on and some primrose yellow turned out to be almost exactly that, though perhaps more oxlip really, as these were the pretty *Primula ruprechtii*.

We passed through into Kazbegi and headed down towards the Russian border a few kilometres away. Tea was brewed by a little bridge whilst we explored. This turned out to be a really very rich plant site. *Primula macrocalyx* was common and as well as a few *Primula ruprechtii* we found the lovely deep purple *Primula amoena*. *Lilium georgicum* was not so far away from flowering and just about in bloom were the first of a lovely purple Iris that I've yet to identify. *Anemone ranunculoides* was joined by white or sometimes pale pink *Anemone fasciculata*. The gorgeous wide yellow bells of *Fritillaria collina* were chequered neatly with various colours. A surprise was *Puschkinia scilloides* growing amidst a patch of *Trollius patulus* and the odd plant of *Gagea sulphurea*. The purple-mauve bells of *Pulsatilla violacea* were a fine sight with *Veronica gentianoides*. Other species noted were *Muscari pallens*, *Ribes biebersteiniana*, *Spirea hypericifolia*, *Pedicularis acmodonta*, and the very fine *Astragalus kazbegiensis*. Amazingly, as we sipped tea down by a little roadside canyon we noted two of the finest species seen at this spot, a subadult Lammergeier circled round inside the canyon seemingly very interested in something there-in and we were too, though it was the lovely pink-purple *Fritillaria orientalis* hanging from some damp grassy cliffs that attracted us.

We continued down to the Russian border. Though snow was still very much in evidence above us, at road level it was already feeling warmer and drier. Butterflies were out, notably Peacock, Small Tortoiseshell and various pierids. The deep crimson *Silene pygmaea* was very attractive and most distinctive for a campion! Growing on the same cliffs was a fine yellow *Linaria*, a fine clumping *Minuartia*, and *Saxifraga kolenatiana*.

We spent the entire afternoon up a side valley that leads up to the Devdorakhi Glacier. We parked the car a mile up the valley. It seemed amazing that a track went up there at all for it could not pass the huge peaks and canyons further up and there was only a wide subalpine tableland with some good summer grazing to justify its presence. No summer grazing yet though so we had the place entirely to ourselves and the large flocks of Alpine Choughs and groups of 'buzzards' still moving north across the valley. There were pairs of Red-billed Chough, the odd Raven, lots of Ring Ouzels and few each of Stonechat, Twite and Caucasian Chiffchaff. The grassland was dotted with *Potentilla caucasica* and in places with *Gentiana angulosa*, *Primula algida* and the large white flowered *Cerastium purpurascens*. On the slopes that led shortly into precipitous birch woods were *Primulas ruprechtii* and *amoena*, as well as our first flowering *Rhododendron caucasicum* and some more of the lovely *Fritillaria collina*. Violets were common and diverse with four species. Most common was *Viola somchetic* with its distinctive round face and most delicate was undoubtedly the yellow *Viola caucasica*. Shamil spotted some animals on the slope opposite. A group of East Caucasian Tur. There were around thirty five of them moving steadily down the cliffs toward us. They are a goat in the general area of 'Ibex' but have a number of features that immediately separate them such as their thick side-ways curved horns. They are stocky too with heavy heads and have a coat of the most beautiful tan with hints of orange and pink in the strong sunlight that soon shone on them. We watched them for an hour as they came down off the cliffs and onto the meadows. It was magical watching them fight (these were all males) and in particular the 'tarans' where both animals leap into the air twist their horns round and clash together! Suddenly they were off across the hillside (we didn't see what spooked them) and as they went we watched Caucasian Blackcock fly past them and then another sat on a rock as the Tur filed past.

It was cold as we walked down to the jeep. We passed signs of both bear and wolf. Earlier we had stopped and chatted to a hunter who Shamil knew and he described how the previous morning he'd seen seven Wolves kill an old (and quite small!) horse just near the main road. And bears? Plenty about at the moment he said and they are hungry!

## Day 4      May 12<sup>th</sup>      The Juta Valley, Kurho Mountain and Gweletti Valley

A busy day started after a good breakfast courtesy of Louisa our kind host. We emerged to see the mountain tops shrouded in cloud and occasional snow flurry whisking past. The journey to the start of the Juta Valley was just three km or so. The flat-floored valley was a typical u-shaped glacial valley though the 'u' was rather sharp edged at the base as with most of these vertiginous Caucasian valleys. We stopped just up the valley at a likely looking spot. The side valley ascended rapidly with birch woods (*Betula litvinowii* and *Betula raddeana*) on one side, snow moraine down the centre and grassy slopes on the other. And of course, snow, above. Walking upwards we'd not gone a hundred metres before we saw our first Great Rosefinches. Females. But where were the strawberry males? It didn't take long before a flock of twenty revealed this Caucasian birding holy grail in its full majesty. These rosefinches are almost the size of a Starling and the extraordinary colour of the male is really something to behold. Needless to say the accompanying Water Pipits gained scant attention. However, the flowers at the base of the birchwood did. There were some lovely *Primula amoena* and *Primula ruprechtii*

and the finest *Fritillaria collina* yet seen. Further up the slope I encountered the endemic crucifer *Sobelowskia caucasica* along with colonies of *Sempervivum caasicum*, the colourful rosettes sitting amongst *Viola somchetica*. Ring Ouzels and Caucasian Chiffchaff were noted up here along with Rock Doves, more Great Rosefinches, and a Long-legged Buzzard dropping nesting sticks to its mate! Descending there were wonderful photographic opportunities with an obliging pair of Great Rosefinches.

By now it had started snowing and as we drove up the valley the snow became heavy for almost an hour. Little settled at valley level but just a hundred metres up the slopes were turning white. Birds were abundant in the valley bottom (probably avoiding conditions higher up). We saw Whinchats, Northern Wheatears, Willow Warbler, Rock Thrushes, Black Redstarts, Cuckoo, Red-backed Shrike and Ring Ouzels. *Draba bryoides* was abundant on cliffs and *Draba nemorosa* in the grasslands. One fenced off field had a fine population of *Primula algida* as well as two species of marsh orchid, both just into flower. The one with unspotted leaves was *Dactylorhiza caucasica* and those with spotted leaves were *Dactylorhiza euxina*. This came with an almost completely purple leaved form. We decided that the heavy snow meant that shouldn't proceed up the road to Juta which at 2200m would have been in snow anyway, so we returned to Kazbegi.

We parked up on the edge of the village/town and had lunch. Of course the sun had come out now! In fact it was rather warm and a pleasant lunch was had as we admired the spectacular surroundings of Kazbegi. Right behind the town on the east side rose Kurho Mountain, rising almost vertically to somewhere around 3500m, The upper half of the mountain was completely snow covered, the lower slopes covered in short turf, scree and rocky ridges. I decided to spend a few hours exploring these in the early part of the afternoon. A short belt of buckthorn *Hippothae rhamnii* had to be negotiated before I reached the first slope but this took an age so full of birds was it. There were maybe twenty *Güldenstädt's* Redstarts, most of them males, and these very tame and approachable – a truly stunning black, white and orange-red bird. Also here were Blackbird, Ring Ouzel, Red-backed Shrike, Dunnock (with a nest) and lots of Red-fronted Serins. Moving up the hill Black Redstarts called from basalt cliffs that held a population of *Saxifraga desoulavyi*, these still just about in flower higher up. There was a wonderful show of flowers as I made my way up above a snow gully. *Primula ruprechtii* and *Primula algida* were overshadowed by a show of purple and white forms of *Primula amoena*. There were literally thousands of *Fritillaria collina* and plentiful *Androsace villosa*, *Gentiana angulosa* and *Corydalis caucasica*. *Lloydia serotina* hung from one cliff ledge. Eventually I stopped to listen and scan for I was now just below the snowline. Though not the best time for looking for grouse I had high hopes and it wasn't long before the distant calls of snowcock echoed down from the snowy crags above. A Lammergeier appeared, an adult, and as it circled nearer I realised that it had something large dangling from its feet. The bird came right overhead and it looked very much as if it was carting of the entire hindleg of a reasonably large animal – the birds wing span being 3m and object it was carrying being almost a metre and a half! The snowcock kept calling yet my patient scanning couldn't reveal their whereabouts. All I saw for the next forty minutes was a Kestrel and a pair of Ring Ouzels. Leaving, I'd done about five metres when I looked up and saw two Caucasian Snowcock gliding along the ridgetop uttering their bubbling flight call. I'd not moved when the sound of something like a jet plane coming into land crossed with a whistle caused me to look round sharply. A male Caucasian Blackcock flew right round me at close range before banking over the ridge. What an extraordinary noise!

Back at the vehicles we discussed options and decided to head back to Gweletti Valley to see if we could see the Tur again. We got there just before six, a good time, but we noticed a set of vehicle tracks in front of us. As we parked up we saw a green jeep in front of us - it was Shaliko, the hunter we'd spoke to yesterday. He was sitting there watching for Tur! So we all joined in though it has to be said that he spotted all the Tur first! He'd already located a herd of females, about ten of them, where we'd seen all the action yesterday. Then just moments after we arrived, the big herd of males came bundling over and hill and settled to grazing, posing and fighting on the slopes opposite. There were thirty five of them. Shaliko's sharp eyes then picked out six magnificent males sitting on some high rocks amongst the snow. There were also several Caucasian Blackcock to be seen including five males in a lek. As we watched they would jump up in the air and flash their white-marked wings, some turning a complete somersault as they did it. Chest puffed out and lyre shaped tailed raised, they were an amazing sight.

We headed back to the main road only to be invited into an old caravan that Shaliko used as a second home (his real and much more substantial place was in Kazbegi). He bought out some high-octane schnapps (really very dangerous stuff) and cracked open some tins of fish and cheese and bread and invited us to dig in. Though we enjoyed his hospitality for such a short time (hunter, alpinist and film star) we could not walk straight to the jeep!

## Day 5      May 13<sup>th</sup>      Kazbegi & the Truso Valley

The weather looked better today and so after breakfast we headed out of the village and up to the churches that sit on a high hill above Kazbegi. We parked half way up and walked up through the woods. It was magical walking through these natural birch and aspen woodlands with the peak of 5033m Kazbegi shining white in the distance. There was little in flower at this altitude, though we did find a wonderful drift of *Pulsatilla violacea* that made for great 'with mountain background' photographs. There were also abundant *Primula ruprechtii*. Griffon Vultures sailed back and forth and Ravens and Chough too. We reached a point almost up into the snow where Kazbegi stood proud in front of us and the churches were behind framed against the snow and rock cliffs of Kurho Mountain. In the distance we spotted a herd of fifteen East Caucasian Tur grazing on a steep slope above a huge drop - these creatures are amazingly sure-footed.

Late morning we headed south towards the Cross Pass, turning right into the Truso Valley. This year this was just about on the snow line even at base of the hills that faced north. The wide valley floor held a couple of houses but was otherwise uninhabited, the Ossetians here had been unable to return from their winter quarters in Chechenya since the closure of the border in recent years. The landscape was stupendous - very wild indeed. We stopped at a junction in the valleys and had lunch. The screes and cliffs above were serpentinite - the rocks were a colourful mixture! *Saxifraga moschata* and *Saxifraga subverticillata*, the latter very common and in good flower, were on the vertical faces. On the cliffs and below them was a narrow endemic primula of the *algida* group, indeed in may just be a form of that species. For now though we'll call it *Primula darialica*. A pair of Wallcreepers foraged over the lichen encrusted rocks. I spent half an hour photographing these as they were often within ten metres or so of

me and on one memorable occasion the female flew towards me and perched just four metres away. I was rather tangled up with my gear at the time but still managed a couple of shots! Meanwhile overhead were lots of Chough, Ravens, Long-legged Buzzards, and two Lammergeiers.

In the afternoon we walked several kilometres up the Truso Valley. It was a truly spectacular walk with the first part taking us through a narrow valley with seemingly endless slopes above on one side and high basalt and serpentinite cliffs on the other. The rushing torrent below had a reputation for poisoned water and it was easy to see why as deep orange Sulphurous springs emptied into the waters at regular intervals and in one place springs could be seen bubbling up vigorously. The smell of rotten eggs – the sulphur – was in the air a few times during the walk. We turned a bend in the river and the scene ahead was magnificent. A wall of mountains covered in thick snow set around an alpine bowl. We walked into this and just stood and stared at the wonderful high alpine territory all around. The mountain in front was completely snow-covered right to the base! The snout of a small glacier poked into the bowl from one valley, the hard grey-blue ice crowned with more recent shining white snowfall. Indeed it snowed a little much of the time we were there. I walked across some areas of snow and as I put my foot onto the snow a loud retort reverberated across the snowy wastes – one could hear it travel up the mountain! There were mineral springs up here too, indeed much of the floor of the 'bowl' was covered in some sort of travertine deposits. The minerals crystallise out as the water trickles over the gentle gradients, forming miniature terraces. These varied between white, yellow and quite orange!

In flora and fauna terms we saw little – it really was still winter up here. We saw many fine footprints of Wolves, and some fresh bear dung – but no animals. Birds included an Imperial Eagle, lots of Chough, a pair of Common Sandpipers and a nice array of songbirds near the glacier snout. The most striking were two handsome male Guldenstadt's Redstarts. There were around a thirty Twite allowing close approach and other birds were Ring Ouzel, Horned Lark and Northern Wheatear. Very little was in flower, though there were some very fine patches of both *Saxifraga subverticillata* and *Draba bryoides* colouring rocks yellow.

We drove back over the Cross Pass as the sun was about to set. The landscape up here was still entirely snow! We were surprised to see a beautiful Red Fox trotting across the pure white surface! A huge herd of around two thousand sheep were migrating over the pass with their shepherds. It was extraordinary to see them still toiling up the ice-bound pass with a metre or more of snow either side of them and still some way to go to the top. I was already icy up here and would be dark within the hour! Descending towards Gudauri the daytime sun had at least melted enough snow for us to see *Galanthus platyphyllus* in flower, though not the many thousands one apparently could normally expect to see here at this season!

## Day 6      May 14<sup>th</sup>      to Bakuriani

The weather was clear and sunny this morning with the sky a stunning blue and the surrounding mountains shining white. The valley below glowed green. It was really difficult to leave! Not least the friendly, warm and stunningly situated Gelas Guesthouse. Still it had to be

done so we did justice to the excellent breakfast spread and were on our way. The journey to Bakuriani is a long one – straight driving is perhaps five hours but we made many stops. The first was to photograph some superb stands of *Rhododendron luteum* which glowed yellow providing ample material for photographs with the snowy peaks as background. *Paris incompleta* and lots of *Primula macrocalyx* were here too.

We did not stop again until we had reach Georgia's main central valley and were getting close to Gori, Stalin's birthplace. An area of degraded *Quercus iberica* forest, now dominated by a pleasingly varied mixture of *Crataegus* species, *Storax officinalis*, *Cotinus coggygria*, *Jasminum fruticans*, *Viburnum* sp, and most abundantly, *Paliurus spina-christi*. The understory held a population of *Paonia tenuifolia*, sadly the flowers were about a week over. There was plenty else though with abundant *Lonicera caprifolia*, and colour was provided by yellow *Coronilla caucasica* and *Helianthemum nummularium grandiflorum*, pink by *Onobrychis angustifolius*, and blues by *Lithospermum purpureocoeruleum*. At least two clouded yellow species flew past and we also saw Powdered Brimstone and various blues.

After Gori we continued to head towards the Lesser Caucasus eventually entering the deep valley that dissects said range as the Kura River descends from Turkey. Immediately the landscape became luxuriant green. Forests rose up the slopes, the amazing variety of greens of the various tree species was a feature. Oriental Beech, *Abies nordmanniana*, *Picea orientalis* and *Pinus kochiana* were the main trees but there were plenty of others. We made a couple of stops in the forest either side of Borjomi. The understory held such delights as *Lathyrus laxiflorus*, *Orobis cyaneus*, *Lathyrus roseus*, *Caragana grandiflora* and a very fine form of *Pisum sativum* – and that was just the peas! Other plants of note were *Polygonatum glaberrinum*, the lovely scented lily of the valley *Convallaria majus*, *Tripleurospermum caucasicum* and the tall saxifrage, *Saxifraga repanda*.

Up the road we stopped by an odd area of dry hillside between the damp forests. It was covered in a spiny *astragalus* but in between and on the many large bare areas of scree were many unusual flowers. A crucifer with strange inflated seed pods was *Coluteocarpus vesicarius* and the annual *Aethionema arabica* was another member of the same family. Amongst several *euphorbias* was *Euphorbia ponticum* a species with rigid glaucous leaves layered up its stem and topped with reddish flowers. Clumps of bright blue *Veronica liwanensis* were joined by a glaucous-leaved pink flowered *Astragalus*. Other species of note here were *Asperula arvensis*, *Nepeta musinii*, *Scutellaria orientalis*, *Silene* cf. *italica*, the lovely grey-leaved *Cerastium argenteum*, a *Thesium* and a lovely white *Onosma*. A drunk local stopped to tell us how the *Tripleurospermum* could help your circulation and heal wounds. He couldn't help with locating paeonies though! The sun was waning so we headed uphill and into Bakuriani, a small town beautifully situated in forests and meadows in a bowl under the higher peaks of the Western Caucasus.

We settled into the Edelweiss. A lovely place with large clean rooms and state of the art bathrooms! The hostess, Nana, provided us with a superb supper. Before this I popped out for a walk – the forest starts just two hundred metres away. Birds included Great Spotted Woodpecker, a pair of Bullfinches, Caucasian Chiffchaff and Siskin. After dinner I went out for a nightwalk and in almost two hours spotted a Red Fox and, worth the walk, a superb Pine

Marten which allowed me to get to within about twelve metres of it before it scarpered! Scops Owls were calling back in Bakuriani.

## Day 7      May 15<sup>th</sup>      Javekheti Plateau

A fine morning meant we could appreciate the wonderful view of the Lesser Caucasus from the Edelweiss. A high ridge, now covered in snow for the last few hundred metres, swept round the horizon and below was a wonderful mosaic of meadows and forest, the latter a mixture of *Pinus kochiana* (green), *Abies nordmanniana* (very dark green), Oriental Beech (palest green and silver) and the dark ridged boles of *Quercus macranthera*.

Our first port of call turned out to be the rubbish tip below the town! We'd asked the hotel owner where he'd got hold of his fine *Paeonia steveniana* and he had divulged not mentioning the less than salubrious surroundings. To be fair, if you ignored the rubbish, it was a most delightful spot. The forest understorey did indeed hold the paeony but it was in tight bud here. The *Pulmonaria* was plentiful in fine flower and *Paris incompleta* was just coming out as was *Polygonatum glaberrimum*. We tried a little lower down. No paeony but we did find a most magnificent primrose in the form of bright red-purple *Primula sibthorpiana*. *Valeriana alliarifolia* was also common and the pretty violet and yellow form of *Viola arvensis* that grows hereabouts was in fine form.

We drove up out of Bakuriani, the asphalt road ending in the town, and the long wind up to the 2200m pass starting almost immediately. It was a beautiful drive and the countryside showed great Brown Bear potential (though not at eleven in the morning!). One could see a vast area of open forest and meadow and a trip up here at six in the morning would be interesting with a telescope to scan. We didn't actually see any sign of bear but did find some great Wolf tracks, these where one had jumped up a snow bank, so the two back feet dug in deep and hard and the front feet barely registered close by them. Our first stop was just above the treeline. *Anemone fasciculata* was common and we found a pink form. *Primula macrocalyx* covered the lower slopes and getting higher it was the turn of *Primula ruprechtii*. Even higher and we found *Primula algida*, a good large flowered form, and here growing right out of the recent snowfall. Most beautiful though was possibly the *Scilla roseni* with its bright blue pale centred flowers offset by the long-protruding white filaments topped by deep violet anthers. The flowers have strongly reflexed petals (tepals) as it matures giving it almost the appearance of an *Erythronium*! It was great to see these on the way up the pass but we weren't prepared for the incredible show as we topped the mountain. It was fifty per cent snow cover up here and the terrain looked bleak and flowerless, almost like a northern English moorland in fact. The wide open vistas were spectacular though with snowy land all about. You could see for ten km in pretty much all directions and a lot further in some and there was not a field or fence in sight, nor indeed any sign of humans, apart from the road and a deserted astro-physics research station on the pass itself! Back to the *Scilla roseni*. Wherever there wasn't snow there was *roseni* – millions of them literally. They were ever-present over the next seven kilometres, sometimes a few here and there, or in other areas a whole kilometre would have swathes of them. It would be no exaggeration I think to suggest we drove past tens of millions. At first there was little else growing with them but then as we moved along the ridge we started to

find things. First was *Gagea glacialis*, this very abundant too. Then there was an *Ornithogalum*. Nearby on a dry slope we found a mix of new species including *Gagea* (allied to *Gagea taurica*), the lovely lemon form of *Viola oreades* (*altaica*) and some very compact forms of *Bellevalia paradoxa*. On the driest spots were *Pedicularis armena* and *Scrophularia chrysantha*. There were plenty of raptors about with one Steppe Eagle seen as well as a Golden Eagle, this being harassed by around forty Ravens, and several Long-legged Buzzards. Smaller birds were represented by Twite, Shorelarks, Water Pipits, Northern Wheatears and Ring Ouzels.

Dry areas held *Gentiana angulosus* and as we got lower this became super abundant and along a one kilometre stretch the show was quite amazing – more gentians than I've seen in one place! Our picnic was down by a river that bore a strong resemblance to the upper Dart near Two Bridges only the background here was a high flat-topped volcano covered in snow rather than the rolling tors of Dartmoor! Many of the flowers already mentioned were by the river as well as *Ranunculus caucasicus* in fine large-flowered form, and *Trollius patulus*. We moved on down to lake Tabats'Kuri, itself at over 2000m and with the aforementioned volcano on one side a mere pimple compared to the almost 3000m ridge of volcanoes that back the lake. We enjoyed the view of the little Armenian village on a spit of land on the foreshore but had no time to do any proper birdwatching, though even from this distant spot we could see a pair of Common Cranes, several Armenian Gulls, some Coot, various ducks and other gulls. Returning to the top of the pass we found that the road to Azavreti (passing close to a high limestone area) was impassable with snow and mud and so we spent the latter half of the afternoon exploring the area between the pass and Bakuriani.

This proved quite productive as we finally found a population of *Galanthus caucasicus* (aka *alpinus*) in flower in a gully below the road. There were a good number of them along with lots of *Anemone caucasica* in fine blue flower and also lots of the *Trollius* and also *Caltha palustris*. On dry bluffs above were more *Bellevalia paradoxa* as well as *Pulsatilla albana* and *Muscari sosnowskyi*. *Androsace villosa* was in fine form and grew with a *Veronica* of the *multifida* group and a mat forming medick endemic to the plateau (and its edge!) *Medicago javakheti*. Whinchats and Ring Ouzels were noted.

Our last stop of the afternoon was almost back into town where Shamil spotted a population of *Paeonia steveniana*. Several were in flower and oddly enough the rain that was now falling made them very photogenic. The large flowers were white to creamy-yellow and the green leaves were almost silvery on the underside. A very beautiful species. And then it was back for another of the Edelweiss's excellent dinners!

## Day 8      May 16<sup>th</sup>                      to Tbilisi via Sveta

I popped out for a pre-breakfast stroll in the open forest that starts near the hotel. There were an amazing number of Common Crossbills – perhaps a hundred or more – feeding on the heavy load of *Abies* cones. They seemed to prefer to actually cut the whole cone and then stand up and eat the seeds. The result was an abundance of falling cones that could be heard throughout the forest! There were also many Siskins, a few Caucasian Chiffchaffs as well as Greenfinch, Blackbird, Goldcrest, Bullfinch and a pair of Great Spotted Woodpeckers.

After breakfast we took a look at the tableland near Bakuriani. The open landscapes were beautiful but unproductive and the forest in a pretty valley was full of emerging plants few of which were in flower. We returned to the *Paeonia steveniana* site of the previous evening and found many in flower and so many photographs were taken in the rather better conditions.

Mid-morning we started our journey to Tbilisi. The road down to Borjomi is very pretty and drops to the gorge of the Kura River quickly. After getting picnic supplies in an excellent market just outside Borjomi we stopped by an old Soviet 'rest camp' set back in the forest. This was a lovely spot to have lunch and moreover was full of good plants. The slopes under the coniferous trees held Birds-nest Orchid *Neottia nidus-avis* as well as a good population of *Cephalanthera caucasica*. *Dactylorhiza urvilliana* was also just coming into flower and we found leaves of *Paeonia ruprectii*. *Ranunculus polyanthemus* and *Ranunculus ampelophyllus* were in a lush valley along with abundant ferns – *Phyllitis*, *Dryopteris* spp, *Aythium* and *Polystichum braumii* amongst others. *Saxifraga cymbalaria*, *Glechoma hederacea*, *Lathyrus laxiflorus*, *Orobis* (*Lathyrus*) *cyaneus* and both blue *Symphytum asperum* and white *Symphytum orientale* were in flower.

Now we had a long drive exiting the Kura Gorge and following the course of the river all the way to Tbilisi. Just ten kilometres or so short of the city we crossed the Kura and headed south into the Lesser Caucasus again. This region Shamil described as xerophytic and it no doubt is though in spring it was lovely a green. A kind of Shibliak community, a scrubland of *Cotinus*, *Paliurus*, *Quercus*, *Viburnum* and *Juniper*, covered much of the hills. Shamil took us to a limestone area which he'd found recently. There is relatively little limestone in Georgia except in areas currently off-limits to travellers so this was an opportunity to see a different flora. And what a great place. Between areas of scrub were grasslands and bare limey soil with abundant *Psefellus carthalinicus* bright pink-purple *Hedysarum sericeum* and yellow *Linum mucronatum* putting on a show. The spires of deep red *Echium russicum* were particularly impressive. Leaves on an *onocycclus* iris – possibly *iberica* – suggested further exploration is needed here and we failed to find *Paeonia caucasica* which should be flowering at this site now. We did find many orchids. *Orchis caucasica* was reasonably common and very large! There were many *Cephalanthera* in flowers, seemingly *caucasica* and *longifolia*. An *Epipactis* was in leaf and we also found flowering *Steveniella satyroides* and *Orchis stevenii*, and in seed was *Orchis punctulata*. An *Ornithogalum* flowered with *Convallaria majus* under the shrubbery and on open banks was *Leopoldia* (*Muscari*) *tenuifolia*. Other plants noted were *Jurinea blanda*, *Onobrychis angustifolius*, *Nonea lutea* and much *Polygala amoenissima*. The spectacular orange-red parasite *Phelypaea coccinea* was seen. Birds included Rock Bunting, Bee-eaters and many Red-backed Shrikes.

Then it was on to Tbilisi with our route taking us right through the heart of the city and its beautiful old balconied buildings. Just before dusk we arrived at Shamil's house in Gamaldzveba near the airport. His family welcomed us warmly and a fine meal was had. After just a few glasses of home-made wine of very good quality Tolka and I went out for a night walk into the fields and marshes outside the village. The only animal seen disappeared too quickly but we did see many European Nightjars!

## Systematic List Number 1 Flora

The following list is a bit of a mish-mash taxonomically as it borrows from a mixture of sources, primarily the Turkish Flora (ed P H Davis), the Georgian Flora (via Shamil Shetekauri), and 'The Caucasus and its Flowers' (Holubec & Krivka). There is still a deal of examples of species that have different botanical names in different countries in this region, so we have tried to make some sense of this with comments under particular species.

### *Equisetaceae*

<i>Equisetum arvense</i>	Scattered along mountains streams etc
<i>Equisetum telmateia</i>	Riversides in the Great Caucasus
<i>Equisetum hyemale</i>	wet banks and streamsides in Bakuriani area

### *Pteridophyta*

<i>Pteridium aquilinum</i>	Very local – only noted in the Borjomi Valley
<i>Adiantum capillus-veneris</i>	Cliffs in Tbilisi!
<i>Asplenium septentrionale</i>	Scree and cliffs in all mountain areas
<i>Asplenium ruta-muraria</i>	Cliffs and boulders in mountains. Or possibly <i>hausknechtii</i> in Great Caucasus?
<i>Asplenium trichomanes</i>	Widespread
<i>Asplenium woronowii</i>	Bi-pinnate species in woodlands and scree in Great Caucasus
<i>Cystopteris fragilis</i>	Widespread. There appeared to be a finer form in some of the highest parts visited in the Great Caucasus. Possibly <i>Cystopteris montana</i> ?
<i>Cryptogramma crista</i>	Tufts in scree in Gwelety Valley and Jura Valley in Great Caucasus
<i>Dryopteris</i> species	Probably at least <i>carthusianorum</i> , <i>felix-mas</i> and <i>oreopteris</i> present but genus not checked thoroughly
<i>Athyrium filix-foemina</i>	Forests around Borjomi
<i>Matteucia struthiopteris</i>	foothills of Great Caucasus
<i>Polystichum setiferum</i>	foothills of Great Caucasus
<i>Polystichum braunii</i>	Common in forests in Lesser Caucasus
<i>Polypodium vulgare</i>	Widespread
<i>Phyllitis scolopendrium</i>	Common in wetter forests
<i>Gymnocarpium robertianum</i>	foothills of Great Caucasus
<i>Phegopteris connectilis</i>	foothills of Great Caucasus

### *Pinaceae*

<i>Abies nordmanniana</i>	Widespread in Lesser Caucasus
<i>Pinus kochiana</i>	Scattered in forests of Lesser Caucasus. Occasional patches right on treeline
<i>Pinus sosnowskyi</i>	Scattered between Kazbegi and Russian border

### *Cupressaceae*

<i>Juniperus communis</i>	alpine areas in Great Caucasus
<i>Juniperus oxycedrus</i>	Sveta limestone shibliak
<i>Juniperus excelsa</i>	Sveta limestone shibliak
<i>Juniperus sabina</i>	alpine areas in Great Caucasus

### *Ephedraceae*

Ephedra spp

David Gareja steppe

### *Fagaceae*

Fagus orientalis

Widespread and locally dominant

Quercus (petraea) iberica

Widespread – low to mid levels

Quercus macranthera

Locally dominant at higher levels in Bakuriana area

### *Salicaceae*

Populus tremula

Scattered

Salix caprea

Kazbegi

### *Juglandaceae*

Juglans regia

Scattered

### *Betulaceae*

Alnus glutinosa

Lesser Caucasus

Alnus incana

Great Caucasus – this species or *Alnus barbata*

Betula litwinowii

Locally abundant in mountains. White bark

Betula raddeana

Great Caucasus. More often on scree. Dark bark

### *Corylaceae*

Carpinus orientalis

widespread

Corylus avellana

foothills everywhere

### *Ulmaceae*

Celtis caucasica

David Gareja steppe

Ulmus georgica

David Gareja steppe

### *Tiliaceae*

Tilia cordata

?probably this species in forest below Bakuriana

### *Moraceae*

Ficus carica

David Gareja steppe

### *Urticaceae*

Urtica dioica

Widespread

### *Caryophyllaceae*

Cerastium argenteum

silvery-grey leaved species on steppe slope between Borjomi and Bakuriani

Cerastium purpurascens

large-flowered species of alpine areas above Bakuriani

Cerastium szovitsii

mat-forming species in scree. Gweletti Valley

Stellaria media

Scattered

Stellaria holostea

Forests in mountain areas

Silene italica

Bakuriani area

Silene pygmaea

Beautiful dark crimson species. Between Kazbegi and Russian border

Silene viscosa

Common steppe species

### *Ranunculaceae*

Helleborus caucasicus	presumably the same as orientalis of NE Turkey. Widespread dry slopes above Buakuriani
Pulsatilla albana	similar habitats in the Great Caucasus. A richer-coloured and larger flowered species
Pulsatilla violacea	
Anemone caucasicus	small blue alpine species. Same as Turkish Anemone blanda? Widespread in damper areas near snow melt
Anemone fasciculata	conspecific with Turkish Anemone narcissiflorus? Scattered on dryish slopes in both mountain areas. Mostly white flowered, some with pink flowers seen (can be red!)
Anemone ranunculoides	Yellow flowered species by late snow patches in woodlands in Great Caucasus
Ranunculus ampelophyllus	damp forests above Bakuriani. Large marsh cranesbill-like leaves
Ranunculus caucasicus	leaves with petiolate central segment. Greater Caucasus
Ranunculus illyricus	large pale yellow flowers and silver leaves appearing undivided or with three long thin segments. Common in lower areas
Ranunculus kochii	squat alpine celandine. A few above Bakuriani
Ranunculus grandiflorus	?probably this large flowered species in high grasslands on the Javakheti Plateau – montane steppe species
Ranunculus polyanthemus	Euxine forests around Borjomi. Meadow Buttercup like species
Ranunculus repens	Borjomi forests
Caltha palustris	widespread in mountains
Trollius patulus	widespread in mountains. Presumably the same as ranunculoides of NE Turkey
Adonis species	Noted in lowlands

### *Paeoniaceae*

Paeonia ruprechtii	leaves noted in forests just outside Borjomi
Paeonia steveniana	in good flower above Bakuriani. White or pale yellow flowers.

### *Cornaceae*

Cornus mas	scattered in shibliak habitats
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### *Berberidaceae*

Berberis vulgaris	scattered in shibliak habitats
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### *Papaveraceae*

Papaver arenarium	scattered. Bright red with large black cross inside flower
Chelidonium majus	common around Borjomi

### *Fumariaceae*

Corydalis angustifolia	by late snow patch in Khada gorge, Great Caucasus
Corydalis emanuelii	this lovely two-tone yellow species on slopes of Mount Kurho above Kazbegi. Flowers not as large as Caucasus flowers states but seems to be this species
Corydalis marshalliana	pink flowered form by late snow patch in Khada Gorge – very pretty
Fumaria sp	at least two noted in shibliak habitats

### *Cruciferae*

<i>Alliaria petiolata</i>	scattered in Borjomi area
<i>Arabis caucasica</i>	cliffs in Great Caucasus near Kazbegi
<i>Arabis brachycarpa</i>	?glabrous species common in grasslands of Javakheti may be this species?
<i>Barbarea</i> sp	Kazbegi area
<i>Capsella bursa-pastoris</i>	scattered
<i>Cardamine impatiens</i>	scattered in forests around Borjomi etc
<i>Cardamine uliginosa</i>	along streams in both mountain areas
<i>Cardaria draba</i>	widespread
<i>Coluteocarpus vesicaria</i>	dry steppe in forest between Bakuriani and Borjomi
<i>Dentaria bulbifera</i>	widespread in higher forests
<i>Draba bryoides</i>	very beautiful species widespread on rocks in Great Caucasus
<i>Draba nemorosa</i>	another yellow draba this common in grasslands in Great Caucasus
<i>Hesperis matronalis</i>	noted near Borjomi
<i>Sisymbrium</i> sp	scattered – more than one
<i>Sosnowskia caucasicus</i>	endemic white flowered crucifer a little like a small squat crambe on screes in Juta Valley, Great Caucasus

### *Crassulaceae*

<i>Sempervivum caucasicum</i>	colonies on scree in various parts of Great Caucasus
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### *Saxifragaceae*

<i>Saxifraga cartilaginea</i>	scattered on rocks on both mountain areas
<i>Saxifraga cymbalaria</i>	Borjomi woodlands in wet areas
<i>Saxifraga desoulavyi</i>	'juniperifolia' type. In Khada Gorge in Great Caucasus growing on sharp shale cliffs
<i>Saxifraga kolenatiana</i>	'cartilaginea' type with larger leaf rosettes. Noted in Truso Valley, Great Caucasus on serpentinite
<i>Saxifraga juniperifolia</i>	not actually sure whether we saw this one – Shamil mentioned this species from Mount Kurho
<i>Saxifraga repanda</i>	tall forest species of 'meadow saxifrage' group. Bakuriani area
<i>Saxifraga subverticillata</i>	most of the 'juniperifolia' saxifrages in the Kazbegi and Truso areas seemed, to me, to be this species. Further looking at this group of saxifrages required!

### *Grossulariaceae*

<i>Ribes biebersteinii</i>	bluffs between Kazbegi and Russian border
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### *Rosaceae*

<i>Geum rivale</i>	damp woodlands above Bakuriani
<i>Dryas caucasicus</i>	in leaf in Truso Valley, Great Caucasus
<i>Poterium lasiocarpa</i>	Shibliak communities
<i>Filipendula vulgaris</i>	Sveta limestone shibliak
<i>Potentilla caucasica</i>	Several cinquefoils noted probably including this one which was rather common in alpine grasslands in the Great Caucasus
<i>Sibbaldia parviflora</i>	Scattered in high areas
<i>Alchemilla</i> sp	Several species noted
<i>Rosa pimpinellifolia</i>	Sveta limestone shibliak. Several other species seen

<i>Fragaria vesca</i>	scattered
<i>Fragaria viridis</i>	scattered
<i>Cotoneaster integerrimus</i>	Sveta limestone shibliak
<i>Crataegus</i> spp	Many species especially in shibliak communities – very diverse in this region!
<i>Mespilus germanica</i>	Shibliak near Gori
<i>Prunus laurocerasus</i>	scattered
<i>Prunus avium</i>	mid-level forests
<i>Sorbus aucuparia</i>	Great Caucasus
<i>Pyrus demetrii</i>	David Gareja steppe
<i>Pyrus salicifolius</i>	Gareja steppe
<i>Malus sylvestris</i>	Bakuriani forests
<i>Spirea hypericifolia</i>	scattered in shibliak, locally dominant in Gareja steppe

### *Resedaceae*

<i>Reseda lutea</i>	scattered in lower areas
<i>Reseda luteola</i>	noted on roadsides

### *Fabaceae*

<i>Robinia pseudacacia</i>	scattered in lowlands – planted
<i>Genista</i> sp 1	fine clump forming species on cliffs around Borjomi
<i>Genista</i> sp 2	dwarf species on limestone shibliak near Sveta
<i>Spartium junceum</i>	common along roadsides around Tbilisi
<i>Caragana grandiflora</i>	Widespread on cliffs and rocky slopes in all mountain areas
<i>Colutea lutea</i> ???	Or porphyrogramma? Lovely orange flowered species from the Gareja steppe
<i>Sophora japonica</i>	presumably the same as the Turkish/Central Asian <i>alopecuroides</i> . Roadsides near Sveta
<i>Vicia lutea</i>	Gareja steppe
<i>Vicia balansae</i>	scattered throughout
<i>Vicia truncatula</i>	woodlands at lower levels in Great Caucasus
<i>Vicia villosa</i>	one of this group in Borjomi area
<i>Vicia (Orobus) crocea</i>	woodlands at lower levels in Great Caucasus
<i>Vicia (Orobus) cyaneus</i>	woodlands around Bakuriani
<i>Vicia sativa</i>	scattered
<i>Lathyrus aphaca</i>	a very small flowered form in Gareja steppe
<i>Lathyrus laxiflorus</i>	common in woodlands around Borjomi
<i>Lathyrus roseus</i>	Woodlands near Borjomi
<i>Pisum sativum</i>	scattered. The form in the woods near Borjomi was very fine indeed
<i>Medicago javakhetiana</i>	endemic to the Javakheti Plateau above Bakuriani, low mat forming species in alpine areas
<i>Medicago sativa</i>	scattered
<i>Trigonella tenuis</i>	Gareja steppe. Other <i>Trigonellas</i> noted too
<i>Trifolium pratense</i>	scattered
<i>Trifolium repens</i>	scattered. Several other <i>Trifoliums</i> noted
<i>Coronilla caucasica</i>	scattered. Probably conspecific with <i>Coronilla orientalis</i> ?
<i>Astragalus cancellatus</i>	Gareja steppe. Purple flowers, slightly shrubby
<i>Astragalus stevenianus</i>	Gareja steppe
<i>Astragalus kazbeki</i>	endemic to Kazbegi area. Pretty white and pink low growing species

Hedysarum sericeum	beautiful red flowered species with large flowers in the limestone shibliak near Sveta
Onobrychis angustifolium	scattered. Pink and very pale forms seen
Onobrychis radiata	large pale flowered species with orange-lined petals – very elegant. Near Gori in steppe
<i>Oxalidaceae</i>	
Oxalis acetosella	scattered in high forests
<i>Geraniaceae</i>	
Geranium purpureum	high forests in Great Caucasus
Geranium robertianum	forests in Bakuriani and Borjomi areas
Geranium molle	limestone shibliak near Sveta
<i>Zygophyllaceae</i>	
Peganum harmala	not in flower. Limestone shibliak near Sveta
Zygophyllum fabago	Gareja steppe
<i>Linaceae</i>	
Linum austriacum	widespread in lower areas
<i>Euphorbiaceae</i>	
Euphorbia iberica	scattered
Euphorbia macroceras	hair tall species of wet areas in forests around Bakuriani with brown-maroon 'flowers'
Euphorbia pontica	'rigida' group. Fleshy glaucous leaves and reddish towards top of plant. Dry steppe slopes in forest above Borjomi
<i>Rutaceae</i>	
Dictamnus caucasicus	spectacular Burning Bush scattered through in shibliak
<i>Polygalaceae</i>	
Polygala amoenissima	aka transcaucasicus. Scattered throughout
Polygala alpicola	scattered on high dry slopes in Great Caucasus
<i>Aceraceae</i>	
Acer campestre	scattered
Acer negundo	introduced. Roadsides near Gori
Acer platanoides	Borjomi forests
Acer trautvetteri	High forests above Bakuriani
<i>Anacardiaceae</i>	
Cotinus coggygria	widespread in shibliak
Pistacia mutica	'vera' like species in Gareja steppe
<i>Celastraceae</i>	
Euonymus latifolia	scattered in woodlands throughout

### *Rhamnaceae*

*Paliurus spina-christi*

locally dominant in shibliak

### *Elaeagnaceae*

*Elaeagnus angustifolius*

*Hippophae rhamnoides*

Gareja steppe

common in valley bottoms in the Great Caucasus

### *Malvaceae*

*Malva sylvestris*

*Malva negelctus*

roadsides near Sveta

near Gori

### *Violaceae*

*Viola arvensis*

*Viola oreades*

fine purple and yellow form in forests above Bakuriani  
aka *Viola altaica*. Creamy yellow form in grasslands of Javakheti Plateau

*Viola caucasica*

aka *Viola biflora* subspecies *caucasica*. Yellow 'rock' violet.

Gweletti Valley in Great Caucasus

*Viola somchetica*

Common in Great Caucasus. Very pretty species with short lower petal making the face look round

*Viola* sp

*odorata*, *sieheana* and *riviniana* types noted but not checked

### *Thymelaeaceae*

*Daphne glomerata*

quite common on dry slopes in Great Caucasus

### *Cistaceae*

*Helianthemum nummularium*

'grandiflorum' form in steppe areas

### *Araliaceae*

*Hedera helix*

cliffs in Tbilisi!

### *Apiaceae*

*Sanicula europaea*

Common in forests

*Chamaescidium acaule*

dwarf stemless species in grasslands of Javakheti Plateau

*Zosima orientalis*

Gareja steppe

*Turgenia latifolia*

Gareja steppe

*Heracleum antasiaticum*

Borjomi area

Many *prangos*, *ferula*, *scandix*, *anthriscus*, *angelica* etc species in leaf only!

### *Ericaceae*

*Rhododendron caucasicum*

locally common in high mountains and in flower sparsely in Great Caucasus

*Vaccinium myrtilus*

forest floor and rocky areas in mountains

### *Primulaceae*

*Primula algida*

high grasslands and wet areas throughout

*Primula darialica*

*algida*-like species endemic to Truso Valley region. Differs little and may be just a variety of the previous species

*Primula ruprechtii*

beautiful pale yellow flowered 'oxslip' common in alpine grasslands throughout

Primula amoena	a purple 'oxslip' common in alpine grasslands and open birchwoods in Great Caucasus. A white form common on Mount Kunho.
Primula cordifolia	like a large leaved pale flowered lax form of ruprechtii. Noted in birchwoods in Gweletti Valley
Primula macrocalyx	beautiful bright yellow 'cowslip'. Widespread in montane woods and meadows
Primula sibthorpii Androsace villosa	pretty deep pink 'primrose' in woods below Bakuriani scattered in dry alpine slopes throughout

### *Ebenaceae*

Diospyrus lotus in leaf in shibliak near Sveta

### *Oleaceae*

Elaeagnus angustifolius Gareja Steppe  
Jasminum fruticans scattered in shibliak communities

### *Gentianaceae*

Gentiana angulosus widespread and locally abundant in alpine grasslands  
Gentiana nivalis noted from one bluff in Javakheti Plateau

### *Asclepiadaceae*

Vinca herbacea shibliak areas  
Vincetoxicum sp white flowered species in various shibliak areas

### *Rubiaceae*

Asperula arvensis blue-flowered. Dry steppic slopes between Borjomi and Bakuriani  
Galium odoratum scattered in woods  
Cruciata cruciatum scattered throughout

### *Convolvulaceae*

Convolvulus arvensis scattered along roadsides  
Calystegia sepium scattered

### *Boraginaceae*

Nonea lutea locally common in steppe  
Nonea intermedia large purple/blue flowers. Gareja steppe  
Cynoglossum officinale scattered  
Lithospermum purpureocaeruleum locally common in shibliak  
Lithospermum arvensis scattered  
Echium vulgare near Tbilisi along roadsides  
Echium russicum beautiful dark red flowered species in limestone shibliak near Sveta  
  
Symphytum asperum blue flowers. Borjomi forests etc  
Symphytum orientale ?maybe this species. White flowers. Borjomi forests  
Myosotis sylvaticum scattered in woods. Other Myosotis species noted  
Macrotomia (Arnebia) pulchra scattered in alpine grasslands  
Cerinthe glabra limestone shibliak near Sveta

A strange borage in gorge by Russian border with atropa-like leaves but wide dark dull purple symphytum like flowers?

### *Labiatae*

Ajuga orientalis	scattered throughout
Ajuga genevensis	Gareja steppe
Ajuga reptans	widespread
Scutellaria orientalis	widespread in low and mid levels. Subspecies sosnowskyi in limestone shibliak near Sveta
Lamium aplexicaule	scattered
Lamium album	widespread
Nepeta musinii	scattered – small species
Stachys annua	Borjomi
Stachys atherocalyx	widespread at lower levels
Salvia gareji	beautiful large pink flowered species in Gareja steppe
Salvia limbata	white and yellow flowered. Gareja steppe. Several other Salvias present including no doubt widespread species such as Salvia virgata and other typical steppe species of this region
Eremostachys laciniata	scattered in steppe and shibliak zones

### *Solanaceae*

Hyoscyamus niger	scattered
Atropa belladonna	in leaf in Borjomi woodlands

### *Scrophulariaceae*

Linaria genistifolia	noted near Brojomi
Linaria sp	a yellow species close to the Russian border north of Kazbegi
Linaria simplex	Gareja steppe
Scrophularia chrysantha	scattered on the Javakheti Plateau
Veronica chamaedrys	Lesser Caucasus
Veronica gentianoides	scattered throughout in mountains
Veronica liwanensis	beautiful species on dry steppe between Borjomi and Bakuriani
Veronica multifida	?one of this group above Bakuriani
Veronica officinale	Borjomi
Veronica petraea	pretty dwarf alpine in Truso Valley
Veronica peduncularis	like chamaedrys but rangier and different colour flowers. Greater Caucasus
Melampyrum arvense	Lower parts of Great Caucasus
Verbascum formosum	beautiful large flowered species. Gareja steppe
Pedicularis acmodonta	near Kazbegi in Great Caucasus
Pedicularis armena	quite common on the Javakheti Plateau
Pedicularis wilhelmsiana	scattered on the Javakheti Plateau

### *Orobanchaceae*

Orobanche ramosa	limestone shibliak near Sveta
Phelypaea coccinea	Gareja steppe and limestone shibliak near Sveta

### *Globulariaceae*

Globularia orientalis	limestone shibliak near Sveta
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### *Plantaginaceae*

*Plantago lanceolata* scattered

### *Caprifoliaceae*

*Sambucus ebulus* widespread in leaf  
*Sambucus nigra* scattered  
*Viburnum opulus* scattered throughout  
*Viburnum* at least one other sp common  
*Lonicera caprifolia* near Gori and Sveta

### *Valerianaceae*

*Valeriana alliarifolia* common in forests in the Bakuriani area  
*Valeriana officinalis* scattered  
*Centranthus longifolius* ?presumably this species on cliffs in the Borjomi area

### *Campanulaceae*

*Campanula hohenackeri* Gareja steppe and near Sveta

### *Asteraceae*

*Bellis perennis* scattered  
*Tussilago farfara* widespread  
*Petasites albus* scattered  
*Artemisia splendens* ?possibly this species near Sveta  
*Achillea* yellow species common in steppe zones  
*Doronicum oblongifolium* pass above Bakuriani  
*Senecio vernalis* scattered  
*Centaurea recurva* Gareja steppe  
*Jurinea blanda* limestone shibliak near Sveta  
*Cichorium intybus* Gareja steppe  
*Psefellus carthalinicus* knapweed-like. Common in all lower steppe areas  
*Taraxacum crepidiforme* Javakheti Plateau  
*Taraxacum officinale* scattered throughout  
*Tripleurospermum caucasicum* Common on drier spots in the Borjomi and Bakuriani areas

## Monocots

### *Liliaceae*

Asparagus spp	scattered
Polygonatum multiflorum	seemingly this species in limestone shibliak near Sveta
Polygonatum glaberrinum	widespread
Convallaria majus	above Borjomi and near Sveta
Scilla armena	in birch forests at Gudauri
Scilla rosenii	widespread (millions!) on the Javakheti Plateau
Ornithogalum sigmoideum	Khada Valley, Great Caucasus, unquestionably this species with reflexed fruiting pedicels also strongly thickened at base
Ornithogalum sp	corymbose species with 2-3 leaves quite wide with glaucous with no obvious white line. Javakheti Plateau
Ornithogalum sp	corymbose species with several narrow leaves with white line. Limestone shibliak near Sveta
Leopoldia (Muscari) tenuifolia	scattered in limestone shibliak near Sveta
Muscari sosnowskyi	scattered on Javakheti Plateau
Muscari pallens	curious white flowered species scattered in rocky areas in Great Caucasus
Bellevalia paradoxa	scattered on Javakheti Plateau
Bellevalia sp	in seed near Sveta
Lilium georgicum	aka Lilium ponticum. In bud between Kazbegi and Russian border
Fritillaria orientalis	Several on cliffs between Kazbegi and Russian border
Fritillaria collina	widespread and sometimes abundant in the High Caucasus
Gagea glacialis	I now believe in this species again! Locally quite common near snow
Gagea sp	A large flowered species of the taurica/alexeeenkoana group seen above Bakuriani
Gagea sulphurea	between Kazbegi and Russian border
Veratrum lobelianum	young leaves in many areas in the High Caucasus
Paris incompleta	widespread, in flower below Bakuriani

### *Amaryllidaceae*

Galanthus alpinus	some in flower above Bakuriani
Galanthus platyphyllus	a few flowers emerging from the freak snowfall above Gudauri!

### Iridaceae

Iris pseudacorus	along rivers near Gori
Iris iberica	in seed in the Gareja steppe. A Juno iris was in seed amid limestone shibliak near Sveta – probably this species?
Iris sp	a beautiful purple rather dwarf species has yet to be identified from between Kazbegi and Russian border
Gladiolus atroviolaceus	limestone shibliak near Sveta

## *Orchidaceae*

*Neottia nidus-avis*

*Cephalanthera caucasica*

*Cephalanthera longifolia*

*Limodorum abortivum*

*Platanthera chlorantha*

*Steniella satyroides*

*Orchis punctulata*

*Orchis caucasica*

*Orchis stevenii*

*Dactylorhiza urvilleana*

*Dactylorhiza euxina*

*Dactylorhiza caucasica*

*Dactylorhiza umbrosa*

## *Dioscoreaceae*

*Tamus communis*

woods near Borjomi

in flower in limestone shibliak near Sveta, also near Borjomi.

The 'white helleborines were rather confusing here and some

looked close to *Cephalanthera kotschyana*

in flower in limestone shibliak near Sveta

woods near Borjomi

woods near Borjomi

in flower in limestone shibliak near Sveta

in seed in limestone shibliak near Sveta

in flower in limestone shibliak near Sveta and near Borjomi –  
some very large specimens!

in flower in limestone shibliak near Sveta

in flower along lower sections of the Georgian Military

Highway and near Borjomi too

a nice little population already in flower in the Juta Valley

already in flower in the Juta Valley with previous species

noted around Bakuriani

Bakuriani area

## Systematic List Number 2      Birds

The taxonomy and order of the following list largely follows Voous (1977, List of Recent Holarctic Bird Species). An indication of frequency of sightings is given by the number of days out of 12 a species was seen on – thus 4/12 means a species was noted on four days during the holiday. The Arrival day in Istanbul and the departure day from Van are not included.

Night Heron	<i>Nycticorax nycticorax</i>	1 near airport, Tbilisi
Honey Buzzard	<i>Pernis apivorus</i>	100+ mostly just north of the Cross Pass and many also in same valleys two days later. 2/7
Black Kite	<i>Milvus migrans</i>	Scattered. 3/7
Lammergeier	<i>Gypaetus barbatus</i>	A total of four seen, all in the High Caucasus. 3/7
Egyptian Vulture	<i>Neophron percnopterus</i>	Singles in the Lesser Caucasus. 2/7
Griffon Vulture	<i>Gyps fulvus</i>	Widespread in low numbers. 5/7
Marsh Harrier	<i>Circus aeruginosus</i>	1 in the Gareja Steppe
Montagu's Harrier	<i>Circus pygargus</i>	10+ in the Gareja steppe and also noted in the valleys around Gori. 2/7
Sparrowhawk	<i>Accipiter nisus</i>	1 near Bakuriani
Common Buzzard	<i>Buteo buteo</i>	Widespread. Hundreds passing through valleys near Cross Pass in the High Caucasus. 6/7
Long-legged Buzzard	<i>Buteo rufinus</i>	Scattered. 3/7
Steppe Eagle	<i>Aquila nipalensis</i>	1 above Bakuriani
Imperial Eagle	<i>Aquila heliaca</i>	1 in the High Caucasus
Golden Eagle	<i>Aquila chrysaetos</i>	1 above Bakuriani
Common Kestrel	<i>Falco tinnunculus</i>	scattered. 4/7
Peregrine	<i>Falco peregrinus</i>	1 at Gudauri
Caucasian Snowcock	<i>Tetraogallus caucasicus</i>	2 on slopes of Mount Kurho by Kazbegi
Caucasian Blackcock	<i>Tetrao mlokosiewiczii</i>	2 males seen first visit to Gweletti Valley, five males at a lek there on the second visit and a male in flight on Mount Kurho, Kazbegi. Feathers found in the Truso valley
Chukar	<i>Alectoris chukar</i>	several in the Gareja Steppe
Coot	<i>Fulica atra</i>	some on the big lake above Bakuriani
Common Crane	<i>Grus grus</i>	2 by the big lake above Bakuriani
Common Redshank	<i>Tringa glareola</i>	An interesting record of one in a high valley near the Cross Pass
Common Sandpiper	<i>Actitis hypoleucos</i>	Scattered. 2/7
Armenian Gull	<i>Larus (argentatus) armeniacus</i>	some by the big lake above Bakuriani
Rock Dove	<i>Columba livia</i>	Widespread – quite a lot of wild birds too. 7/7
Collared Dove	<i>Streptopelia decaocto</i>	Only noted near Tbilis
Cuckoo	<i>Cuculus canorus</i>	widespread and common
Long-eared/Short-eared Owl	<i>Asio otus/flammeus</i>	Not sure which. Seen briefly at night at Gudauri
Scops Owl	<i>Otus scops</i>	Heard on several occasions
Nightjar	<i>Caprimulgus europaeus</i>	1 seen in the Gudauri Steppe and c.8 seen at night around Gamaldzveba Village
Common Swift	<i>Apus apus</i>	scattered. 4/7
European Bee-eater	<i>Merops apiaster</i>	scattered – lower areas. 3/7
Roller	<i>Coracias garrulus</i>	a few seen in the Gudauri/Tbilis area
Hoopoe	<i>Upupa epops</i>	only noted in the Gareja Steppe

Great Spotted Woodpecker	<i>Dendrocopus major</i>	Locally common in forests in the Bakuriani area. 3/7
Calandra Lark	<i>Melanocorypha calandra</i>	Scattered in steppe. 2/7
Short-toed Lark	<i>Calandrella brachydactyla</i>	A few in the Gareja Steppe
Crested Lark	<i>Galerida cristata</i>	roadsides in the central valley
Skylark	<i>Alauda arvensis</i>	Scattered. 2/7
Shore Lark	<i>Eremophila alpestris</i>	Scattered above 2200m. 2/7
Sand Martin	<i>Riparia riparia</i>	Scattered. 2/7
Crag Martin	<i>Ptyonoprogne rupestris</i>	scattered. 3/7
Swallow	<i>Hirundo rustica</i>	widespread. 7/7
House Martin	<i>Delichon urbica</i>	scattered. 2/7
Water Pipit	<i>Anthus spinoletta</i>	widespread in mountains. 5/7
Grey Wagtail	<i>Motacilla cinerea</i>	Along most hill streams. 4/7
White Wagtail	<i>Motacilla alba</i>	Widespread. 7/7
Dipper	<i>Cinclus cinclus</i>	scattered along hill rivers. 3/7
Wren	<i>Troglodytes troglodytes</i>	Only seen near Gudauri, heard elsewhere
Dunnock	<i>Prunella modularis</i>	scattered. 3/7
Robin	<i>Erithacus rubecula</i>	Noted near Borjomi
Thrush Nightingale	<i>Luscinia luscinia</i>	Heard near Sveta
Black Redstart	<i>Phoenicurus ochruros</i>	Scattered. 4/7
Common Redstart	<i>Phoenicurus phoenicurus</i>	Locally common in Lesser Caucasus. 3/7
Güldenstädt's Redstart	<i>Phoenicurus erythrogaster</i>	c.20 on the lower slopes of Kurho Mountain by Kazbegi and 2 males up the Truso Valley. 2/7
Whinchat	<i>Saxicola rubetra</i>	scattered. 2/7
Stonechat	<i>Saxicola torquata</i>	Widespread. 5/7
Isabelline Wheatear	<i>Oenanthe isabellinus</i>	Gareja Steppe
Northern Wheatear	<i>Oenanthe oenanthe</i>	Widespread. 6/7
Rock Thrush	<i>Monticola saxatilis</i>	Scattered in High Caucasus. 2/7
Ring Ouzel	<i>Turdus torquatus</i>	Scattered throughout, locally common. 4/7
Blackbird	<i>Turdus merula</i>	Scattered in wooded areas. 4/7
Mistle Thrush	<i>Turdus viscivorus</i>	Scattered. 3/7
Lesser Whitethroat	<i>Sylvia curruca</i>	1 in Gareja Steppe
Barred Warbler	<i>Sylvia nisoria</i>	2 in the David Gareja steppe
Willow Warbler	<i>Phylloscopus trochilus</i>	Noted a couple of times in the High Caucasus
Caucasian Chiffchaff	<i>Phylloscopus lorenzii</i>	Widespread and common. 5 (seen)/7
Goldcrest	<i>Regulus regulus</i>	Heard in the Bakuriani area
Coal Tit	<i>Parus ater</i>	Bakuriani
Blue Tit	<i>Parus caeruleus</i>	Bakuriani
Great Tit	<i>Parus major</i>	Scattered throughout. 5/7
European Nuthatch	<i>Sitta europaea</i>	Heard in the Bakuriani area
Western Rock Nuthatch	<i>Sitta neumayer</i>	Gareja Steppe
Wallcreeper	<i>Tichodroma muraria</i>	2 confiding birds in the Truso Valley
Red-backed Shrike	<i>Lanius collurio</i>	Widespread. 5/7
Lesser Grey Shrike	<i>Lanius minor</i>	scattered. 3/7
Jay	<i>Garrulus glandarius</i>	scattered. 4/7
Magpie	<i>Pica pica</i>	Widespread in the Lesser Caucasus. 3/7
Alpine Chough	<i>Pyrrhocorax gracilis</i>	Common in the High Caucasus. 7/7
Red-billed Chough	<i>Pyrrhocorax pyrrhocorax</i>	widespread. 5/7
Jackdaw	<i>Corvus monedula</i>	only noted in the Gareja Steppe
Rook	<i>Corvus frugilegus</i>	only noted in the Gareja Steppe
Hooded Crow	<i>Corvus (corone) cornix</i>	Widespread. 5/7

Raven	<i>Corvus corax</i>	Widespread. 6/7
Starling	<i>Sturnus vulgaris</i>	Only common in steppe areas. 2/7
Rose-coloured Starling	<i>Sturnus roseus</i>	several flocks in the Gareja Steppe area. 2/7
House Sparrow	<i>Passer domesticus</i>	Widespread but local. 7/7
Snow Finch	<i>Montifringilla nivalis</i>	Just one on the Cross Pass
Chaffinch	<i>Fringilla coelebs</i>	Scattered. 4/7
Red-fronted Serin	<i>Serinus pusillus</i>	scattered. 4/7
Serin	<i>Serinus serinus</i>	Just one in Bakuriani
Goldfinch	<i>Carduelis carduelis</i>	Scattered. 2/7
Siskin	<i>Carduelis spinosa</i>	scattered. 2/7
Linnet	<i>Carduelis cannabina</i>	Widespread. 4/7
Twite	<i>Carduelis flavirostris</i>	Locally common in areas above 2200m. 4/7
Redpoll	<i>Acanthis flammea</i>	50+ Kazbegi
Common Rosefinch	<i>Carrpodacus erythrinus</i>	Scattered
Great Rosefinch	<i>Carpodacus rubicilla</i>	c.20 start of Juta Valley
Rock Bunting	<i>Emberiza cia</i>	1 near Borjomi
Ortolan Bunting	<i>Emberiza hortulana</i>	Scattered. 2/7

## Systematic List Number 3

## Mammals

East Caucasian Tur	<i>Capra cylindricornis</i>	Several large groups seen in Gweletti Valley. The group of 35 males was seen on both visits and a group of 16 females seen on second visit there. Also 15 visible from the church above Kazbegi
Red Fox	<i>Vulpes vulpes</i>	Singles noted twice in High Caucasus, one was seen crossing a vast expanse of snow late in the afternoon, the nearest non snow-covered land was at least a mile away!!
Pine Marten	<i>Martes martes</i>	1 seen in woods by Bakuriani at night
Snow Vole	<i>Chionomys nivalis</i>	At least five seen in the Truso Valley
Other species recorded by sign only –		
Brown Bear	<i>Ursus arctos</i>	Dung and tracks noted at several locations in the High Caucasus
Wolf	<i>Lupus lupus</i>	Dung and tracks noted frequently in the High Caucasus where seems to be quite common