

Sichuan

Black Primulas & Prayer Flags

27th June – 14th July 2010

A Greentours Trip Report

Led by Ian Green

Day 1 June 27th Departure

Most of us departed various UK airports and with Pierre and Michelle coming from Paris (having left Tanzania not long before) and met up at Amsterdam Airport where the long direct flight to Chengdu departed on time. A very comfortable flight with good food.

Day 2 June 28th Chengdu

We arrived a few minutes early into Chengdu's very modern airport. Procedures were reasonably quick and so we were soon outside meeting Tsehbo, Nongbu and Adong, our three drivers and guides, and were on our way to the hotel. Though not far into the city to our hotel in took an age, however we were all tired from the flight and the chance to evaluate our new surroundings quietly from the 4wds or just have a snooze was actually just fine. Once at the excellent Wen Jun, situated in a street of fine modern 'old-style' Chinese architecture, we settled in, had a short rest and then met up for lunch in a restaurant across the road. The group took to chopsticks like ducks to water and indeed to the excellent Sichuan cuisine, about the best of a very good set of Chinese regional cuisines, though tending towards the hot and spicy for some tastes. We devoured it with relish. Your leader was the only fork-wielder at lunch, so he was shamed into getting to grips with the chopsticks in the evening!

After lunch we took to the giant carpark that is Chengdu's streets again and headed to the north side of the city where we spent a very pleasant two hours exploring the Giant Panda Centre. Here they study the Giant Pandas and have recently built up a very successful breeding programme, something that for many years seemed impossible as initially the Pandas seemed shy of such things. Now they are even thinking of exporting them as well as reintroducing Pandas to the wild. The enclosures are large and in a semi-natural setting and the pandas certainly look relaxed and accepting of the situation. Indeed one youngster really played to the gallery, pretending he was going to fall off a platform and generally larking around. The rest of them just slumbered or stretched. A highlight were the groups of stunningly marked Red Pandas which are not related to Giant Pandas, the latter being true bears, and the Red Pandas more closely related to Bearcats and Civets. They are the prettiest of creatures. The vegetation was a mix of introduced and native species. The birds however were very much native and we found it to be very lively, maybe it was the very light rain that was freshening them all up. There were Chinese Bulbuls and White-browed Laughingthrushes everywhere and we

encountered small flocks of Black-throated Tits and Japanese White-eyes too. Oriental Turtle Doves were noted and a Eurasian Cuckoo called often and was seen too. A little party of Vinous-throated Parrotbills went past and we later saw a single Grey-throated Parrotbill in the same spot as a superb Chinese Bamboo Partridge (which allowed great views) and a little group of very pretty Red-billed Leiothrixes. There were even a few butterflies with Great Mormons and Common Bluebottles the pick.

Then it was back through the traffic and the one-way systems to the hotel where after a rest we met up and went over the street again to the same excellent restaurant.

Day 3 June 29th Wolong

We started with a small delay as I had to go to the bank! Then it was into the maelstrom of Chengdu traffic, except... this morning all seemed quiet, perhaps we'd missed the rush hour? So we were able to make our way serenely out of town. It took an age still to shake ourselves free of the metropolis, Chengdu does hold ten million people! Eventually though countryside arrived, but how strange it seemed. Lush certainly, and fully cultivated, but what were all these trees being held up by angled poles? It seems that this area is a staging post for the well-grown trees that the Chinese move around seemingly at will, and so for miles we passed these strange looking fields full of trees of all kinds, supported so their roots could get a hold. Eventually through the misty morning we espied some hills ahead and then all of a sudden we were in the mountains, very steep mountains with narrow valleys. We hardly saw them for a while, twenty minutes or so was spent mostly in tunnels emerging occasionally into deep valleys with rushing rivers, or with reservoirs. This new tunneled highway took ninety minutes off our journey. Then we turned up towards Wolong. Now this area had suffered much earthquake damage two years previously and so now the road is only just being rebuilt. It was rough in places but this meant we were able to get a better look at the scene as we rose slowly up the valley. It was hard not to stop but it had to happen so enticing did the roadsides look. There was little traffic so it was easy to pull over. We saw a group of White-capped Water Redstarts and Plumbeous Water Redstart. Two species of clouded yellow, one bright orange, and a sailor, and several dark Pachlioptera swallowtails were seen. However the plants were the main draw. The pinky-purple rather open flowered *Gentiana primuliflora* was on the roadside bluffs along with a fine plant or two of *Epipactis mairei*. Large bright yellow *Impatiens* had its flowers marked with crimson whilst nearby was a smaller yellow-flowered *Impatiens* with green centres. The strange *Saxifraga fortunei* with one elongated petal grew on the steep bits whilst on leveler ground we found various *Rubus* species, *Phytolacca polyandra* and the more familiar, to us Europeans, Self-heal. We arrived a little late for lunch but really enjoyed the excellent meal provided by the hotel in Wolong.

Then it was off for the afternoon sortie. This took in a gorge some ten kilometres further up the road. We were now in pristine habitat, surrounded by the Panda reserve, but of course none of them to be seen, they would be much higher up. Nevertheless some fine fauna presented itself with a cryptically marked toad, and some great birds. Stephen spotted both a Lammergeier which cruised quite low through the gorge, and at least two Wallcreepers which flew back and forth above us. There was also a look at the amazing Red-billed Blue Magpie. Other birds of note included Nepal House Martin, Fork-tailed Swift and a pair of Golden Eagles. The flora was exceptional. As we walked up the narrow valley, the old path damaged in places by land

slides, but now passable again, a variety of woody species was noticeable with lots of trees as well as flowering shrubs such as *Eunymus frigidus*, *Deutzia longifolia* and *Spirea*. On the path we found the first long-tubed lousewort of the trip, these amazing plants have thin flower tubes several centimetres long topped by a striking, one in this case, bright pink flower. This was *Pedicularis macrosiphon*. Later we found the tall *Pedicularis dunniana* and an even more solid *Pedicularis* with pinkish flowers. A huge surprise was the giant *Cardiocrinum giganteum* in flower though it was metres up a cliff and out of reach. Other monocots seen included a tall thin *Alectris*, the 'grass' *Ophipogon bodinieri*, an *Allium*, and two orchids, one of which was *Amitostigma basifoliatum*, the tiny white flowers with pink dots. The gorgeous *Corydalis flexuosa* produced vibrant sky-blue flowers and later we saw a fine yellow *Corydalis* with distinctive red stems. More fine flora was noted in the shape of *Paris polyphylla*, the unusual yellow and red flowered *Siphonostegia chinensis*, *Ranunculus japonicus*, *Acer* and *Juglans* species, and an abundance of beautiful ferns.

Day 4 June 30th Wolong Area

I went out for an early morning walk up a track close to the hotel. The orchid *Calanthe tricarinata* was found and so too lots of *Epipactis mairei*. Birds included Collared Finchbill, White-collared Yuhina, a couple of Elliot's Laughingthrushes, the beautiful Mrs Gould's Sunbird, several leaf warblers including singing Chinese Leaf Warbler, and on the way back, a Red-billed Blue Magpie!

After breakfast we were on our way up the road to explore some higher parts of Wolong. Our first stop was for some handsome red and white *Pedicularis davidii*. We drove quite a way (half an hour) up the valley to a trail. Here we spent the morning. It was beautiful habitat, basically elfin forest, with oaks and rhododendrons dominating, the latter past flowering. There was also a variety of other trees and shrubs including *Sorbarias* and *Rosas*, these including the large-thorned *Rosa emeiensis* and pretty pink *Rosa sweginzowii*. Both *Deutzia glomeruliflora* and *Deutzia longifolia* were covered in cascades of creamy blooms. By the entrance we found a fine population of flowering *Oreorchis foliosa* a pretty orchid rather like a fine coralroot. Within metres of starting the trail we found another beauty, *Calanthe tricarinata*, an orchid with yellow and russet blooms. Soon we were admiring more beauties, various *Anemones*, also *Arisaema elephas*, and the lovely *Iris bulleyana*. A pretty *Lathyrus* and many anemones accompanied us over the next kilometre. Tsebho and co had gone ahead to put a picnic together and though they hadn't gone more than a kilometre by lunchtime Tsebho was coming back to see where we'd got to! There were innumerable new flowers. Aside from Irises and Orchids we saw several *Smilacina* species, *Parnassia delavayi*, lots of *Androsace henryi*, and the purple *Semiaquilegia calcarata*. Yellow *Trollius yunnanense* and meadow buttercup-like *Ranunculus japonicus* mixed with *Viola biflora* and the large leaves of *Rodgersia pinnata*. Both *Veratrum macrophyllum* and the almost black *Veratrum nigrum* were in flower and we saw *Paris polyphyllum* and the little *Streptopus parviflorus* with twin hanging bells. Growing along the track was another red long-tubed lousewort, different from yesterday's, this *Pedicularis bella*.

After a very good picnic including Wolong special fried rice (!) we explored a bit of old growth forest by the river. On boulders was something resembling *Saxifraga sibirica* and in the deep moss under trees were three very small orchids, a *Liparis* species with tiny brown flowers, a 6cm tall *Habenaria* and the delightful little *Neottia smithii*, a tiny twayblade with green and

white flowers found by Michelle and Pierre. We continued up the valley a bit enjoying time to photograph the flora and seeing many more of the little twayblade and the irises. Chestnut Thrushes became frequent and we worked hard at deciding what all the *Phylloscopus* warblers were. I found a little group of Grey-headed Bullfinches and a pair of the rather unusual Yellow-bellied Tits.

For the latter part of the afternoon we rose to 3300m above sea level. Now above the tree line most of the slopes were covered in rhododendron scrub however there were open areas and we spent a happy hour and a half exploring one of these finding some unbelievable plants. First noticed from the road was some very flowery *Clematis montana* and large red blooms of *Paeonia veitchii*.

In the grassy areas we found pink flowered *Polygonatum curvistylum* and similarly pink was *Geranium pogonanthum*. A Dark-breasted Rosefinch was seen and Elliot's Laughingthrushes made plenty of noise from the shrubbery. A slightly damper areas was full of flowers. Reddish *Primula polyneura* was joined by our first beautiful tall yellow *Primula sikkimensis*, a lovely species that when first seen draws much admiration, though we were soon to realize how widespread it was. Beautiful blue *Corydalis pachycentra* bloomed with the delightful yellow bells of *Lilium lophophorum*. White *Morina alba* and red *Morina nepalensis* were both common. The orchids were amazing. Little *Ponerorchis chusua* was everywhere and there seemed to be other *Ponerorchis* species present too. There were *Herminiums* and *Malaxis monophylla*, though we doubted the identity because they all had two leaves – apparently this species does often have two leaves in China! However it was the lady's slippers that really drew the acclaim. Pierre found the first luscious pinky-purple slippers of *Cypripedium tibeticum* and these proved rather common with some fine clumps up the hillsides, some of them so dark as look black in the misty conditions. We were amazed to find a yellow slipper amongst them, this *Cypripedium flavum* and then a different pink species with larger pinker slippers with no white rim, these quite possibly *Cypripedium franchetii*. There were more orchids too, the familiar *Cephalanthera longifolia*, the equally familiar tall pink *Gymnadenia conopsea* and two relatives of the latter, white *Gymnadenia omeiensis* and pale pink and stocky *Gymnadenia crassinervis*.

After dinner and a lengthy checklist session I went out for a nightwalk. For an hour and forty minutes I padded up a track then up a stream and was rewarded handsomely. At the furthest point I came across an animal resting on a bluff. I set up the torch and studied it for a while steadily getting more excited as it fidgeted about trying to hide behind a rock but coming out occasionally, then it stood up properly and walked off – a Red Panda! On the way up I had very good prolonged views of a Goral feeding on a cliff close to me, and on the way down even better views of a flying squirrel, this a red species with a grey head and a pale sandy coloured underside, presumably *Petaurista caniceps*.

Day 5 July 1st Balang Shan

A few of us wandered up the valley next to the village a little before six. It was cloudy and low mist hung in ribbons over the forest. Green-backed Tits were soon followed by a Chinese Leaf Warbler that sat atop a spruce giving its long-repetitive song. Two more leaf warblers then gave renditions of their very different songs. Further along we found a male Mrs Gould's Sunbird that came in and allowed pretty good views though we were briefly distracted by the

appearance of a Collared Finchbill, a White-collared Yuhina and then a pair of Elliot's Laughingthrushes. It started to rain as we walked back to breakfast and indeed continued until around eleven. We packed up and left the friendly hoteliers and said goodbye to their very good cooks, though our verdict on their bathrooms was less complimentary.

We rose quickly up the road towards Balang Shan. We checked out the *Cypripedium* spot from yesterday and confirmed that the single yellow one was indeed *Cypripedium flavum*. A superb male Dark-breasted Rosefinch was seen briefly. Then it was up into new territory. Once the scrub had given way to grasslands the terrain became incredibly flowery and indeed would remain so for the entire day – I think I may never have seen so many flowers in one day! Our first stop was on said grassy slopes where we spent a happy hour or so wandering the slopes enjoying the rich variety. Lady's Slippers were again prominent though it was the sheer number of them here that took the breath away, all of them were *Cypripedium tibeticum*. There were also very many Primulas, these the abundant pink *Primula gemmifera* as well as *Primula sikkimensis*. The lovely large purple flowers of the primula relative *Omphalogramma vincaeflora* were soon encountered as were the delicate half closed yellow balls of *Lilium lophophorum*. There were new plants, plenty of them. A fritillary with purple tessellated bells evaded certain identification and then there were two lovely *Corydalis*, an elegant yellow species with a strange crest atop the flower, this *Corydalis pseudocristata*, and a glorious blue species, *Corydalis panda*(!). Anemones were as usual very varied.

We moved up the road a mile or so and stopped by a most enticing looking slope – even as we pulled up we could see yellow, blue and red *Meconopsis*' all in flower. It was all we could do to hold back, but a little light lunch was necessary! Then we were off, enjoying a great show of really red-pink *Primula polyneura* before entering lush slopes covered in all kinds of flowers, though first we had to pay homage to the poppies. It really was extraordinary to see them, let alone three species, all in full flower, and one each of red, blue and yellow. Most obvious was the impressive tall and hairy *Meconopsis integrifolia*. The great yellow bowls were up to ten cm across. Then there was the more delicate but still tall *Meconopsis delavayi* which was common, and hardly less numerous was the fabulous Prayer Flag Poppy, Red Poppywort or *Meconopsis punicea*, a plant imbued with such charisma it was a wonder we all didn't bow down before it! Those lovely hanging red flowers, the petals twisted and pocked, each with the now finished rain having drops making them look even more attractive, were photographed so much! There was so much else! New Primulas appeared, a tall yellow species and a tiny, yet to flower one. *Lloydia tibetica* with yellow flowers and *Lloydia serotina* with white, then there were *Corydalis*, and here we added another blue species, *Corydalis pseudobarbisepala* to the list. Shrubs of willow and the honeysuckle (possibly *Lonicera involucrata*) held a breeding pair of Yellow-streaked Warbler. Overhead was a Himalayan Griffon Vulture and Rosy Pipits were common. There were even two new *Pedicularis* species, one white and pink.

We moved up the road, the lunch spot had been at 3900m and our next one was around 4200m. This was an incredible spot. The *Meconopsis*es were there again, this time in even better condition, but the blue one here was different, the short *Meconopsis lancifolia* with very pretty violet blue flowers. Our attention soon wandered to a rocky outcrop where *Paraquilegia microphylla*'s delicate white (with a hint of blue) blooms grew on rock crevices whilst around them bloomed the large white flowered *Rhododendron phaeochrysum* and the small mauve flowered *Rhododendron russatum*. The pretty little *Primula gemmifera* bloomed on rocks and here

we had our first encounter with the lovely purple flowers and long leaves of newly described *Primula longipetala*. We found a little blue gentian, a white gentian and the yellow Gentian look-a-like *Cyananthus flavus*. These grew with an assortment of delicate alpines including new orchids in the shape of a tiny green *Androcorys oxysepalus* (about 2cm tall!) and the pretty little pink *Ponerorchis brevicealcarata*. Plain Mountain Finches appeared briefly though there were few birds compared to our next stop hardly below the pass where we saw Yellow-billed Chough, Brandt's Mountain Finches and Red-faced Rosefinches. At this spot we found yet another electric blue *Corydalis (pachycentra)* however this one eclipsed all previous ones for sheer beauty. And for the abundance of its flowers, as in places it covered the ground. Here we found our fifth flowering *Meconopsis* of the day, the very prickly *Meconopsis rudis*.

The pass is at a heady 4487m and one or two of us (me!) were feeling it a little but with good light and clear conditions we just had to enjoy a little more of this superb high alpine area. We stopped just below the pass and spent a while wandering a rocky slope. This had a most distinctive and different flora to anything we'd seen so far. *Ranunculus petrogeiton* was quite frequent forming clumps topped by large buttercup flowers. Immediately we saw the fabulous *Corydalis melanochlora*, a prize in ice-blue tipped with black. There were *Saxifragas aurantiaca*, *pseudohirculus* and *melanocentra* as well as *Saxifraga jacquemontanii* growing low to the gravelly turf along with *Androsace delavayi*. An Alpine Accentor potted about as we enjoyed mats of *Primula dryadifolia* and the lovely hanging deep purple bells of *Primula amethystina*.

Then it was on down to Rilong, the road descending rapidly to 2800m and our rather plush hotel set in a deep valley next to a rushing river.

Day 6 July 2nd Rilong area and then to Danba

After a rather varied breakfast including all sorts of unidentified offerings some of which appealed, others didn't get the vote, we were off on our journey. We stopped first in Rilong to take a look at a roadside flush of *Ligularia przewalskii*, a pretty species with yellow spires above dissect leaves. There was much else besides. We enjoyed the pretty little sky-blue *Gentiana pseudosquarrosa*, noted the tall *Androsace erecta*, and photographed the lovely billowing purple and yellow *Thalictrum delavayi*. A little up the road we spent a few minutes exploring a roadside terrace which was the home of *Arisaema consanguineum* now in good flower. This proved a good spot for birds. Hill Pigeons and a Cuckoo flew past but nearer at hand were two superb White-throated Redstarts, a Chestnut Thrush, at least three Beautiful Rosefinches, and, by the vehicles, a Godlewski's Bunting.

A roadblock delayed us only a few minutes and then we were on up to some forested slopes which looked out over the magnificent vista dominated by the 6200m Four Girls Mountain (Siguniang Shan). We parted by a little Buddhist Chorten by which grew a small white orchid, a few *Paeonia veitchii*, and lots of lovely *Primula deflexa*, a delightful species with a tight head of hanging soft purple-blue flowers. In the forest, which was rather open in places, we found a lot more of this primula, *Anemone tomentosa* and a little *Anemone*, some *Oreorchis foliosa*, and a little *Ponorchis chusua*. A few Kansu Pikas were seen and there were some good birds. A pheasant escaped identification but White-browed Rosefinch sat for all to see as did another White-throated Redstart. There was a pair of Lemon-rumped Warblers, several Large-billed Leaf Warblers, a White-collared Yuhina and a pair of lovely Orange-flanked Bush-Robins.

We headed west, stopping to photograph the first improbably tall Tibetan watch tower we came across. Soon after we stopped for an excellent lunch in Xiaojing, a rather late one too, and so in the afternoon we had to cover the remaining sixty kilometres or so to Danba. We made a couple of stops. The first was to walk down the road through a narrow part of the valley. Here there were many butterflies including Citrus Swallowtails, an Erebia, a Danaid of some sort, a Ypthima, and some Sergeants. Blue Rock Thrush and Blue Whistling Thrush were seen and we watched Russet Sparrows and Hill Pigeons. The last stop was close to our destination. Here we looked at a low roadside cliff that held a fine population of the gesnerid *Corallodiscus lanuginosus*, some with the blue flowers still in bloom. On the slopes were white wands of *Eremurus chinensis* and a strange *Primula* with secund racemes of yellow flowers, inflated calyxes and heucheria-like leaves, this being *Primula bathangensis*. Orchids were yet to flower and there was an *Arisaema* going into fruit. A *Cynanchum* hung down from the cliffs and we also found the fine *Ceropegia mairei* with unusual trumpet-like flowers. A pair of Black-headed Greenfinches sat on the wires and a Striated *Prinia* sang from a bush.

Then it was into Danba and to our rather grand hotel where as we were checking in we were amazed to see a Black-necked Crane fly high over the narrow gorge. This is a rare bird now and we were extremely lucky to see one. Evening dinner at the hotel was superb. We counted no less than fifteen dishes for the nine of us, and very many were delicious.

Day 7 July 3rd to Luhou

We left Danba shortly after nine and headed west, the huge valley walls hemming us in and the slope were covered in verdant greenery, it felt almost subtropical. There were tantalising glimpses of all sorts of things and it didn't take long for us to stop, though this time it was Nongbu, one of our drivers who called a halt. He had spotted the lovely white *Lilium taliense* growing on the slope. This, and a second stop all of one hundred metres up the road, proved most productive. A tiny blue *Corydalis* was found and on the slope above was a huge *Anemone*. Two species of *Epipactis*, humilior and the tangutica subspecies of helleborine, flowered just by the vans and an intriguing orchid with large round basal leaves was in bud. *Arisaema consanguineum* was in flower and on rocks, amongst abundant ferns and mosses were two gesnerids, *Corallodiscus flabellatus* and another *Corallodiscus* species, as well as a striking red *Sedum*. Various butterflies flitted about including something that looked like a more delicate and long-tailed version of our European Scarce Swallowtail.

We continued up the valley, as usual wanting to stop at every turn, but we did manage a few miles before at around 3000m we stopped by some cliffs. The landscape here was really beautiful with a rushing river, large screes, big cliffs (above which sailed a Himalayan Griffon Vulture or two) and boulders and slopes cover in low mossy forest with the likes of *Hydrangea heteromalla* in flower. Large-billed Leaf Warblers and a Rufous-gorgetted Flycatcher were seen in the greenery. *Corydalis conspersa* was found with a little pink *Ponerochis*. The striking orange flowers of *Primula cockburniana* were found and on a rock above them a most delightful show of *Pleione limprichtii* leaves was noted and Tony found one with a flower still just about hanging on. The beautiful flowers didn't stop there. There was still time to find *Roscoea alpina* flowering on the cliffs, then Michele, who had found this, went one better by locating a pretty pink *Primula* and *Meconopsis prattii* flowering at the foot of some bouldery rubble!

It was all we could do to drag ourselves away, but we managed it, passing the hot springs where much *Primula cockburniana* could be seen flecking the meadow with orange. We stopped up in the *Rhododendron* scrub and had a lunch-time snack and tea. The boggy valley that reached the roadside here held an amazing variety of *Primulas* with no less than seven species within fifty metres of the vehicles. There was the tiny pink *Primula rhodocroa* growing with *Parnassia pusilla* and a tiny *Gentiana* in the boggiest bits, then in the only slightly boggy parts *Primula sikkimensis* flowered with at least three other *Primulas*. Drier spots under trees etc had *Primula cockburniana* and a capitate-headed pale violet *Primula* of the violacea persuasion, but seemingly something different. *Pedicularis longiflora* var *tubiformis* had yellow blooms glowing almost as strongly as the lovely *Caltha scaposa* which was common here. A tiny burnet *Sanguisorba filiformis* showered the wet areas with little heads of white and the beautiful prostrate purple heads of *Ajuga ovalifolia* nestled in the eponymous leaves. The top of the pass was a short distance away but we again stopped just short as the impressive blooms of *Incarvillea mairei* lit up the scene. Then it was down into the montane steppe of Baimei for lunch passing Yaks and Dzhos grazing the open grasslands as we descended.

In the afternoon we had a bit of a long journey on to Luhou, it taking us until nine o'clock in the evening to get there. The road wasn't great, but we just had to stop along the route as well. The countryside was stunning, especially the Tibetan villages with their beautiful houses, all made from huge timbers and faced with stones, then decorated in traditional colours. Prayer flags and chortens (stupas) became common place. The prayer flags were set in triangular patterns in this region. We made a stop near some as some more *Incarvillea* appeared. Growing with it was the gorgeous *Androsace spinulifera* with pink drumstick heads, a prostrate thistle, the black pea *Thermopsis barbata*, and yet more *Primulas* and *Pedicularis*. Himalayan Marmots shared a nearby slope with some horses.

Our last stop was on the down slope of a low pass. Daurian Redstarts and Elliot's Laughingthrushes were noted. *Primula secundiflora* was new, a lovely thing with deep crimson heads. We were surprised to see *Meconopsis integrifolia* blooming happily, whilst *Cypripedium tibeticum* was appreciated. Lower, under trees we found *Cypripedium calcicola* as well as lots of a white *Ponorchis*. Then it was on to Luhou for the night.

Day 8 July 4th Luhou to Ganze

After a very good breakfast of stuffed dumplings and assorted other local specialities in the nearby restaurant we packed up and said farewell to the hotel at nine. Just as we were leaving a few locals stopped by, one of them having a beard that couldn't quite live up to Richard's wonderful specimen, but the two of them enjoyed the beardy photo-shoot! Again the weather was kind though there was plenty of cloud about, but this just made the temperature very pleasant, throughout the day. We headed northeast out of Luhou, it taking just two minutes to be clear of the tiny town, however we still managed only a mile or two before we stopped to look at some *Codonopsis convolvulacea* growing by the roadside, a pretty pale blue species with quite open flowers. *Clematis tibetica* and *Clematis rehderiana* flowered in the field margins, and we found *Dracocephalum forestii* and *Pedicularis verbenifolia*, a curious violet-flowered species, in quick succession.

Now we drove straight to the top of the pass and a little beyond, initially through beautiful

valleys cloaked in open forest and meadows, then up into wide open grasslands that stretched as far as the eye could see, the hilltops visible for huge distances in each direction. These were studded with the jet black outlines of yaks and in every sheltered spot with a little flat ground and a stream up here were the black tents of nomadic herders. Our first stop was a little down the pass where open scrub laced the slopes at around 4000m. It was very flowery here. Once again *Meconopsis* made the initial impact. Here was the lovely Prayer Flag Poppy in abundance and with no wind photography was blissfully easy. There were the pure yellow goblets of *Meconopsis integrifolia*, and lots of the prickly *Meconopsis pratii* with sky-blue blooms centred with a large boss of yellow anthers. There was a fourth species too, the rather more delicate *Meconopsis lancifolia*, a lovely plant with up to three violet-blue blooms on each stem. Two yellow *Corydalis* species graced this show, the one with narrow leaves and orange on the lip was *Corydalis linarioides*. As usual there were *Primulas*, though only one which was new! The spidery deep crimson blooms of *Primula tangutica* with their wiry subulate petals were simply stunning. The green flowered *Parnassia lanceolata* was rather unusual and there was lots of *Trollius ranunculoides* as well as a curious little *Trollius* with bronze backed petals, this *Trollius farreri*. Other delights included a *Daphne* and the extraordinary globose-headed yellow-flowered *Soro-seris hookeri*. A Black-eared Kite sailed over the scene and we were fortunate to see in quick succession a male Blue-fronted Redstart, a Rosy Pipit and a Rufous-breasted Accentor.

We drove back over the pass and stopped to photograph the scene, the yaks, the encampments and even some of the locals who, smilingly, joined in. Then it was a quick stop to photograph a stunning display of *Incarvillea mairei* before dropping down into the valley and the meadows and conifer woods. Here we saw Long-tailed Minivets (Stephen) and both Elliot's Laughingthrushes and Grey-headed Bullfinches. By now we were getting used to the cry of 'new orchid, new primula!' Here there was one of the latter and two of the former! And two new Irises two, the larger *Iris polysticta* and the small flat-topped *Iris confusa*. There were even two frits as well, some fine yellow *Fritillaria cirrhosa* complete with climbing tendrils, and Michele and Pierre found *Fritillaria unibracteata*. We finished the morning with a brief stop to look at the lovely floriferous and very fragrant bushes of *Philadelphus purpurascens*.

Back in Luhou we had a good lunch before tackling the ninety kilometres of still mostly rather poor road to Ganze. So much of the afternoon was spent travelling, nevertheless we managed to see a good deal during the trip. Initial stops were for photographing villages and some yaks all loaded up to take hardware up the slopes, though when we were asked for money for these we stopped! Several of the locals joined in in any case, some so good photographs were still had. Then there was a stop for some fabulous *Pedicularis longiflorus longiflorus*, the large blooms being of two different yellows and set atop three inch flower tubes. These grew with abundant purple-blue *Lathyrus*. An abortive attempt to find *Spiranthes sinensis* still yielded lovely red-pink *Primula hoi* and a strange little *Codonopsis* as well as a beautiful skipper, this *Carterocephalus houangty*. Just up the road we stopped to look for Ibisbill and after mere seconds Richard spotted one sitting motionless with its back to us. An amazing bit of spotting for the bird was motionless and perfectly camouflaged. It started to rain, so most only got views of the bird sat still, but as the rain suddenly became heavy the bird woke up and showed its long red-curved bill and then flew off to join another one across the river. We hastily jumped back into the vehicles, just in time as it started hailing heavily.

The rest of the journey was completed through increasingly grand scenery. We reached a lake

and then rose quickly into green grassy hills. We made several short stops in this area, all bird induced! First was a group of Hume's Ground Jays, or Hume's Groundpeckers. Very strange birds indeed, and great fun. They travel round in little family parties generally sticking to any areas of exposed soil or rock, and here this meant the roadside so we got great views of them. They would lift their wings in some kind of display and the family would suddenly fly off! There were Oriental Skylarks singing away and Rock Sparrows too. Just a bit further along were Ruddy Shelducks, then in some scrub, as Tony photographed five *Aporia procris*? butterflies roosting on a twig, we found White-collared Blackbird, Kessler's Thrush, Godlewski's Bunting, Stonechat, and a superb Spot-winged Rosefinch. Then it was down the hill and into Ganze, a town stunningly decorated, and the ripped up main street allowed us plenty of chance to enjoy the shop fronts as we struggled along the road! The background was pretty stunning too with the snowy pinnacles of the Chola Shan rising to the south.

Day 9 July 5th Dzo Dala

It looked a touch rainy outside this morning though by the end of breakfast it had brightened considerably and the mountains were appearing through now shredding clouds. We drove southwards towards a band of high mountains, part of the Chola Shan, that separates Ganze from the Yangtze Valley and beyond Tibet. Soon after leaving town we were following a pretty valley up into these mountains, the snowy peaks already visible ahead.

It turned out to be a marvellous day with excellent weather throughout and the flora, fauna and scenery was magnificent. Rather than describe the events through the day by place, I'll merely mention that we stopped first quite low down in the valley for a while, then a little higher where some marshy ground by the stream and road held very fine flowers. During the middle part of the day we were considerably higher by a bridge at 4400m, but still in the valley. In the early afternoon we spent a while on the pass itself which was a heady 4800m above sea level, and then, for some of us, we had a late afternoon session up a stunning side valley at about 4600m. So by the end of the day we had a pretty good picture of what was to be seen in this wonderful mountainous area though given a few weeks we could have seen so much more!

Starting with the mammals, we were very lucky to see three Blue Sheep, spotted by Richard, on a rocky ridge well above the road. We were able to watch these elusive creatures through the 'scope for some considerable time. Later in the day we saw many Himalayan Marmots.

The birds. Well, what a day it was for vultures, not least because they were fed. We had already seen Himalayan Griffon, Lammergeier and Golden Eagle all together within a minute of our first stop when further up the valley several Himalayan Griffons were spotted on the ground. We stopped for a look and realised there were more down in the bushes feeding on a carcass. As we watched these, and photographed them, more came in allowing us a great chance to both see these great birds (they are considerably larger than the European Griffon) at close range but also to photograph them as they wheeled in over our heads. We saw them on and off during the day too, however it was the Lammergeiers that took centre stage from then on. It seemed they liked us for every half an hour one would sail by, or two, and at one stage three, all adults, were in the air around us. However these were not your typical distant views of Lammergeiers, no, these were close, incredibly so at times. I even managed to photograph one

from above. Later in the afternoon we spotted one of the adults perched high on a cliff, a beautiful sight on the limestone pinnacles as the late sun lit them up. Later still a dark immature sailed up the valley and bounced to an ungainly landing on the hillside. We saw some fabulous Streaked Rosefinches. The name is poorly given for these large rosefinches are stunning, the male shimmering pinky-red dotted on the underside with white. Twice we saw groups of six or so. Three species of Accentor were seen, both Robin and Alpine Accentors were seen only by me, however several of us had very good views of a Rufous-breasted Accentor. Redstarts were even more varied with Blue—fronted, Black, White-capped Water, Plumbeous and even a White-winged Redstart all seen, and I found a close relative of theirs, an immature Golden Bush Robin, a bird whose orange markings are a most brilliant colour. Speaking of colour possibly the most beautiful bird of the day was a fantastic luminous cobalt-blue Grandala, though the pair of close range Wallcreepers that we watched for ages must push it close! It didn't end there, there were still Tickell's Leaf Warblers, Plain Mountain Finches, White-winged Snowfinches, Stonechats, and even a Water Pipit noted, and Kessler's Thrushes as we drove up.

But could the plants compete with is excellent haul off birds? The answer was an emphatic yes. The streamsides as we drove up were lit by a yellow veil of *Primula sikkimensis* with the purple bells of *Primula secundiflora* adding to the show. Primulas were as usual varied with a pale lilac *Primula* common on screes, the little pink *Primula stenocalyx* on rocks and the tall violet *Primula limbata*(?) actually growing on cliffs! A dwarf *Rhododendron* offered its pink or mauve flowers throughout the upper parts whilst a little lower it was yellow *Potentilla fruticosa* and white *Potentilla glabra* that dominated. *Meconopsis* of course were at the forefront with yellow *integrifolia* again prominent and this time they were joined by the prickly *racemosa* with lovely racemes of blue flowers. Lowest was the conical hanging lilac blue bells of *Meconopsis quintuplinervia* whilst only a little higher the lovely purple with a hint of blue flowers of *Meconopsis henricii* started, these going right to the pass top at 4800m where they and *Meconopsis racemosa* were dwarfed and made stunning portrait shots against the snowy pinnacles beyond. Up in this area we found some fantastic alpiners. There were cushions of saxifrages and *Androsaces*, little *Saxifraga pseudohirculus*, *Anemone yulongshanicus* and on screes the delightful *Corydalis scaberula*. Growing with this was the plant of the day, the Dalek of the plant world, the curious upside down cone of silvery hairs that is *Saussurea medusa*, the hairs almost completely concealing the leaves. Later we were to find another fine high alpine *Saussurea*, this time *quercifolia*, looking a little like it had just landed from outer space! In this area there were a lot of fine yellow blue-tipped *Corydalis hamata* and the fine large yellow flowered *Corydalis dasypetra*, back up on the pass we'd seen the delicate sky blue *Corydalis atuntsuensis*. Other fine plants included *Primula tangutica*, some large blue *Paraquilegia microphylla* forming cushions on rocks, moonwort on the rocks, and lots of the striking blue *Salvia evansiana*.

Throughout the day we saw butterflies too, an *Aporia* species was common, and Black-veined Whites too, in fact we drove through clouds of whites at one stage on the way up. There were fritillaries and skippers too. And all day long stunning scenery, hardly a soul about, and a great little picnic too. A really very good day!

Day 10 July 6th to Maniganga

After another excellent breakfast at the cafe just by the hotel we packed up and said goodbye to the Golden Yak and headed first through town and northwards along a pretty river valley. Cuckoos, Grey-backed Shrikes and Daurian Jackdaws were common on the wires and there were abundant Astragaluses of various types along the banks. We parked up with the idea of walking back down the road however most of us hardly managed moving from the immediate area for the next hour! The large open-flowered *Codonopsis convolvulacea* showered the bank about the road with palest blue whilst three Clematises, *rehderiana*, *tibetica* and *tangutica*, flowered close to the fast-flowing little river. A Rufous-breasted Woodpecker flew in and gave us great views as did White-capped Water Redstarts, whilst a Common Rosefinch fed in a poplar top. A Hodgson's Redstart also provided us with exceptional views. Butterflies were abundant in the warm morning sunshine. Particularly so the 'black-veined white', *Aporia hippia*, with just a hint of yellow on the underwing. There were several fritillaries, clouded yellows, a blue or two, a couple of coppers, one of which had brilliant fiery orange uppers, and a strange nymphalid that looked like a cross between an emperor and sailor. Little drifts of *Pedicularis tricolor* enjoyed the rivers gravels along with pink wands of *Myricaria laxiflora*. There were other louseworts too. Tall yellow *Pedicularis ingens* was common on the far bank of the river where its close relative, the slightly more refined *Pedicularis steingeri* also bloomed. *Pedicularis szetcsuanica* flowered with a common white lousewort alongside the road and on the banks was a beautiful lousewort with pink lip and golden galea – *Pedicularis densispica*. Across the river *Meconopsis racemosa* was in good flower as was the orchid *Gymnadenia emeiensis*. Back on the near side we found *Herminium alashanicum* and *Herminium monorchis* both in flower, not for the last time today!

Then it was back through Ganze and on to the road to Tibet. Not far out of town we stopped and searched a slope above the road. The two *Herminium*s were particularly common at this spot and there were many of the species we'd seen in the morning. *Stellera chamaejasme* was in fine form and there were two *Dracocephalum*s, the narrow leaved *forestii* and the rather less showy *calophyllum*. *Allium macranthum* flowered in a gully whilst lower down was an *Allium* with paler pink flowers. Common Tern flew along the river and a family of Goosander rested on its bank. Butterflies were even more numerous than the morning with some of the same species plus graylings, dryads, anomalous blues and a Yellow-legged Tortoiseshell.

We continued along the road west stopping for lunch in the edge of a poplar plantation. This was full of Magpies and Hoopoes! Black Drongos were on the wires outside. Then it was on to Rumbanga, one of a number of similarly built local villages. Tsebho guided us around, taking us through the tracks and paths that wound through the houses. He showed us where they housed the prayer wheel and we walked round it clockwise admiring the paintings on it and the walls. Several local children, very well behaved, joined us and enjoyed posing for photographs. One local lady brought her daughter in and insisted good—naturedly that we make sure that her daughter was photographed! We passed a big chorten and then wound our way back round the village, taking photographs of the houses, their decorated exteriors and the whole scene with high mountains in the background. Then it was on to a power site. This was where a small river disappeared under a big rock only to reappear the other side. The route took us round the rock passing abundant prayer flags these billowing the strong breeze that had developed in front of an approaching storm.

Then it was on towards Maniganaga however we couldn't resist another stop or two. First was a deep valley where Richard turned up two Ibisbills on the shingle right close to us. This was a youngster but later appearing near it was a beautifully attired adult. Richard had previously reported an Ibsibill from the river in Ganze that morning! Up the wooded and shrubbed slope I saw Buff-barred Warbler and a lovely Slaty-backed Flycatcher. *Paeonia veitchii* was in good bloom and the lovely *Pedicularis metaszetschuanica* had pink and purple flowers. White and blue *Gentianopsis* was down by the road and several saw the pretty little pink *Bletilla formosana*. Moving further along the road we stopped when a large raptor was spotted on a telegraph post. This was an Upland Buzzard which proved very approachable. It didn't want to leave and we soon found why as Pat filmed the inhabitants of the small burrows all over the field – Black-eared Pikas! *Ajuga lupulina* was common.

After noodle soup courtesy of a local restaurant run by an Islamic minority from the arid northwest of China (very good!) some of us went out on a night drive for an hour and a half. This was partially successful in that we found several animals. We saw lots of foxes, at least two of which were Tibetan Foxes, and also a female White-lipped Deer.

Day 11 July 7th Cho La – a giant of a pass!

Richard had as usual been wandering around town early am and we weren't at all surprised to hear he'd seen Ravens along the main (only?!) street, however the Hume's Groundpeckers were certainly not what one expects in the middle of a town, but then Maniganga is a bit wild west and is 3800m above sea level, so it is certainly not run of the mill.

We spent the entire day covering the journey to Dege, just a few miles short of the Tibetan border. However the journey time itself was not long, maybe three hours, so the large part of the day was spent in the field and much of it near the top of a mighty pass. Our GPSs were giving 4900m at the top, that's 15,900 feet in old money! Our gradual process of acclimatization had been particularly successful and we all felt that we were very happy at this altitude! However back to the approach. The valleys were bird-filled this morning and it was difficult not to stop. We eventually did when a Little Owl was spotted being hassled by a group of Kessler's Thrushes. We saw another bird, a youngster. It seemed a bit unfair for the thrushes were larger than the owl!

As we started to rise into a picturesque valley we noticed the rocks were all carved, so many great granite boulders had giant writing on them, all carved into the stone, a most impressive sight, especially when we stopped to take photographs of a stunning lake hemmed in by mountains and with these stones in the foreground. The little green musk orchid *Herminium josephi* flowered on the bank.

Then it was up the valley further and a chance to explore the rhododendron dominated slopes above the road. We were already at 4400m but seemed hardly to have risen at all – to our south we could see great glaciers hanging off the edge of the peaks. *Rhododendron russatum* was covered in little purple-mauve flowers whilst the much larger *Rhododendron phaeochrysum* had all but finished, just a few lovely white umbels survived. There were two *Corydalis* species under the bushes, a common blue one and an elegant purple-pink one. Pierre found a couple of *Cypripedium tibeticum*. *Allium prattii* was common and there was abundant blue *Salvia evansiana*

as there would be all day. The unusual *Soroseris hookeriana* was in good flower. Below the road there was a striking community of rich yellow *Pedicularis longiflora*. This was a great spot for birds though they didn't always show themselves well. Blue-fronted Redstarts sang from bushtops and a Golden Bush Warbler disappeared quickly. A White-tailed Rubythroat was a great find.

We moved up to the top of the pass only to stop just short when we spotted a mound of blue on the hardly vegetated slope. We hurried over and gasped in admiration at our first *Chionocharis hookeri*. We wandered the slopes finding many more, most in flower and some smothered in the sky-blue with the occasional hint of pink blooms. Most were just ten centimetres across, but some approached twenty cm. The other cushions common here were the rather less showy *Arenaria polytrichoides*. Golden *Allium atrosanguineum* flowered with a couple of gentian species, and there were lots of very fine squat yellow and russet blooms of *Pedicularis oederi* to enjoy. There were *Potentillas*, lots of *Saxifrages* and even the lovely little buttercup *Ranunculus glabricaulis* with flabellate leaves and purple-edged sepals. A striking grey, black and white butterfly of the *Metaporia persuasion* was seen.

Now we reached the pass. In some respects a desolate place, but at 4900m it had every right to be. Prayer flags draped a stupa and the iron ore truck drivers and occasional other vehicles stopped and threw prayer papers to the winds chanting or shouting their wishes as they did so. Either side of the pass the land rose to ridges of shattered rock from which great scree descended, take your pick, fine mobile scree to giant boulder scree and everything in between. There was not much up here for plants. But of course this is where some of the finest grow and just a few metres down the far side of the pass Michelle produced a magnificent display of *Chionocharis hookeri* with many large plants totally smothered in blue blooms. Several of the group continued on down the road, a highlight on their route being a superb male Crimson-browed Finch, an uncommon species. Several of us took on the scree slopes above the pass hoping to find something special. In the rocks at the foot were several Black-lipped Pikas. The red-flowered *Rhodiola crenulata* was common and we found a pretty *Corydalis* with green, yellow and white flowers. The strange and beautiful *Soroseris rosularis* flowered on the first scree, its 15cm rosette of leaves flat to the substrate and topped by creamy flowers – an extraordinary looking plant. But not as amazing as the silvery dalek that was found a little further on. Just the one plant, but what a sight. Standing about 15cm tall and columnar all that was visible was the long silvery hairs that covered the plant. Looking very closely one could see pinnate leaves inside. This was *Saussurea simpsoniana* (or was it *leucoma*??) a species that is known to occur as high as virtually any flowering plant in the Himalayas, going up to around 6000m and not occurring much lower than we found it today, at 4975m. As if to try and cap this a Grandala flew along the ridgeline and then, chuckling maniacally, seven Tibetan Snowcocks flew over. They landed across the pass and I was able to watch them for some time in the 'scope. An Apollo species flew past.

We descended a little for lunch enjoying a spell of sunshine though in truth the weather had been great all morning, cloudy, but dry. Blue-fronted Redstart, Golden Bush Robin and a Rufous-breasted Accentor were seen over lunch along with a Lammergeier or two – these had become so commonplace! Then it was downhill into a beautiful valley which continued down into a gorge and eventually to Dege. We explored a side valley, still over 4000m. It was very yak grazed but scenically lovely. A green-flowered grass of *parnassus* was abundant here and as

well as *Ajuga ovalifolia* we found its look-a-like *Lamiophlomis rotata*. *Androsace mairei* was common and we found the delicate little yellow *Cyananthus flavus*. Elliot's Laughingthrushes were seen. We made one more stop down in the gorge but after admiring a Slaty-backed Flycatcher a sharp shower drove us on to Dege.

Day 12 July 8th Dege and journey to Ganze

There had been rain in the night and in the morning there were wispy clouds hanging in the deep gorge in which Dege sits, though the rain had stopped. We were packed up and off by eight fifteen or so, though we had hardly five minutes to drive to the famous Parkhang Printing Press. The impressive red building is considered one of the three most important sites for Tibetan Buddhists. It contains something like seventy per cent of Tibetan literature all in hand printed books. These books are printed on long sheets of paper that are then made into books with long—handled wooden covers. These works are then loaned out to monasteries and to local communities throughout the Tibtan region. The importance of the place could be gauged by the large number of people doing the clockwise prayer walking round the building. These provided quite a good opportunity for photography! We visited the paper makers opposite first. Several ladies were busy removing sheets of hand made paper from the frames, these apparently made from the root of *Stellera chamaejasme*! Tsebo took us on a guided walk through the place. Entering the main door we found ourselves in a brightly decorated long courtyard where a number of workers were treating the carved printing blocks preparing them for use in the printing press inside. These were a friendly bunch and allowed us to photograph them and their work. They did however insist upon having a picture of Richard and his beard! Inside we walked around the King's room where a large number of Buddhist statues were housed, then we went upstairs to the main printing place. Here about a dozen teams of two were working hell for leather at printing the pages. They do 3000 per team of two before finishing for the day and so the quicker they do it ... Several looked like father-son teams and all worked with great precision and at high speed. Pages were being produced at an incredible rate! Again we were allowed to photograph here. Then it was into the library itself where the wooden covered books were stored much as any library books would be, but of course to us they all looked the same, except for the most recent ones which had paler wood! Then it was into an area where we could watch two guys printing pictures that were meant for general consumption and here we were able to buy some pieces of printed paper. Outside we found the block engravers too and were able to buy some printing blocks.

Then it was up the long valley to the Cho La Pass. We stopped a couple of times en route, once for a large painting of the Avalokiteshvara, the Buddha of Compassion, produced in vibrant colours on a rock face. A Vinaceous Rosefinch was in the shrubbery behind. Then we had a plant stop where some fine *Incarvillea delavayi* was in bloom along with *Codonopsis campanulacea*. Searching the nearby shrubbery we found lots of Musk Orchid growing with a fine butterfly orchid *Platanthera fargesii*. There were also two tall *Androsaces* here, the very tall pink *stenophylla* and the shorter pale pink *Androsace henryi* with reniform leaves. Beautiful Rosefinch was in the bushes. We stopped again a little further up the road where a bank was covered in Musk Orchids and opposite were two species of *Delphinium* in flower and *Aconitium gymnantrum* too

Then it was up to the top of the pass and down the other side a little. We stopped for lunch and

then spent an hour walking around an open side valley at about 4600m. This was a beautiful spot. The rocky crags and scree descended into the greener valley drained by a stream that started just a few hundred metres above us. Lammergeiers and a Golden Eagle flew over. Rufous-breasted Accentors and Blue-fronted Redstarts were common and we also saw an Alpine Accentor. There was abundant purple flowered *Rhododendron russatum* on the slope and lots of fine herbs including four *Corydalis* species, pinky *Ugeniana*, blue *Kokiana*, yellow *Dasyptera*, and *Hamata* with yellow blue-tipped flowers. Two less showy *Saussureas* were in evidence, one was *graminifolia*. The delightful yellow *Crematodium reniforme* had open hanging bright yellow flowers. There were lots of *Pedicularis przewalski*, *Pedicularis superba* and other members of this fine genus. *Saxifraga melanocentra* was in good bloom and we also found a lovely deep blue *Codonopsis*.

Then it was time to move on as we had a long journey still to Ganze. We made only one brief stop on route, a chance one as it turned out. As the drivers sorted out a phone call we saw an abundance of Black-eared Pikas and Himalayan Marmots on a grassy area where Hume's Groundpeckers were also common. Just before leaving a Citrine Wagtail and then two Twite flew in.

We arrived into Ganze at around seven in the evening and settled into the now familiar Golden Yak before going out for another very good evening meal.

Day 13 July 9th Along the Yulong River and then to Litang

We woke to a grey and murky morning with cloud hanging low over the landscape. After an excellent breakfast in the cheerful little cafe just by the hotel we were on our way by eight-thirty. Or at least an attempt to be so for all the main road in the middle of Ganze was under reconstruction and so our drivers had to find their way round the back (posh!) streets to get back onto the highway east. Once done we soon found ourselves following the course of the Yulong River southwards through these great mountains. This is a mighty river, one of the main tributaries of the Yangtze and during the nearly four hours spent by its waters it never seemed to have a calm moment. Indeed for such a large river it travelled with a ferocity that was surprising. It was also an amazing red colour! The landscape we descended through was spectacular, dropping from the high grasslands around Ganze through steep sided forested lands and into gorges interrupted by areas of more serene landscapes where man had managed to settle. The villages, and indeed individual farm houses, were striking. They were huge. Each was three stories high and clearly contained many and large rooms. They looked like they could withstand pretty much anything so well-built were they. Apparently three generations would live in them at the same time (floor each?) though they still spoke of wealth and security. We passed piles of mani stones, stones that have prayers carved into them, as well as many stupas and temples. We hardly had time to stop as we needed to get many miles under our belts this morning, merely contenting ourselves with a comfort stop and a brief stop to look at a *Primula* and a *Pedicularis*, the later intriguing as it didn't fit anything in the flora!

We stopped for lunch just off the main road by the start of our route up to the pass over to Litang. Swallowtails, fritillaries and various satyrids fluttered about and White-capped Water Redstarts were as ever noisy near the river, not as noisy as the cicadas though! We found a couple of these beautiful beasts, patterned in a mosaic of green and gold. A *Ceratostigma*

(probably willmottianum) had blue flowers on the roadside and we also found a nice Delphinium. After lunch we popped back down the road for a look at some Clematis delavayi and chanced upon an immature Grey-capped Greenfinch. Then it was up into the hills, though we were still hardly below 3000m. Sadly the rain again started and stayed with us now all afternoon. It was a pity as this was one of the floweriest passes we had seen. The road wound its way up gradually passing the neat village of Junba and thence into slopes sparsely covered in conifers. We searched for Cypripedium yunnanense under these but they had just finished, instead we found Epipactis humilior and Ponerorchis chusua. A Parnassia was common and we saw many louseworts including the pretty yellow and white Pedicularis tricolor and the odd Pedicularis cyathophylloides with its large pink flowers and cupped leaf bases. Then it was on up the road passing numerous Oriental Turtle Doves. We reached around 4000m and took a look at a fantastic little flowery place. Massed displays of Primula sikkimensis, pink Primula hoi, pink louseworts and yellow louseworts made for a memorable display. There were some great little clumps of Pedicularis siphonantha shining bright cerise and the majestic similarly coloured flowers of Incarvillea mairei were a sight to behold. Up the road further and we explored the uppermost forest edge, still in the rain. Here Lemon-rumped Warblers and Rufous-vented Tits were still active enough, and again there was a mass of flowers along a stream valley including all of the above plus Iris goniocarpa and the splendid deep pink drumsticks of Androsace spinulifera.

Our last stop was in the alpine meadows juts below the pass and what a spot it was. We followed a shallow stream valley up hill into a flower wonderland. The stream was lined with the aforementioned Primulas and there were mixed in with them Parnassias and Fritillaria unibracteata. Brilliant Incarvilleas smothered a bank where Ligularias smothered all else in yellow. The extraordinary flat inflorescences of Dolomeiaea forrestii were splattered over the ground but even these couldn't compete with the spired lanterns of Rheum alexandrae, the palest lime green inflated bracts covering the flowering spikes up to a height of a metre or so. There were a few to start with but as we rounded a corner in the stream there were hundreds, lighting up the gloomy moorland landscape for us. There was plenty more, Corydalis hamata, tall green Parnassia viridiflora, an hepatic phase Cuckoo, and a strange red parasitic Boschniakia himalaica, but we had to go on, it was now getting very late. We soon crested the pass and descended, passing a Hare, two Tibetan Partridges and lots of Hume's Groundpeckers, as we went. We soon started passing nomadic herders and their number rapidly increased as we reached a spot where they were to hold some kind of festival. However tents, yaks and herders hardly seemed to diminish for the next twenty kilometres before we descended into Litang. Hardly the right word really for Litang is at 4000m above sea level, the highest town in Sichuan, and was decidedly cold this afternoon. However our hosts gave us a warm welcome and after a hot shower we were ready for the evening meal.

Day 14 July 10th to Yajlang

Some suffered a bit from the dog chorus during the night however all seemed quite cheery at breakfast especially given the various items on offer, these for the first time on the tour including fried eggs! The staff had been very attentive and one girl, aided by our trusty team, was running, literally, to bring breakfast to our table.

We started the morning at the Litang Monastery. Like many of the region's monasteries this

was rebuilt after the cultural revolution and what a spectacle it was especially rising from the rather one-horse-town surroundings of Litang. Tsebho took us round the monastery. As soon as he'd started to give us some background in the courtyard a group of three monks walked past, one wearing the golden cloak of a teacher. He was in fact one of the main teachers at this monastery of over a thousand monks, and certainly exuded the air of one of easy importance. We were told that if we wanted to go inside we'd better go pronto as they'd be closing the main hall to the public shortly as the monks would be meditating. Though this produced a rather rushed passage through the beautifully murrled and pillared hall it was one with atmosphere as monks were already getting into position and chanting. Tsebho tried to explain some of the main images pictured on the walls but we had to move on. Outside we moved to the monastery's kitchen, an amazing place, where tea and meals were made for such a large number of incumbents. The size of the kitchen utensils spoke for themselves and the ovens were fired by half trees! Outside Tsebho gave us some of the history of Buddhism in Tibet, a little of the various sects, and of the importance of Litang as the birthplace of the seventh Dalai Lama. Meanwhile we were joined by a very good natured and curious group of monks and a couple of elegantly hatted ladies (though this doesn't differentiate them from all the other hatted ladies that populate this land). These provided good photographic opportunity!

Then it was onwards with our journey. We left the town heading upwards which is always impressive from 4000m! In fact during the entire day our road took us along a ridge keeping us between 4000m and 4500m until our final descent into Yajlang. The landscape was not so much spectacular as big with grassy steppe covered ridges of a similar height stretching off in all directions. Occasional glimpses of lower regions showed thick forests coming up to meet these grasslands in the sky. We stopped several times in the morning, the first of which was a brief sortie up a valley where *Stellera chamaejasme* was in both yellowish and pinkish forms. *Meconopsis henrici* was seen and there was the fine sight of a huge *Inula/Ligularia* about to flower. In some bushes we saw Stonechat, Golden Bush Robin and pipits. The nature of the terrain was brought home to us by our next stop. We explored a shallow slope that was covered not in grass but by a small *Isolepis* species or similar, for this was tundra, the ground almost permanently frozen, and even now in July it was hard underfoot and slippery to those of us in wellies! There were few flowering plants in this community notably a lovely *Pedicularis* however birds did include Tibetan Snowfinches and Hume's Groundpeckers, both in numbers, and a few each of Shorelark and Twite. Further along the road we reached a low pass (so 4300m or so!) where yaks and a couple of horses grazed amongst an impressive display of *Rheum alexandrae*. This made for a memorable photographic spectacle. The tundra here exhibited a characteristic form of frost-heaving associated with shallow gradients, illustrated by the formation of hummocks in lines. Shorelarks and a Hume's Short-toed Lark were found between these.

We moved some way along the ridge stopping for lunch overlooking much *Salvia evansiana* and *Ligularias*. The *Lilium lophophorum* here was of a curious pinky-peach colour as well as the normal yellow form. In a gully below the road I found a family of the rare Pink-rumped Rosefinch. Lunch was enjoyed above the road overlooking a vast area of land as fritillaries kept Tony busy and a Lammergeier flew by to inspect the dead yak down in the valley below. Further afternoon stops saw us enjoying more *Rheums* and also the lovely blue *Corydalis pachycentra* by a stream then throwing prayer flags on the highest pass of the day, (4629m but our GPSs suggested 150m lower) and noting the fine *Pedicularis decorissima* there.

Our major stop of the afternoon involved an exploration up a side valley just below the pass. The lower areas by the stream held little we didn't already know, however as we rose up through the *Rhododendron* scrub we soon started to find new things such as *Androsace limprichtii* and the parasitic *Boschniakia himalaica*. However it was the screes which gave us much cause to celebrate. For here were some special plants, most of them *Corydalis*! First was a lovely species with pale blue and white flowers with black centres, these accompanied by the pink-lavender *Corydalis porphyrantha*. Pierre found the cream of *Corydalises* though with the extraordinary *benecincta* a beautiful species with large pinkish flowers and amazing scree-coloured leaves. A Golden Bush Robin appeared briefly but soon our attention was drawn back to the plants as we looked at the rocks above the scree. Here was the delicate *Primula blinii* as well as new *Pedicularis* species and the lovely *Paraquilegia microphylla*. It was all we could do to get down fifteen minutes late!

All that remained was for us to get down to the hotel however we did make one more stop for the bank that had more of the same *Primulas* as above and in these meadows were abundant *Primulas sikkimensis* and *secundiflora*.

Day 15 July 11th Over the Zhedou Shan to Kangding

We set off at nine and followed the river valley for a short while before turning up into the hills. This was a beautiful valley full of mountain slopes covered in natural or at least semi-natural vegetation and with regular small hamlets comprised of the typical large square houses of the region. We made a stop when *Lilium leucanthemum* was spotted from the vehicles. These were impressive specimens, the variously coloured flowers, yellow through to dull reddish-brown were from one to seven per stem and some of the plants stood two metres high. *Dianthus superbus* was in good form and we saw *Siphonostegia chinensis*, the red-berried *Rhamnus chinensis*, and lovely *Thalictrum delavayi*. Speckled Wood Pigeons flew over and in amongst the bushes were three 'laughingthrushes', Elliots, Chinese Babax and Giant Laughingthrush.

We moved up the valley, waiting until the top to stop again. Here in the company of some seemingly un-puffed cyclists we took a moment to adjust to the 4250m altitude and then started looking around. Prominent amongst the many dwarfed alpiners up here was the red cushion forming *Silene davidii*. There were also both blue and yellow *Comastomas* and lots of the lovely *Lilium lophophorum*, here in both yellow and reddish forms. A Streaked Rosefinch flew in and perched for a while starting off a sequence of good birds including Lammergeier, a singing male Long-tailed Rosefinch, a perky little White-browed Tit-Warbler, lots of noisy Kessler's Thrushes and Olive-backed Pipits.

We moved on to the area between the top of the twin passes but stopped again after only a few hundred metres as a *Meconopsis* caught our eye, this a very small neat form of *lancifolium*. Growing with it was the lovely lavender, pink and yellow *Corydalis* as well as the raspberry-ripple ice-cream *Pedicularis decorissima* a tiny white flowered *Rhododendron*. Another White-browed Tit-Warbler was seen here. Then it really was on to lunch, taken in a small settlement in the valley bottom, but still at 3500m above sea level! After a very good lunch we were on our way up the new main road over the Zhedou Shan. This impressively smooth road soon took us up through rather more open country than of late to the pass at around 4300m. Though a similar altitude to the last pass this one had an altogether different character due to the

proximity of higher mountains roundabout and also to the closeness of Kangding, a reasonable sized city. So here we saw people dressed much more in western, or should I say, modern Chinese clothes, than we'd seen of late! We took a walk up the path towards the upper prayer flag area, but soon gave up the path for the veritable garden that grew alongside it. The flowers were astonishing up on this stretch. Violet—blue *Meconopsis lancifolia* hovered above vast pink cushions of *Androsace rigida*. Yellow *Astragalus yunnanense* grew with reddish *Hedysarums* and a purple *Astragalus*. The pinky-violet *Primula dryadifolia* was common and there were many buttercups and potentillas providing yellow. The long-tubed *Pedicularis siphonantha* had fine purple flowers whilst those of the wonderful white and deep purple *Pedicularis* were a sight to behold. Shining blue *Corydalis pseudoadoxa* was joined by yellow *Corydalis lineariloba* and there were mats of red *Sibbaldia rosea* and another *Androsace*, this time the white *zambalensis*. Further along we explored the scree and found some small colonies of the bizarre high altitude *Saussurea medusa* as well as another very fine *Corydalis*. *Primula amethystea* was noted on the way back to the vehicles as were Plain Mountain Finches.

Our last main stop of the day was to explore a stream valley a couple of kilometres down, though still at 4000m. Our aim here was to find the 'black primula' and we weren't disappointed, just ten minutes or so after starting our search we found it. An extraordinary flower that literally is black – one could maybe discern a touch of purple in there but.... We found just the three in flower, and a few gone over, but this still represented a good find as this incredibly rare plant, though discovered a hundred years ago had not been found since until just three years ago and since that time has only been found in two spots! It was far outnumbered by the much smaller *Primula dryadifolia*. There were also a few of the larger *Primula sikkimensis* and *Primula secundiflora* as well as the lovely blue *Primula muscarioides*. Lots of *Ponerorchis chusea* flowered under the *Rhododendron* scrub and there was a lot of a small white orchid too. The strange stemless thistle *Sorozeris rosularis* was just about to open its yellow flowers (we'd already seen some fine flowering *hookeri* on the pass). There were colonies too of *Veratrum stenophyllum*. I watched a very cute little Kansu Pika on the slope above the stream and this proved a great bird area with Dark-rumped Rosefinches, a very confiding pair of White-winged Grosbeaks, several Rufous-breasted Accentors, White-tailed Rubythroats and Tickell's Warblers.

On the way down we made a final stop for a good display of the dark violet *Iris chrysographes*, their falls marked with gold. Then it was into the modernity of Kangding and the comfortable Gesar Hotel.

Day 16 July 12th Luo Gou Haii

A rather relaxed start this morning saw us leaving some time after nine and heading up the valley into the mountains. Passing the new government blocks being built well up the valley we could see, briefly a huge snow-capped peak in the distance. This is one of eleven peaks over 5000m that culminate in the 7500m Gongga Shan, though sadly the latter is not easily visible from this area.

We stopped half an hour out of town at the start of a series of switchbacks. Here we explored the slope for a while enjoying the abundant *Iris chrysographes*. There were orchids here too, notably our first Greater Butterfly Orchids as well as a goodly number of *Ponorchis*, *Bletilla*

ochracea and *Gymnadenias*. Elliot's Laughingthrushes were nosy in the shrubbery. Hiding under the shrubbery were a few *Primula watsonii*, another of the capitate headed violet-blue group, this one with very small dark flowers. Moving up the hill a few switchbacks we explored an idyllic little spot covered the delightful yellow lipped and purple beaked *Pedicularis torta* as well as lots of fine *Iris* and the improbable orange *Primula cockburniana*. Add to this the pink *Geraniums* and the yellow *Ligularias* and it was a very colourful scene. Scattered amongst it was the lovely large blue *Corydalis trifolia* and lots of white *Parnassias*. Yellow *Primula sikkimensis* was seen, as was the pretty pale violet *Primula muscarioides*. We looked again at the *Gymnadenias* here, the regional form of *conopsea* with shorter than the European form's spurs causing some disagreement. There was also the white *Gymnadenia emeiensis* with stout flowerheads, and the similar but smaller and pale pink *Gymnadenia crassinervis*. A tall multi-tiered *Pleurospernum* resembled a wedding cake.

We continued up towards the lake stopping briefly at a spot where I found the recently finished *Primula szechuanica* and Pierre some *Cypripedium tibeticum*, all among lots of *Primula dryadifolia*. We turned off the road now, already at close to 4000m above sea-level and bumped along a track for couple of kilometres. Now we were in *Rhododendron* country, with much slightly dwarfed *phaeohrysum* by the road, now past flowering. Under it was little in flower, just a couple of *Cremanthodium* species, however there was a beautiful mat of mosses and lichens and in one spot, a small group of *Cassiope pectinata* in flower. Suddenly we found ourselves by a lake, the cloud was already swirling down around us and it, the large boulders studding the near shore, crowned with mosses, lichens, *rhododendrons* and assorted blooms, looking like something out of fairyland. A pair of Ruddy Shelduck watched us nervously but the White-capped Water Redstarts hardly seemed to care! At the end of the lake is a sand extraction area, and we pulled up and had our picnic just short of this. It would have been an idyllic spot though in the swirling mists there was no doubting the spot had atmosphere! We wandered about for a few minutes finding several orchids. There was a lot of the diminutive *Ponerorchis brevicarata* with one or more usually two small purple flowers. There was a little (very little) white orchid with two leaves and four or five flowers with a three lobed lip, this gem only an inch high! And we finally found the real *Gymnadenia* orchides, with a tight-knit ruby-red inflorescence. A good example this of how 'picture book' mistakes can lead to many giving plants the wrong names, for confidently illustrated in at least two flower guides to the area is the stocky white *Gymnadenia* orchides, whereas true orchides is a smaller, very stocky plant, with deep red flowers!

After lunch some of us walked up the valley in the thick fog! Several took the sensible option and relaxed in the vehicles for a while. Though the cloud cleared a bit for a while it returned later so with very poor visibility we did give up after an hour and a half. But a good time was had in the meantime! Rufous-breasted Accentors, White-winged Grosbeak, White-tailed Rubythroat and Blue-fronted Redstarts were all seen on the way up. On dry bluffs we saw massed displays of *Primula dryadifolia* with a strange yellow flowered plant that we surmised might be some member of the *Gentianaceae*, though its calyxes were covered in rusty glandular hairs. I continued up into the screes which were rather less interesting than screes had been of late (no *Corydalis* or *Saussurea* species!) however one or two nice things fell my way. There was a white *Lloydia* on the cliffs, out of reach, but nearer at hand were two yellow species, *delavayi* and *tibetica*. Another *Meconopsis* was found, this the very prickly (dark-based prickles) *horridula*, differing from *rudis*, the other species in this region with dark based prickles, in having many

flowers on single scapes, as well as being VERY prickly! Whilst examining this I was suddenly aware that I was not alone. No, not another group member, but a Hog Badger, snuffling past me on his way somewhere. Slightly larger than our Badger with similar markings but a slightly different face pattern and with a distinctive long hog-like snout, this was a memorable encounter. The birds didn't like him much, which allowed me great views of Crested Tit-Warblers (female and young) and White-winged Grosbeak again as well as Tickell's Leaf Warbler.

With the fog just intensifying we gave up and went downhill, though we didn't have to go down far before the weather improved. So we explored another area of hillside. A path took us past some *Cyananthus flavus* and another larger white species with blue lines. In the shrubbery we found the nice *Rhododendron orbiculare* in flower, this mostly going a little over, but some plants still had the bright red buds, the flowers opening white or pinkish. Red primroses could not be keyed quite anywhere except *Primula polyneura* though they didn't look all that much like the one's we'd seen on the Balang Shan. Christopher found a group of *Habenaria fargesii* orchids with their fine coiled lip side lobes. *Iris chrysographes* and *Primula cockburniana* put on a fine show here, the mix of colours added to by *Primula sikkimensis* and *Primula secundiflora*.

We made a last stop down at the same area as this morning as we thought we might be able to add some further orchids to the list. In the end we found little new though good numbers of *Platanthera chlorantha* and *Ponerorchis chusua*. There were also *Oreorchis foliosa* again, and some *Epipactis humilior*. We found the parasitic *Boschniakia himalaica* just past flowering and the Ericaceous shrub *Lyonia villosa* in good flower. However the best find went to Tony who produced a memorable *Notholirion bulbiferum* which all braved a steep slope to see – a most impressive plant. Then it was down to our hotel, ready for dinner and out to a Tibetan barbecue just fifty metres from the hotel. This was quite an experience and we all wolfed down the various spicy and delicious barbecued meats, and were getting pretty full by the time an abundance of barbecued vegetables including lotus and gourds arrived. Then a lovely noodle soup. Very delicious, but as usual we couldn't eat it all!

Day 17 July 13th to Chengdu

Today we had the long journey back to Chengdu, some 450km, though the latter half was along a big highway. Nevertheless the long haul down out of the mountains took much of the day, though was scenically wonderful and did have some stops of interest along the way. In fact we passed so much that we could have stopped and enjoyed, the lush subtropical lower valleys were full of misty fern gardens that no doubt contained many wonderful new flowers and indeed some new birds too, but time was extremely limited so we contented ourselves with only stopping for the most striking of lilies!

There were three of these. Soon after we left Kangding we stopped when orange turk's-caps were seen on the roadside cliffs. These proved to be *Lilium davidii*. Also on the cliffs was flowering *Corallodiscus flabellatus*. And a white long-tubed lousewort with a striking rose-purple beak, this either *Pedicularis variegatus* or the microphyton form of *Pedicularis przewalski*, though as both here were at least a thousand metres lower than their usual given ranges one wonders whether these could have been something else.

Next, an hour lower, were the gargantuan white funnel flowers of *Lilium sargentiae*. These blooms were fully twenty centimetres long and with up to half a dozen flowers on each two metre tall stem were an arresting sight. They were very fragrant too. We struggled up a bank only to find that they were roadside for the next twenty kilometres! There were all kinds on new plants here including a spectacular purple climber.

Further still we reached a tunnel and again noted lilies just before it. These were big, though not quite as big as the *sargentiae*, and were a clear yellow. They seem to be a form of *Lilium primulinum* though we couldn't reach them to check properly. Collared Finchbills, Japanese White-eyes and Chestnut Thrushes were seen here, the latter singing lustily in the rain.

Then it was on down the valleys, winding our way past much wonderful scenery, lush cliffs draped in ferns and other greenery. Just as a restaurant hove into view we spotted something interesting flowering on said cliffs. As Adong went in to sort out our catfish lunch we admired a fine plant of *Dendrobium moniliforme* and indeed spotted another orchid above, though the large white flowers of *Dendrobium nobile* were out of reach. A beautiful purplish *Hydrangea* was one of several species noted on the descent. A large Nymphalid, a grass yellow, and a superb Chinese Peacock Swallowtail flew around during lunchtime. Lunch was excellent, the catfish stew truly tasty. Though we could have spent all day in this productive looking area it was really time to get going. We had just about reached the plain when we stopped at Luding to take a look at the 18th century suspension bridge, the last place east of Tibet where Mao's Red Army could cross the mighty Dadu River without making a thousand mile detour. The crossing inspired Mao to write (roughly translated) "The Red Army fears not a difficult march, ten thousand torrents and a thousands crags is nothing, the five ranges unfold like small waves. The majestic rolling Wumeng are mere drops of clay. Warm are the soaring cliffs lapped by the waters of the Jinsha. Cold the iron chains spanning the Dadu Bridge. Joyously we cross the thousand miles of snow of the Min Mountains. After this the Three Armies will still be smiling from ear to ear" Well, we'd had it somewhat easier (!) but we had seen some of the majestic mountains that Mao and co had moved through and had some idea of the physical aspects of moving through such harsh and high country! Now it was on into the soft lowlands where we stopped outside Ya'an by a monument to the tea couriers as we were now on the edge of tea country. The white headed form Black Bulbul flew over and we also saw White-browed Laughingthrush and lots of dragonflies including a huge 'river cruiser'.

All that remained was the long motorway into Chengdu and once there an hour and a half's shopping in the Tibetan quarter before heading to the excellent little Wengjun Mansion hotel. Adong ensured there was a slap-up menu prepared at the restaurant opposite, a fitting finale to our sampling of Sichuan's excellent cuisine, an experience enjoyed thoroughly by all I think.

Day 18 July 14th Departure

Our morning trip to the airport went without a hitch and we said a sad farewell to Tsehbo, Nongbu and Adong, our trusty crew, and promised to return soon!

Itinerary Summary

28 th June	Chengdu arrival and visit to Panda Research Centre
29 th June	Chengdu to Wulong. Afternoon along the Yinlong Trail
30 th June	Wulong. Lower Balang Shan
1 st July	Balang Shan Pass and to Rilong
2 nd July	uphill from Rilong then to Danba
3 rd July	Danba to Luhuo
4 th July	Luhuo to Ganze
5 th July	Ganze – Dzo Dala Pass
6 th July	Pass north of Ganze and then to Maniganga
7 th July	Maniganga to Dege via the Cho La Pass
8 th July	Dege to Maniganga via the Cho La Pass
9 th July	Ganze to Litang along the Yulong River
10 th July	Litang - Ganze – Dzo Dala Pass
6 th July	Pass north of Ganze and then to Maniganga
7 th July	Maniganga to Dege via the Cho La Pass
8 th July	Dege to Maniganga via the Cho La Pass
9 th July	Ganze to Litang along the Yulong River
10 th July	Litang to Yajlang
11 th July	Yajlang to Kangding via the Zhedou Shan
12 th July	Kangding – Luo Gou Haii
13 th July	Kangding to Chengdu

Systematic List Number 1 Flora

The taxonomy and systematics of the following list follows the Flora of China, many volumes of which are now published in English, and which is available on line at <http://hua.huh.harvard.edu/china/>

Pteridophytes

<i>Adiantum davidii</i>	Common in parts of western Sichuan, typical maidenhair fern
<i>Botrychium lunaria</i>	Dzo Dala
<i>Dryopteris fragrans</i>	Wolong
<i>Osmunda claytoniana</i>	Interrupted Fern. Luo Gou Hai
<i>Pteridium aquilinum</i>	Bracken. Wolong

Taxaceae

<i>Taxus yunnanensis</i>	Wolong
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Pinaceae

<i>Abies georgica</i>	noted in the Luhou area
<i>Cedrus deodora</i>	scattered in upland forests
<i>Larix potanini</i>	noted in the Luhou area

Salicaceae

[<i>Populus nigra</i>]	or something similar as the common roadside poplar on grasslands around Ganze]
[<i>Populus szechuanicus</i>]	magnificent trees on the descent from Langdu]
[<i>Salix</i> spp]	various species seen, often planted]

Betulaceae

<i>Betula chinensis</i>	red-barked species. Wolong and Luhuo areas
<i>Betula pendula</i>	Danba area
<i>Betula utilis</i>	widespread

Myricaceae

<i>Myrica rosea</i>	Long racemes of pink flowers, shrub along rivers. Near Ganze
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Phytolaccaceae

<i>Phytolacca polyandra</i>	common around Wolong
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Juglandaceae

<i>Pterocarya delavayi</i>	wingnut sp. Wolong area
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Fagaceae

<i>Quercus aquilifoliaeae</i>	Above Wolong, Balang Shan and Yajlong areas
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Ranunculaceae

<i>Aconitum gymnantrum</i>	Widespread roadside species with deep blue-purple flowers
[<i>Aconitum polyanthum</i>]	fine light blue monkshood. Not seen in 2010]
<i>Aconitum tangutica</i>	Fine dwarf species on Dzo Dala
<i>Anemone demissa</i>	A hugely variable species with several distinct forms, the following two of which were widespread
<i>Anemone demissa</i> var <i>major</i>	Striking white variety with large dissect bract
<i>Anemone demissa</i> var <i>villosissima</i>	Sky blue variety common Litang, Kangding, etc
[<i>Anemone obtusiloba</i>]	Lu Gou Hai. Not seen in 2010]

<i>Anemone rivularis</i>	Very wide inflorescence with long pedicels and purple backed white flowers. Wolong and Danba areas
<i>Anemone rupestris</i>	Extensive drifts on grasslands in white to pale yellow
<i>Anemone rupestris</i> var <i>gelida</i>	Dwarf plant on Cho La pass, white flowers
<i>Anemone tomentosa</i>	Mid-altitude valleys e.g. Rilong. Leaves heavily felted beneath, pink flowers
<i>Anemone trulliifolia</i>	Dzo Dala and Cho La passes. Unusual oblong leaves with three points
<i>Anemone vitifolia</i>	Pink flowers, mid-altitude forests, roadsides in wetter areas. Danba
<i>Anemone yulongshanica</i>	Dzo Dala and Cho La passes. Variable flower colour
<i>Anemone</i> spp.	Many confusing anemones were seen, particularly white ones and unfortunately remain unidentified
[<i>Aquilegia rockii</i>	Widespread and scattered purple flowers. Not seen in 2010]
[<i>Batrachium bungei</i>	A crowfoot, occasionally seen in ditches and ponds. Not seen in 2010]
<i>Caltha palustris</i>	Widespread in wet areas
[<i>Caltha palustris</i> ssp <i>umbrosa</i>	Xiling Shan in wet areas. Not seen in 2010]
<i>Caltha scaposa</i>	common. Dwarf highland species with large flowers
[<i>Cimicifuga foetida</i>	Rilonguan in bud. Not seen in 2010]
[<i>Clematis akeboides</i>	Ganze, greyish rounded leaves, brownish purple backed flowers. Not seen in 2010]
<i>Clematis delavayi</i>	small shrub. Pinnate leaves and large white flowers. Noted alongside the Yalong River and near Yajliang
<i>Clematis montana</i>	showy shrub with cascades of 4-petalled flowers. Wolong and Kangding areas
<i>Clematis rehderiana</i>	common mid altitude species with yellowish campanulate bell-flowers.
<i>Clematis tangutica</i>	large yellow bell flowers, acute tips to corolla segments, strongly scented. Widespread in higher valleys
<i>Clematis tibetica</i>	frequent along roadsides, often prostrate but also scrambling brownish to orangey-yellow, similar to <i>tangutica</i> but smaller flowers
[<i>Delphinium beesianum</i>	large deep blue flowers with long spurs, Chola Pass. Not seen in 2010]
[<i>Delphinium</i> sp	fine species with lilac-blue flowers on Xinjun Pass. Not seen in 2010]
<i>Oxygraphis glacialis</i>	scattered in highlands, a miniature celandine
<i>Paeonia veitchii</i>	fine species with dissect leaves and deep pink flowers, widespread especially on areas of scrub/larch adjacent to grasslands from Wolong to Ganze
<i>Paraquilegia microphylla</i>	lovely pure white form on Xiling Shan
<i>Ranunculus diffusus</i>	leaflets ternate or 3-parted. Looks like an annual (but isn't) and grows in grassy places by streams, lowlands. Noted at Chengdu Panda Centre
<i>Ranunculus glabricaulis</i>	leaves 3 sect nearly to middle. Sepals dark purple or greenish. Dwarfed plant. Cho La Pass
<i>Ranunculus japonicus japonicus</i>	rather like meadow buttercup <i>Ranunculus acris</i> . Wolong

<i>Ranunculus melanogynus</i>	black carpels make this a very distinctive species. Plant dwarf, leaves glabrous 3-partite reniform. Dzo Dala. Not recorded in Sichuan by the Chinese Flora (though in S Xizang) but given how easy it is to recognize...
<i>Ranunculus membranaceus</i>	basal leaf oblong, undivided, hairy. Luhou
<i>Ranunculus nephelogenes</i>	basal leaf undivided, glabrous, ovate. Petals rounded. Dzo Dala
<i>Ranunculus petrogeiton</i>	dwarfed plant, basal leaves 3-set, thin, glabrous. Balang Shan
<i>Ranunculus tanguticus</i>	basal leaves 3-sect, further divided with narrow segments. Balang Shan, probably elsewhere
<i>Semiaquilegia ecalcarata</i>	quite frequent alongside streams and rivers in western Sichuan, looks very much like an <i>Aquilegia</i> with bits missing
<i>Thalictrum alpinum</i>	diminutive, flowers in a raceme, leaves basal. Balang Shan & Dzo Dala
<i>Thalictrum delavayi</i>	tall lilac-pink species. Abundant along valleys in Western Sichuan
<i>Thalictrum javanicum</i>	common in Danba area. Yellowish green flowers, tall
<i>Thalictrum omeiense</i>	tall white species. Danba area
[<i>Thalictrum przewaltzii</i>	Tall white sp in Dege area and elsewhere. Not seen in 2010]
[<i>Thalictrum virgatum</i>	Delicate green flowered species. Not seen in 2010]
<i>Trollius farreri</i>	purple backed golden flowers. Leaves cut almost to base. Ganze area, esp Dzh Dala
<i>Trollius ranunculinus</i>	typical deep yellow trollius, common, dissect palmate leaves. Commonest in high areas
<i>Trollius yunnanense</i>	Ganze, etc, palmate-parted leaves. The common globe-flower at mid-altitudes
Berberidaceae	
<i>Berberis dictophylla</i>	Balang Shan
<i>Berberis jamesiana</i>	Wolong area
<i>Podophyllum hexandrum</i>	noted in fruit, various places, woodland edge
Papaveraceae	
<i>Digranostigma leptopodium</i>	drier roadsides at mid-altitudes – like a large flowered Greater Celandine
<i>Meconopsis delavayi</i>	?or at least similar to this! Balang Shan. Tall stems with nodding purple-lilac flowers
<i>Meconopsis henrici</i>	Beautiful large lilac-purple flower near Luhou and Ganze and also on the Zhedou Pass. Like <i>lancifolia</i> except flowers larger and held more upright and with whitish anthers
<i>Meconopsis horridula</i>	Luo Gao Hai. Solitary blue flowers on many scapes, leaves all basal, plant very prickly with straw-coloured spike-like hairs with dark bases. Base of scree
<i>Meconopsis impedita</i>	Between Litang and Yajlang. Grassy passes. Leaves all basal, flowers singly on scapes, bristly plant, flowers purple with white anthers
<i>Meconopsis integrifolia</i>	abundant above 4000m on Balang Shan and widespread elsewhere – distinctive three veined leaves. Yellow flowers.
<i>Meconopsis lancifolia</i>	Common purple species seen on Balang Shan. Lanceolate leaves, flowers looking downwards, yellow anthers.
<i>Meconopsis pratii</i>	between Danba and Luhuo. Bristly plant with leaves both basal and cauline and with inflorescence with many blue flowers

<i>Meconopsis punicea</i>	perhaps the most extraordinary species seen - red with curious downward pointing petals, on Balang Shan and north of Luhuo
<i>Meconopsis quintuplinervia</i>	on the Dzo Dala south of Ganze, lovely nodding lilac bells.
<i>Meconopsis racemosa</i>	fine blue species common in many places e.g. Ganze, Dege. Blue to purplish spicate with very bristly leaves. Chola Shan population has distinct white spots at bristle bases and may be a different taxa
<i>Meconopsis rudis</i>	Balang Shan, spicate with blue flowers and dark purple spots at bristle bases

Fumariaceae

A stunning array of *Corydalis* were seen – many not identified!

<i>Corydalis adunca</i>	Luhuo area. Roadsides with orangey flowers
[<i>Corydalis appendiculata</i>	Dark blue species with orbicular broad-lobed leaves on Xiling Shan]
<i>Corydalis atuntsuensis</i>	Lovely elegant, slender yellow species in alpine turf south of Ganze and Zhedou Shan area. Dark green, narrow leaves
<i>Corydalis benecincta</i>	between Litang and Yajlang. Fabulous scree dweller with glaucous-blue rounded leaflets and flowers and large pale pink blue-purple tipped flowers
[<i>Corydalis chandoensis</i>	Taller species with pale yellow flowers with arcuate recurved spur, narrowish spikes, Ganze Pass near seeps 2008]
<i>Corydalis conspersa</i>	Cho La Pass. Similar to <i>hamata</i> but differences in bracts and overall 'jizz', very leafy and tall.
<i>Corydalis curviflora</i>	Balang Shan. Electric blue flowers, variable in stature.
<i>Corydalis dasyptera</i>	Lovely deep yellow species on the Dzo Dala and Chola Passes, dense inflorescence, divided glaucous leaves with acute tips to leaflets
<i>Corydalis eugeniae</i>	Cho La Pass. This is the pink/purple form with purple veins (the possibly distinct <i>Corydalis crassicalcarata</i>), leaflets glaucous one side, green the other, pinnate, 3 pairs of leaflets
<i>Corydalis flexuosa</i>	Dainty blue species in forest at Wolong. Ferny leaves
<i>Corydalis hamata</i>	Handsome dense flowered yellow species with blue mark at flower tip. Noted on the Dzo Dala and Litang area. Spreading mats in rocky seeps
[<i>Corydalis kokiana</i>	Very fine tall blue species on east side of Chola Pass]
<i>Corydalis lathyrophylla</i>	Cho La Pass. Lavender pink-tinged flwrs. Pinnate leaves, two paired. Subspecies <i>dawuensis</i> ?
<i>Corydalis lidenii</i>	?probably this species. Cho La Pass. Pale purple flwrs, bracts rhomboid, small plant
<i>Corydalis linarioides</i>	Fine yellow flowers with orange tips, variable narrow leaves. Luhuo and also common in the Zhedou Shan. Part of the <i>linarioides</i> group which includes similar but smaller <i>atuntsuensis</i> .
<i>Corydalis melanochlora</i>	a stunning species on Balang Shan pass c4500m. Dense sky blue to light blue flowers with finely cut leaves sprouting from scree
<i>Corydalis pachycentra</i>	Balang Shan. Brilliant indigo blue flwrs with upper petals tipped with white.
<i>Corydalis panda</i>	Balang Shan. Flowers blue, inner petals often white at tip.
<i>Corydalis porphyrantha</i>	tallish dark purple flowered species. Between Litang and Yajling
<i>Corydalis pseudoadoxa</i>	Zhedou Shan and Luo Gou Haii. Very dwarf, blue flowered
<i>Corydalis pseudobarbisejala</i>	Balang Shan. Flowers clear azure-blue to purplish-blue, very dense flowerheads

<i>Corydalis pseudocristata</i>	Balang Shan, mid-level meadows. Robust flowers spike with yellow orange-tipped flowers and obvious abaxial crest
<i>Corydalis rorida</i>	Cho La Pass. Bright blue flowers, alpine species, pinnatisect bracts
<i>Corydalis scaberula</i>	Screes on the Dzo Dala, lovely pale yellow species with reddish dissect leaves with rounded lobes, on scree. One of the finest species seen
[<i>Corydalis schaereri</i>	Pretty pink species with long upright pointed spur at Wolong, Sichuan. 2007]
<i>Corydalis trachycarpa</i>	between Litang and Yajlang. High screes. Another fantastic species with dark grey-green leaves the wide lobes broadly crenulate. Flowers pale pinkish, purple tipped
<i>Corydalis trifolia</i>	dark blue species with purplish-green tri-part leaves, Luo Gou Haii
Brassicaceae	
<i>Cardamine griffithii</i>	Wolong only
<i>Cardamine macrophylla</i>	Very common and widespread
<i>Cardamine microzyga</i>	pratensis-like species deeper purplish-pink flowers on the first pass in the Tagong grasslands en route to Litang
<i>Dipomia iberidium</i>	Cho La, Litang, Zhedou Shan etc
[<i>Draba jucunda</i>	Tight-growing species with typical bright yellow flowers, Balang Shan and Xinjun Pass, etc]
<i>Erysimum crocea</i>	Orange-yellow wallflower near Rilong
<i>Megacarpa delavayi</i>	Tall lilac-pink flower with expanding inflorescence on high passes near Ganze, Litang and Kangding
[<i>Pegaeophyton scaberula</i>	White cress on Xinjun Pass]
[<i>Solmslaubachia pulcherrima</i>	Chola Pass]
Violaceae	
<i>Viola biflora</i>	widespread, yellow flowers, rounded leaves
Crassulaceae	
<i>Rhodiola crenulata</i>	Cho La Pass. Red, like a large sedum
[<i>Rhodiola dumulosa</i>	Rose and white species Xinjun Pass]
<i>Rhodiola fastigiata</i>	widespread
<i>Sedum oreades</i>	Balang Shan, also Dzo Dala and Cho La. Small dense species with whitish-yellow flowers
Saxifragaceae	
<i>Chrysosplenium camosum</i>	Cho La Pass
<i>Chrysosplenium griffithii</i>	Pretty-leaved plant on Balang Shan and scattered elsewhere. Other species of <i>Chrysosplenium</i> seen to
<i>Parnassia davidii</i>	staminodes with globose glands at apex. Flowers white, purple-brown punctuate. Yalong River
<i>Parnassia delavayi</i>	widespread. White 'normal-sized' flowers
<i>Parnassia lanceolata</i>	green flowers, pointed petals. Small. Dzo Dala and Cho La Passes
<i>Parnassia pusilla</i>	diminutive species with greenish flowers. Scattered throughout
<i>Parnassia viridiflora</i>	green flowers, purplish-veined. Between Yalong River and Litang

<i>Rodgersia aesculifolia</i>	Common in moist forests at Wolong large pinnate-leaved herb with dense pink flowers on branched spikes
<i>Saxifraga aurantiaca</i>	Small cushions with yellow flowers on Balang Shan, Dzo Dala and Cho La Passes
<i>Saxifraga finitima</i>	??maybe this species. Dwarf cushion-forming species with yellow flowers. Balang Shan
<i>Saxifraga fortunei</i>	West of Danba and Kangding in lower valleys. White flowers with pronounced lower petal, moist shady places
<i>Saxifraga pseudohirculus</i>	Small orange flowers on slender tallish stems Balang Shan & Cho La Pass. Many other yellow flowered species were seen but not identified
<i>Saxifraga melanocentra</i>	Lovely white flowered species with darker red markings and black centre Balang Shan, Xinjun Shan, Zhedou Shan etc – the form on the latter was particularly stunning!
<i>Saxifraga sibirica</i>	white flowers, kidney-shaped leaves. Balang Shan
[<i>Tiarella polyphylla</i>]	Pretty white flowered species at Wolong and other dense woodlands 2007]

Caryophyllaceae

[<i>Arenaria barbata</i>]	large flowered alpine on Xinjun Pass]
<i>Arenaria kansuensis</i>	cushion forming species covered in small white flowers. Zhedou Shan
[<i>Arenaria oreophila</i>]	cushion forming. Balang Shan]
<i>Arenaria polytrichoides</i>	cushion forming species covered in small white flowers on Dzo Dala and Co La Passes
<i>Dianthus superba</i>	Zhedou Shan. Dissect petals
[<i>Silene aprica</i>]	Unusual dwarf species in wet areas on Xinjun Pass]
<i>Silene davidii</i>	Lovely mat forming species with pink flowers on Zhedou Shan and passes just west of there
<i>Silene nigrescens</i>	petals almost included in the inflated calyx. High passes in west of region
<i>Silene hupehensis</i>	Luhuo area

Polygonaceae

<i>Oxyria digyna</i>	common roadside species in highlands
[<i>Polygonum albertii</i>]	'Russian Vine' Climber at mid-altitudes]
[<i>Polygonum spherostachyum</i>]	Short-cylindrical to globular white flowers, Balang Shan, etc, widespread]
<i>Polygonum viviparum</i>	common in Litang area
<i>Rheum alexandrae</i>	damp areas in highlands e.g. Litang, near Yajling, Kangding etc
[<i>Rheum delvayi</i>]	dwarf species with red-veined leaves]
<i>Rheum palmatum</i>	scattered along valley en route to Zhedou Shan, cultivated for medicine

Geraniaceae

<i>Geranium delavayi</i>	pale form. Balang Shan. Some regard this as <i>refractoides</i> but probably a colour form of this species
<i>Geranium lambertii</i>	blackish filaments and pale pink petals. Cho La Pass
<i>Geranium moupinense</i>	widespread at mid altitudes, e.g. Wolong. Large flat pink flowers
<i>Geranium pogananthum</i>	like <i>delavayi</i> but petals white to pink or purplish and longer petals. Wolong

Hypericaceae

Hypericum forrestii

common on roadsides

Actinidiaceae

Actinidia kolomikta

climber in shrubberies in mid-altitudes e.g. Wolong

Euphorbiaceae

[*Euphorbia helioscopia*

familiar weed]

[*Euphorbia nematocarpa*

locally common]

[*Euphorbia pekinensis*

scattered with orangey-green bracts]

Hydrangeaceae

[*Deutzia calycosa*

pink-flowered species at Wolong and west of Danba]

Deutzia glomeruliflora

mid-elevations e.g. Wolong

Deutzia longifolia

long-leaved! Common in the Wolong, Rilong and Danba areas

Hydrangea aspera

Wolong and Rilong. A large white form and smaller pink form are both subspecies of this widespread species

Hydrangea heteromalla

west of Danba where some fine plants, a white lacecap

Philadelphus purpurascens

distinctive smaller flowered species with dark reddish purple pedicels and calyces, leaves hairy on ribs beneath, north of Luhuo

Philadelphus subcanus

scattered. The commonest Mock Orange, leaves with short adpressed hairs

Rosaceae

Cotoneaster microphyllus

widespread

Fragaria orientalis

very common on banks in the Wolong area

Potentilla anserina

Luhuo

Potentilla bifurca

near Ganze. Pinnate leaves

[*Potentilla coriandrifolia*

alpine turf]

Potentilla eriocarpa

dense cushion forming shrub on Dzo Dala. The very different 'lax' subspecies *tsarongensis* on Cho La Pass and Zhedou Shan

Potentilla fruticosa

widespread yellow flowered shrub

Potentilla glabra

widespread shrubby species with white flowers

[*Potentilla leuconota*

denser leaves than *coriandrifolia* Zhedou Shan]

Potentilla stenophylla

pinnate toothed leaves. Luo Gou Haii & Zhedou Shan

[*Princepia utilis*

spiny arching branched shrub with bluish oval berries on Yulong]

Rosa multiflora

handsome dense flowered species, Wolong area

Rosa omeiensis

impressive thorny stems. Lower slopes of Balang Shan

Rosa sericea

upland species with white to cream flowers

Rosa sweginzowii

fine deep pink-red species. Lower Balang Shan and Zhedou Pass

[*Rosa willmottiae*

light pink rose. Rilonguan]

Sanguisorba filiformis

scattered in wet areas. Tiny flowerheads. Between Danba and Luhuo

Sorbaria arborea

foamy cream flower masses on shrubs with large pinnate leaves. Wolong

Spenceria ramalana

widespread and spicate 'potentilla'. Covered some hillsides near Ganze and Litang

Spiraea schneideriana

Wolong area

Spiraea myrtilloides

between Litang and Yajling

Fabaceae

[<i>Albizia julibrissum</i>	roadside tree at lower altitudes]
<i>Albizia mollis</i>	Wolong
<i>Astragalus tongolensis</i>	shrubby species with creamy flowers near Rilong
<i>Astragalus yunnanensis</i>	yellow and white flowers with black hairs on calyx, alpine turf, many passes
<i>Bauhinia</i> sp	a white flowered creeper seen near Dege
[<i>Caragana jubata</i>	spiny highland shrub with pink flowers, a similar fine species on Ganze Pass]
<i>Caragana leucophloea</i>	yellow flowers with red lines spiny Rilong, Danba & Luhuo areas
[<i>Caragana versicolor</i>	pink flowered spiny shrub on Zhedou Shan]
<i>Indigofera balfouriana</i>	pink shrub. Danba and Luhuo areas
<i>Lotus corniculatus</i>	widespread
<i>Melilotus alba</i>	White Melilot. Wolong
<i>Melilotus officianalis</i>	Wolong
[<i>Piptanthus nepalensis</i>	Tagong Grasslands and other high areas, scattered. Yellow flowered shrub with large trifoliate leaves]
<i>Thermopsis barbata</i>	black pea. Luhuo and Ganze grasslands
<i>Thermopsis smithiana</i>	in seed between Litang and Yajling
<i>Tibetia tongolensis</i>	widespread little legume with purple flowers on long stems. Cream flowered form also seen. Another <i>Tibetia</i> species seen on the Zhedou Shan
<i>Trifolium repens</i>	Wolong
<i>Vicia nummularia</i>	roadsides, a typical vetch

Celastraceae

<i>Euonymus frigidus</i>	Wolong
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Aceraceae

[<i>Acer cappadocicum</i>	forests]
<i>Acer caudatum</i>	Kangding area
<i>Acer davidii</i>	undivided leaves. Wolong area

Aquifoliaceae

<i>Ilex pernyi</i>	triangular-leaved holly. Wolong
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Ericaceae It should be noted that many of the rhododendron recorded were from the earlier season 2007 reccy, as such there will be a limited number in flower during the tour

<i>Cassiope pectinata</i>	shrublet with small white bell flowers. Balang Shan and Luo Gou Haii
<i>Lyonia villosa</i>	Zhedou Shan
[<i>Rhododendron augustinii</i>	Wolong]
[<i>Rhododendron balangense</i>	common on Balang Shan]
[<i>Rhododendron bureavii</i>	probably this species growing along river banks below Balang Shan]
[<i>Rhododendron chryseum</i>	pale yellow dwarf species, widespread e.g. Kangding]
[<i>Rhododendron decorum</i>	very common in mid altitude woodlands, pines, etc – pink and white forms]
<i>Rhododendron nivale boreale</i>	very small shrub with pale white-pink flowers. Zhedou Shan
<i>Rhododendron orbiculare</i>	Luo Gou Haii. Beautiful red buds open to white flowers

Rhododendron phaeochrysum	common and widespread high altitude species in variety of colours from white to pink – still a few in flower
[Rhododendron primulaeflorum	small flowered species in white or pink, scattered]
[Rhododendron racemosum	common and widespread]
[Rhododendron rubiginosum	widespread bright to pale pink common on drier hillsides]
Rhododendron rufescens	small shrub with pale flowers. Zhedou Shan
[Rhododendron rupicola	more delicate dwarf shrub on Baima]
Rhododendron russatum	a small lilac species, upland moors
Rhododendron trichostomum	small shrub with pale flowers. Zhedou Shan
[Vaccinium fragile	widespread]
Pyrolaceae	
[Pyrola sororia	Wolong]
Diapensiaceae	
[Diapensia purpurea	Previously found on passes south of Tagong grasslands, so it may occur at some point]
Monotropaceae	
Monotropa hypopitys	lower slopes of the Balang Shan and between Litang and Yajling
Primulaceae	
Androsace bisulca	var bisulca. Dense cushions with 2-flowered umbels, flwrs pink. Dzo Dala
Androsace delavayi	very dense cushions with white pink-tinged flowers tight to the leaves. 4800m on the Dzo Dala
Androsace erecta	common upright annual species with many wiry stems and small whitish pink flowers
Androsace henryi henryi	very common at Wolong. White drumsticks.
Androsace henryi simulans	like henryi but bracts obovate and only to 5mm. Dege Gorge
Androsace limprichtii	laxly caespitose, leaves trimorphic, scapes to 20cm, umbels ten flowered or more the flowers white or pink, quite large. Luhou and common in Zhedou Shan area
Androsace mairei	?maybe this species. Small pink flowered umbels, dimorphic leaves. Ganze area and Cho La Pass
Androsace minor	laxly caespitose species forming patches with red-eyed pink flowers on the Zhedou Shan
[Androsace rigida	laxly caespitose species with good patches at Luo Gou Haii in various shades of white to deep pink]
Androsace spinulifera	common and widespread. Tall drumsticks of pale pink to deep purplish-pink
Androsace stenophylla	tall (to 20cm) umbels, pink flowers with white eye. Dege Gorge
Androsace tapete	compact cushions with small pink flowers. Dzo Dala
Androsace zambalensis	dense cushion forming species with white flowers with yellow or red eyes. Zhedou Shan and Luo Gou Haii
Omphalogramma vincaeflora	fantastic deep purple species with large flowers. Many in alpine turf on Balang Shan
Primula amethystina	Balang Shan
Primula bathangensis	unusual species with yellow flowers in a raceme and greatly inflated calyxes. On slopes above Danba
Primula bellidifolia	soft blue species like deflexa on granitic rocks to west of Cho La pass. In 2010 probably this species on the Zhedou Shan

<i>Primula blinii</i>	small species growing on rocky outcrops with bluish-rose flowers. Passes above Yajling
<i>Primula chionantha sinopurpurea</i>	purple-violet flowers. Balang Shan
<i>Primula cockburniana</i>	stunning orange species, fine stemmed, common in Danba and Luhou areas and also below Luo Gou Hai
<i>Primula deflexa</i>	blue-purple long tubed capitate species. Rilong and Danba area
<i>Primula dryadifolia</i>	lovely species very common on Balang Shan and Zhedou Pass, wide pink bells, leaves leathery, almost orbicular and crenulate
<i>Primula euprepes</i>	wonderful near-black species on Zhedou Pass – three plants seen in flower in 2010
<i>Primula gemmifera</i>	Balang Shan, pink with white eye
[<i>Primula heucerifolia</i>	possibly this species at Wolong]
<i>Primula hoii</i>	tall deep pink-lilac species in grasslands west of Luhuo
<i>Primula involucrata</i>	common in the Ganze area and between Luhou and there. Marshy ground. Flowers various shades of pink to nearly white or purple
<i>Primula limbata</i>	flowers blue-purple, calyx strongly farinose inside. On cliffs and slopes on Dzo Dala
<i>Primula longipetala</i>	a recently named species in abundance on Balang Shan over 4000m
<i>Primula muscaroides</i>	unusual narrow-tubed purple species below Luo Gou Hai
<i>Primula orbicularis</i>	tall umbels, yellow flowers, long narrow leaves. Damp meadows on the way up the Balang Shan where just about over
<i>Primula palmata</i>	in woods west of the Balang Shan. Leaves like a geranium!
<i>Primula polyneura</i>	Balang Shan and around Danba and Luhuo. Also has leaves like a geranium, but much longer than broad. Flowers pale rose
<i>Primula rhodocroa</i>	this or something very similar in the alpine tundra north of Litang, a tiny pink species. In 2010 we saw it in marshy ground between Danba and Luhou. May be something else?
<i>Primula secundiflora</i>	common and widespread with umbels of rose-purple flowers beautifully set off by white farinose calyxes. In wet flushes usually with sikkimensis
<i>Primula sikkimensis</i>	very common pale yellow species
<i>Primula stenocalyx</i>	neat umbels of bluish-pink-lavender flowers on Balang Shan turf amongst rocks
<i>Primula szechuanica</i>	possibly this tall species with reflexed pale yellow flowers in whorls, Luo Gou Hai
<i>Primula tangutica</i>	amazing spidery reddish-brown flowers, Pass north of Ganze, also Dzo Dala, Cho La Pass and Litang area
<i>Primula violacea</i>	pretty lilac narrow-flowered species at Luo Gou Hai
<i>Primula watsonii</i>	deep indigo-purple flowers. Luo Gou Hai
[<i>Primula zambalensis</i>	Something close to this in similar habitat on which it occurs in Yunnan on the pass south of Ganze]
Onagraceae	
<i>Chamaerion angustifolium</i>	scattered
Apiaceae	
<i>Heracleum candicans</i>	large umbellifer with fine-cut leaves for a <i>Heracleum</i> . Balang Shan
<i>Pleurospermum benthamii</i>	large 'colourful' umbel common at Wolong and Balang Shan
<i>Pleurospermum biclor</i>	Litang and Zhedou Shan

Pleurospermum astrantioideum [Tetrataenium nepalense]	dwarf Pleurospermum tinged purple-red all over. Zhedou Shan Large white umbels and broad-lobed pinnate leaves reminiscent of Heracleum]
Trachydium roylei	stemless species. Between Litang and Yajling
Thymeleaceae	
Daphne bholua/retusa	presumably this species below Balang Shan and elsewhere?
Daphne tangutica	north of Ganze
Stellera chamaejasme	common in pastures, alpine turf in white and greenish cream forms mainly
Cornaceae	
[Cornus capitata]	between 1000 and 2000m, superb flowering shrub/tree with wide creamy bracts]
Tamaricaceae	
Myricaria laxiflora	various of the larger rivers
Loganiaceae	
Buddleja davidii	mid-altitudes in east
Plumbaginaceae	
Ceratostigma willmottianum	more shrubby than the previous species, similar habitat. Yilong River
Oleaceae	
Jasminum polyanthum	roadsides between Ganze and Litang
Osmanthus delavayi	widespread in shrubberies
Syringa yunnanensis	Wolong. White flowers
Asclepiaceae	
Ceropegia mairei	weird, hairy flowers on twining stems near Danba at Eremurus site
Cynanchum sp	near Danba
Vincetoxicum hirundinaria	scattered, whorls of small green flowers but seen only in seed. Yilong River
Caprifoliaceae	
Leycesteria formosa	scattered in shrubberies and roadsides
[Lonicera tibetica	rather sparse pink flowers. Scattered]
Sambucus ebulus	common herbaceous elder
Viburnum spp.	species seen but not identified
Adoxaceae	
Adoxa moschatellina	Dzo Dala
Dipsacaceae	
Morina alba	scattered throughout at mid altitudes. White flowers
Morina nepalensis	Balang Shan. Pink flowers
Pteroccephalus sp	Rilong area
Cannabinaceae	
Cannabis sativa	occasional roadside weed

Solanaceae

<i>Anisodus tanguticus</i>	scattered, often as a roadside weed. Strange large greenish or purplish flowers
<i>Datura stramonium</i>	Rilong area
<i>Hyoscyamus niger</i>	villages between Ganze and Maniganga

Asteraceae

<i>Anaphalis nepalensis</i>	widespread
<i>Aster diplostephioides</i>	?maybe this species along the Yilong River
[<i>Aster farreri</i>	distinctly clump forming species seen near Litang and probably this on Xinjun Pass.]
[<i>Aster himalaicus</i>	fine wide flowered species with large mauve rayed flowers on short stems, Haizi, Zhedou Shan. Another wonderful wide, fine-rayed species en route to Maniganga.]
<i>Aster oreophilus</i>	dense-rayed branched species en route to Luhou
<i>Aster soulei</i>	lovely variable mauve daisy, widespread
[<i>Aster yunnanense</i>	Tall branched species en route to Maniganga, scattered elsewhere]
[<i>Microglossa albescens</i>	Frequent shrub aster e.g. Rilong, Zhedou Shan (Danba)]
<i>Cremanthodium decaisnei</i>	wonderful displays near top of Dzo Dala, pendant heads with spidery yellow petals
<i>Cremanthodium angustifolium</i>	Luhou area, marshy places/pools on grasslands
<i>Cremanthodium campanulatum</i>	Dzo Dala
<i>Cremanthodium rhodocephalum</i>	not reniforme! Yellow daisy flowers and reddish-bronze crenulated leaves, Cho La Pass
<i>Cremanthodium smithianum</i>	another species with reniforme leaves. Near Litang
<i>Dolomiaea forrestii</i>	extraordinary squat thistle with almost black flowers. Noted near Danba and Litang
<i>Doronicum altaicum</i>	Dege area
[<i>Leontopodium haplophyloides</i>	scattered in meadows, long spidery rays]
<i>Leontopodium jacotianum</i>	dwarf species on Chola Shan, thick triangular rays
[<i>Leontopodium soulei</i>	Ganze pass, etc, small with short broad rays]
<i>Ligularia cymbrifera</i> .	a fine large glaucous-leaved species, wide spread corymbose infl. Between Litang & Yajling
<i>Ligularia duciformis</i>	large species with reniforme or cordate leaves. Compound corymbs with numerous capitula with yellow flowers. Zhedou Shan area
<i>Ligularia lankongensis</i>	damp roadsides, spicate inflorescence. Widespread
<i>Ligularia nelumbifolium</i>	common in marshy areas, very large orbicular leaves. Some just in flower. Scattered throughout
<i>Ligularia przewalskii</i>	handsome cut-leaved species with tall spikes of yellow flowers, Rilong
<i>Pyrethrum tatsiensense</i>	common orange daisy on grasslands around Ganze
[<i>Saussurea obovallata</i>	tall herbaceous species with flowers wrapped in ensheathing bracts on Chola Shan]
<i>Saussurea graminea</i>	undistinguished purplish flowered species. Dege area and also Zhedou Shan
<i>Saussurea hieracioides</i>	Litang passes and Luo Gou Haii
<i>Saussurea medusa</i>	fabulous high-altitude 'dalek' with entire leaflets covered in hairs. On gravelly screes at 4800m on the Dzo Dala and lower at the foot of a scree slope on the Zhedou Shan

Saussurea leucoma	fabulous high-altitude 'dalek' covered in dense lanate hairs so that almost the whole plant is obscured. Leaflets pinnately lobed. Forms an almost cactus-like columnar plant about 15cm tall. Steep screes at 5000m above the Cho La Pass
Saussurea quercifolia	another superb high alpine Saussurea this one with more open leaf rosettes (so not so columnar as leucoma and medusa) and these covered in tomentose indumentum on upper-side. On gravelly screes at 4800m on the Dzo Dala
Sorooseris gillii	wonderful species with broad domes of yellow flowers and rosettes of undulate leaves at 4800m on Dzo Dala where some in flower
Sorooseris hirsuta	in bud on the Zhedou Shan
Sorooseris hookeriana ssp erysimoides	Yellow flowered species, with extending stem. Most passes
Sorooseris rosularis	screes on Cho La Pass
Convolvulaceae	
Cuscuta europaea	Dege area
Polemoniaceae	
Polemonium chinense	in bud between Danba and Luhou
Gentianaceae	
A confusing number of small flowered annual species were seen and not unidentified	
[Comastoma pulmonarium	pale blue upright gentian east of Luhou]
[Gentiana asterocalyx	tiny annual species with dark blue flowers]
Gentiana dolichocalyx	flowers pale blue with yellowish tube and outside with blue streaks. Luo Gou Haii
[Gentiana nanobella	probably this species between Dawu and Danba, variable blues]
Gentiana primuliflora	corolla violet, open. Common along roadsides around Wolong
Gentiana pseudosquarrosa	tiny dark blue species noted in Danba area
[Gentiana pubigerum	variable little gentian growing on roadsides and alpine turf on Balang Shan]
Gentiana purdomii	large tubular cream species with blue stripes on passes south of Litang
Gentiana rubicunda	deep magenta dwarf species on Cho La Pass and south of Litang
Gentiana tetraphylla	pale flowers with dark blue stripes and yellow base. Zhedou Shan
Gentianopsis barbata	cream and blue striped species just outside Maniganga
Gentianopsis grandis	deep blue on tall wiry stems. Scattered throughout
Gentianopsis paludosa	blue flowers, all calyx lobes roughly equal. Between Ganze and Maniganga
[Halenia elliptica	peculiar claw-like blue flowers, Ganze area]
Boraginaceae	
[Cynoglossum amabile	common along roadsides]
Chionocharis hookeri	sensational alpine with fine cushions on the Cho La Pass at over 4700m – particularly spectacular mounds on the west side of the pass
[Onosma maaikangense	blue-flowered borage between Luhou and Dawu]
Trigonotis sp	the common brilliant blue alkanet that was locally abundant were this genus, but there are many species!

Scrophulariaceae

At least 60 species of Pedicularis were seen (there are at least 250 spp in Sichuan) and they proved a challenge!

Euphrasia regelii	very small eyebright. Wet ground between Danba and Luhuo
Lagotis integra	dense spikes of white veronica-like flowers. Tundra between Litang and Yajling
Lancea tibetica	widespread, dwarf, purple flowered
Pedicularis alopecurus	elegant pale yellow flowers with purple-tipped galea. Luhou area
Pedicularis anas var tibetica	stunning species with purple flowers and a pale creamy lower lip and dark purple-red galea. Between Ganze & Maniganga. Possibly also Zhedou Shan?
[Pedicularis anas var anas	deep pink with black 'cat's whiskers' markings, tall, flowers in whorls. Grasslands west of Ganze]
[Pedicularis batangensis	pretty whitish-pink with deep pink beak, long-tubed, open slopes south of Luhou]
Pedicularis bella	?something similar to this on the way up the Balang Shan – not this species though
Pedicularis cernua	very small. Red flowers with galea erect basally, with a central marginal protuberance on each side, apex truncate, 1-toothed on each side. Luo Gou Hai
Pedicularis chenocephala	dwarf alpine, leaves whorled or opp, flowers rose with straight tube, beak longer, slightly curved and goosehead shaped and golden or purplish. Ganze area and Zhedou Shan
Pedicularis confertiflora	pink flowers with purple galea. Calyx lobes leaf like. Very short alpine species. Dzo Dala
Pedicularis cyathophylla	spectacular tall species with long tubed pink flower twisted through 90°. Almost black galea also bent 90° and connate petioles. Between Litang and Yajling
Pedicularis cyathophylloides	leaves in whorls of 3-4, bases connate. Flowers pink, large, galea apically expanded. Between Ganze and Litang
Pedicularis davidii	lovely bicolored pink and white species with twisted beak e.g. Rilong, Balang Shan oblong leaves very coarsely crenulated
Pedicularis davidii var pentadon	deep pink with twisted beak, common Danba & Luhou areas
Pedicularis decorissima	one of the most beautiful species seen, long tubed with purple-pink galea and beak – Zhedou Shan area
Pedicularis densispica	leaves opposite or whorls of 3-4. Medium sized species with large pink flowers the beak a striking golden colour. Dzo Dala
Pedicularis dichotoma	tall elegant species with inflated calyces and pink flowers with hooked purplish galea, Cho La Pass
Pedicularis dielsiana	branched species, leaves in whorls of 3. Flowers yellow. Luhou area
Pedicularis dunniana	impressive very tall yellow flowered species near Wolong and Luo Gou Hai
Pedicularis excelsa	impressively tall species – 1m or more! White flowers with purple beak. Ganze area
Pedicularis flaccida	glabrous, many weak branches, corolla strongly bent from base. Zhedou Shan
Pedicularis hirtella	?maybe this species. pale pink lip, dark purple falcate galea. Zhedou Shan

<i>Pedicularis ingens</i>	very tall with pale yellow flowers and distinctive auriculate double-dentate leaves. Luhou area
<i>Pedicularis integrifolia</i>	dwarf alpine species with large pink flowers with S-shaped slender beak. Luhou area
<i>Pedicularis kansuensis</i>	branched basally, pink flowers, 4 lines of hairs on stem, leaves in whorls of 4. Zhedou Shan
<i>Pedicularis kantingiensis</i>	like <i>lachnoglossa</i> but villous galea twisted and corolla lobes rounded. Zhedou Shan
<i>Pedicularis kialensis</i>	red lip, purple twisted bearded galea, alternate leaves. Between Ganze and Litang
<i>Pedicularis lachnoglossa</i>	elegant slender species with dark pink flowers, the galea strongly twisted and densely villous. Luhou area
<i>Pedicularis likiangensis</i>	short several stemmed species with red-pink flowers, tube bent at right-angles basally. Dzo Dala
[<i>Pedicularis lineata</i>	pale pink species e.g. Balang Shan]
<i>Pedicularis longiflora</i> var <i>tubiformis</i>	deep yellow with maroon markings, long tubed flowers, marshes or grasslands. Scattered in the west
<i>Pedicularis lyrata</i>	dwarf single stemmed, opposite leaved species with yellow flowers, galea falcate at middle and with 3-5 teeth each side near apex. North of Ganze
<i>Pedicularis macrosiphon</i>	small pink species seen at Wolong
<i>Pedicularis metzschuanica</i>	red flower, purple galea. Ganze area
<i>Pedicularis oederi</i>	yellow species with orangey-red tip to galea, most high passes
<i>Pedicularis polyodonta</i>	pretty small pale yellow flowers, ovate pinnatisect leaves, galea falcate apically with 3-6 teeth on each side. Ganze area and Luo Gou Hai
<i>Pedicularis przewalskii</i>	deep pink long-tubed dwarf alpine species Litang area and Dzo Dala
<i>Pedicularis rex lipskyana</i>	tall and robust. Leave bases connate and cupular. Flowers in 'cups' purple red. Wolong area & near Dege
<i>Pedicularis rhinanthoides</i> ssp <i>labellata</i>	a widespread species (ssp <i>tibetica</i> probably also present) in moist meadows, slopes, etc, lower lip spreading forward to encompass beak which is S-shaped. Pink or pink and white.
<i>Pedicularis rhodotricha</i>	medium purple-red flowered species, half moon galea is densely covered in long pale red hairs! Luo Gou Hai
<i>Pedicularis roylei</i>	beautiful alpine species with strongly-veined pink flowers, lip lobes overlapping. Dzo Dala
[<i>Pedicularis rupicola</i> ssp <i>rupicola</i>	var <i>flavescens</i> . Chola Shan, whitish species with dark mark on galea]
[<i>Pedicularis semitorta</i>	roadsides below Xiling Shan]
<i>Pedicularis siphonantha</i>	Zhedou Pass, pink and white with twisted beak and inverted black 'v' markings]
<i>Pedicularis steingeri</i>	tall, 70cm+, yellow flowered species with linear dentate leaves, the teeth with more than 60 pairs. Luhou, Maniganga, etc
<i>Pedicularis superba</i>	tall and robust. Leave bases connate. Large flowers pink-red, galea paler dark tipped. Danba to Luhou
<i>Pedicularis szetchuanica</i> ssp <i>latifolia</i>	en route to Chola Shan, abundant pink species among shrubberies
<i>Pedicularis tatsienensis</i>	blackish-purple goosehead galea, lip shining red-purple. Zhedou Shan

<i>Pedicularis thamnophilla</i>	inflated petioles forming a cup, flowers yellow, leaves in whorls of 3 or 4. Common either side of Yajling
<i>Pedicularis tongolensis</i>	ingens group, tall yellow, glabrous except calyx, leaves clasping, densely incised. Between Ganze and Litang
<i>Pedicularis torta</i>	stunning spicate yellow or white flowered species with purple galea and S-shaped beak. Rilong and Luo Gou Haii
<i>Pedicularis tricolor</i>	striking yellow and white species with cymes of large flowers with twisted beak, grasslands and meadows e.g. near Luhou, Ganze
[<i>Pedicularis variegata</i>	remarkable species with large creamy-white flowers and reddish-purple beaks larger than the plant itself. Only on Zhedou Shan on previous tours]
<i>Pedicularis verbeniifolia</i>	unusual violet flowered species. North of Luhou
<i>Siphonostegia chinensis</i>	unusual flowers – lower lip yellow, upper red-purple. Wolong, Danba and below Kangding
[<i>Triosteum himalayanum</i>	odd yellowish and red flowers, broad triangular leaves, woods Rilong]
<i>Verbascum thapsus</i>	common along roadsides in drier areas
Gesneriaceae	
<i>Corallo-discus flabellatus</i>	rhomboid pleated leaves. Between Danba and Luhou. Also another form or species on rocks in this area
<i>Corallo-discus lanuginosus</i> .	blue flowers and wrinkled leaves. Extensive colonies flowering west of Danba, Zhedou Shan
Bignoniaceae	
<i>Incarvillea arguta</i>	common along roadsides in drier areas, bushy with small pinnate leaves
[<i>Incarvillea compacta</i>	pass north of Ganze]
<i>Incarvillea delavayi</i>	common garden species seen en route to Cho La Pass from Dege, tall spicate inflorescences
<i>Incarvillea mariei</i>	common and variable. Some stunning deep pink forms. Form multifoliata between Ganze and Litang
Orobanchaceae	
<i>Boschniakia himalaica</i>	dark-coloured parasitic species. In seed at various localities
<i>Orobanche coerulescens</i>	between Ganze and Maniganga
Lentibulariaceae	
<i>Pinguicula alpina</i>	Luo Gou Haii
Verbenaceae	
[<i>Clerodendron bungei</i>	village roadsides in Sichuan, globular pink flowerheads]
Balsamiaceae	
<i>Impatiens delavayi</i>	yellow balsam near Wolong. Other <i>Impatiens</i> species also seen
Lamiaceae	
<i>Ajuga lupulina</i>	large bracts of reddish or cream. Widespread in grasslands
<i>Ajuga ovalifolia</i>	deep purple flowers and crinkled leaves. Widespread in grasslands
<i>Dracocephalum calophyllum</i>	Ganze and Luhou areas, deep blue, fine-cut leaves
<i>Dracocephalum forrestii</i>	Ganze and Luhou areas. Leaves with even finer segments

<i>Lamiophlomis rotata</i>	Litang and Cho La Pass. Stemless crinkled broad leaves with purple flowers
<i>Lamium amplexicaule</i> [<i>Nepeta stewartiana</i>]	noted in fields near Danba variable blue to mauve-pink sp east of Luhou and elsewhere in grasslands]
<i>Phlomis tatsienense</i>	wonderful deep purple species on lower slopes of Balang Shan
<i>Phyllophytum complanatum</i>	leaves noted on Dzo Dala
<i>Prunella vulgaris</i>	scattered along roadsides
<i>Salvia evansiana</i>	impressive blue species, widespread in mountains, grasslands
[<i>Salvia subpalmatinervis</i>]	widespread purplish-red species, quite hairy flowers]
[<i>Salvia przewalskii</i>]	Lugu Lake and elsewhere a fine species with deepest purple lip]
<i>Scutellaria orthocalyx</i>	frequent along roadsides pinkish-blue spikes

Campanulaceae

<i>Campanula</i> sp	a delicate wiry-stemmed species on most passes
<i>Adenophora capillaris</i> [<i>Adenophora coelestis</i>]	pretty pale blue bells on wiry stems in Ganze area, etc tall with dark blue bells, Xinjun Shan]
<i>Codonopsis convolvulacea</i>	Luhou and Ganze area – clambering species with open blue flowers. Other <i>Codonopsis</i> species seen too
<i>Cyananthus flavus</i>	small yellow alpine looking like a gentian – Balang Shan, Cho La Pass and common in the Zhedou Shan area
<i>Cyananthus longiflorus</i>	probably this blue species south of Litang. Also at least one other blue species and a white species too

Zingiberaceae

<i>Roscoea tibetica</i>	?probably this species. On cliffs between Danba and Luhou
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Commelinaceae

<i>Commelina communis</i>	lush valleys below Kangding
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Liliaceae

[<i>Alectris alpestris</i>]	white flowers, scattered e.g. Zhedou, Lu Gou Hai]
<i>Alectris glabra</i>	slender brownish stems. Lu Gou Hai
<i>Alectris pauciflora</i>	Wolong and lower Balang Shan
<i>Allium atrosanguineum</i> var <i>tibeticum</i>	brass-yellow dwarf allium. Dzo Dala and Cho La Passes
<i>Allium beesianum</i>	blue-flowered. Between Ganze and Litang
<i>Allium cyathophorum</i> [<i>Allium macranthum</i>]	pretty purple umbels. Ganze to Maniganga umbellate species with pendant flowers, near Ganze]
<i>Allium prattii</i>	widespread pink drumstick, broad leaves
<i>Allium przewalskii</i> [<i>Barnardia japonica</i>]	Ganze to Maniganga tall slender pink spikes open slopes near Luhou]
<i>Cardiocrinum giganteum</i> ssp <i>yunnanense</i>	magnificent fragrant trumpets. Wolong!
<i>Eremurus chinensis</i>	tall, white spikes en route to Danba
<i>Fritillaria cirrhosa</i> (<i>siniaca</i>)	scattered, Luhou and Ganze areas. The frits on the lower part of the Balang Shan may have been <i>przewalskii</i> ?
<i>Fritillaria unibracteata</i> [<i>Hemerocallis fulva</i>]	scattered, Luhou and Ganze areas, also near Litang near Danba, but maybe planted]
<i>Lilium davidii</i>	tall orange turk's-cap type near Danba and below Kangding
<i>Lilium duchartrei</i>	lovely white turk's-cap type, between Danba and Luhou

<i>Lilium leucanthemum</i>	impressive tall lily one to two metres tall. It seems to be var centifolium as the tepals were tinged purplish or brownish along the mid-vein on the outside, however that form is only known from one site in South Gansu, though at a similar altitude.
<i>Lilium lophophorum</i>	noted almost throughout on and near high passes. Mostly the yellow form, but south of Litang was a peach coloured form
<i>Lilium primulinum</i>	bright yellow lily seen only from a distance in the lush valleys below Kangding may well have been this species
<i>Lilium sargentiae</i> [<i>Lilium sulphureum</i>]	fabulous trumpet lily in lush valleys east of Kangding impressive pale yellow trumpet lily, fragrant, between Kangding and Ya'an c2000m]
<i>Lloydia delavayi</i> <i>Lloydia serotina</i>	yellow with reddish or purplish-green inside. Luo Gou Haii white – the Snowdon Lily. On east slopes of Balang Shan. The white <i>Lloydia</i> growing in rocks above screes at Luo Gou Haii may have been this species?
<i>Lloydia tibetica</i>	yellow with reddish or purplish-green inside. Inner tepals crested-lamellar near base adaxially. Scattered throughout the tour
<i>Polygonatum curvistylum</i> <i>Polygonatum hookeri</i> [<i>Polygonatum verticillastrum</i>] <i>Maianthemum henryi</i>	verticillate hanging pale purple flowers. Balang Shan tiny pink flowered solomon's seal. Balang Shan mauve flowers, linear leaves, Luo Gou Haii] tubular white-green flowers. Luo Gou Haii and probably also in Balang Shan area
<i>Notholirion bulbiferum</i> <i>Ophiopogon bodinieri</i>	superb pale blue-purple flowered lily below Luo Gou Haii spikes of white flowers. Stoloniferous. Common in the Wolong area
<i>Ophiopogon intermedius</i>	spikes of white flowers. Not stoloniferous. Common in the Wolong area. Other species of <i>Ophiopogon</i> noted but not identified – a tricky group!
<i>Paris polyphyllum</i> <i>Maianthemum oleraceum</i>	Wolong area aka <i>Smilacina oleracea</i> . flowers white to red, tepals almost free. Balang Shan
<i>Maianthemum tatsienense</i>	aka <i>Smilacina paniculata</i> ! Greenish flowered. Common in Wolong and Balang Shan area
<i>Streptopus parviflorus</i> <i>Veratrum macrophyllum</i> <i>Veratrum nigrum</i> <i>Veratrum stenophyllum</i>	1-2 little white flowers hanging under leaves axils. Balang Shan fine species with white flowers, large ribbed leaves, Balang Shan black-flowered. Balang Shan green-flowered. Zhedou Shan
Iridaceae	
<i>Iris bulleyana</i>	paler than <i>chrysographes</i> with yellow-tinged patch at centre rather than base. Balang Shan
<i>Iris chrysographes</i>	common on Zhedou Shan, superb deep purple flowers with gold lines
[<i>Iris confusa</i> <i>Iris cuniculiformis</i>]	odd flowers, widespread in mid-altitudes. Ascending rhizomes] dwarf flat-topped lilac to pink/violet flowers 6-7cm across. Balang Shan
<i>Iris farreri</i>	another flat-topped iris, densely tufted, white and violet flowers, 7.5 – 9cm across. North of Luhou
<i>Iris goniocarpa</i>	dwarf, flat-topped pale purple/blue iris. Around Luhou and also good populations in Litang and Yajling areas
[<i>Iris polysticta</i>]	fine mauve species west of Ganze pass]

<i>Iris ruthenica</i>	?possibly this species between Litang and Yajling
Araceae	
<i>Arisaema consanguineum</i>	widespread and variable species with brown or green and white-striped spathes, mostly over by July but some in flower at various localities. In general I found these very difficult to identify!
<i>Arisaema ciliatum</i>	odd ones seen in flowers, scattered e.g. between Ganze and Litang
<i>Arisaema elephas</i>	Wolong and Luo Gou Haii
Orchidaceae	
<i>Amitostigma basifoliatum</i>	delicate orchid with several white flowers with purple spots on the lip. Wolong
<i>Androcorys oxysepalus</i>	tiny green orchid just a few cm high in grasslands on the Balang Shan. Maybe other <i>Androcorys</i> species seen?
[<i>Bletilla formosana</i> <i>Bletilla ochracea</i>]	pink and yellow species along Danba to Kangding road] white and yellow flowers, south of Baoxing. Not seen on the 2010 tour – all mention of this species was in fact <i>Oreorchis foliosa</i>]
<i>Calanthe tricarinata</i>	common around Wolong. Complicated chestnut and yellow lip with other petals and sepals lime green
<i>Cephalanthera longifolia</i> [<i>Coeloglossum viride</i> <i>Cypripedium calcicola</i>]	lower slopes of the Balang Shan one near Rilong] smaller, squarer flowers, two pale windows at back of slipper and no white rim. Marshy area near between Danba and Luhou
<i>Cypripedium flavum</i>	large yellow slipper with red spots inside. Single plant in bloom on Balang Shan amongst abundant <i>Cypripedium tibeticum</i> and <i>Cypripedium franchetii</i> !
<i>Cypripedium franchetii</i>	?very large deep pink slippers – need to check next time – are ovaries densely villous? A few plants with <i>Cypripedium tibeticum</i> at mid-levels on the Balang Shan
<i>Cypripedium tibeticum</i>	large deep pink slippers. Good colony on Balang Shan, also Danba area, Dege area and Luo Gou Haii
<i>Cypripedium yunnanense</i>	lovely pink species between Ganze and Yajling. Only in seed on 2010 tour
<i>Dendrobium monoliforme</i>	creamy or yellow-white flowers, tinged with various colours. Growing on roadside rocks between Kangding and Ya'an!
<i>Dendrobium nobile</i>	large white flowers, out of reach up a bank between Kangding and Ya'an!
<i>Epipactis helleborine</i> <i>Epipactis humilior</i> <i>Epipactis mairei</i>	in mossy forest between Danba and Luhou hanging rather closed green flowers tinged purple. Mid-altitudes rather colourful helleborine seen below Wolong
<i>Gymnadenia conopsea</i> <i>Gymnadenia crassinervis</i>	grasslands, scattered throughout the tour variable pink species, short or medium, spur always tiny. Quite common in grasslands throughou
<i>Gymnadenia emeiensis</i>	robust white flowered species noted in subalpine grasslands throughout the tour. In some books this is shown as 'orchidis' – it is not that species!
<i>Gymnadenia orchidis</i>	robust species with pink to red small fragrant flowers with short curved spur. Luo Gou Haii

<i>Habenaria fargesii</i>	fine butterfly orchid with lip strongly three parted, the lobes coiled! Between Dege and the Cho La Pass and also Luo Gou Haii
<i>Herminium alashanicum</i>	relatively tall and slender musk orchid, quite common in grasslands especially in Danba, Luhou and Ganze areas
<i>Herminium josephii</i>	relatively tall and slender musk orchid, lip entire, 2-leaved, lip spurless, flower not second, yellowish-green. Maniganga, Dege and Dzo Dala
<i>Herminium monorchis</i>	Musk Orchid. Lip furcately 3-lobed, lobes linear, 3-4 leaves, petals rhombic. Widespread, often in large dense colonies
<i>Herminium ophioglossoides</i>	relatively tall and slender musk orchid, lip 3-lobed, plant with one leaf. Common and widespread on grasslands around Balang Shan and Danba
<i>Liparis</i> sp	tiny brown-flowered species under mossy forest lower Balang Shan
<i>Malaxis monophyllos</i>	slender green orchid with two leaves on all plants we saw
<i>Neottia smithii</i>	delicate little twayblade with green white-edged flowers. Not uncommon under forest lower slopes of Balang Shan
<i>Oreorchis foliosa</i>	like a rather glorified coralroot with many white, yellow and brown flowers, and single dark green strongly veined leaf
<i>Platanthera chlorantha</i>	particularly dense flower heads. Luo Gou Haii
<i>Pleione limprichtii</i>	abundant in leaf on mossy rocks between Danba and Luhou, one still just on flower!
<i>Ponerorchis brevicealcarata</i>	dwarf, one-leaved, 1-3 pink flowers, spur less than 1mm. Scattered throughout under rhodos, in alpine grasslands etc
<i>Ponerorchis chusua</i>	small pink orchid widespread and variable
<i>Ponerorchis limprichtii</i>	one-leaved, the leaf purple on underside, flowers 2 to several, rather large for size of plant, lilac to rose-purple, open. Widespread
<i>Ponerorchis sichuanica</i>	2-5 leaved, pink flowers, leaves on stems, petals papillose/ciliate, bracts =/less than ovary, stem and leaves green. Balang Shan area. Other <i>Ponerorchis</i> were probably seen too!
[<i>Spiranthes sinensis</i>	gorgeous little pink and white orchid with a twist]

Systematic List Number 2 Birds

Nomenclature and taxonomy is taken from the Birds of China by MacKinnon and Phillipps (2000) and where species are found in it, from Birds of East Asia by Brazil (2009). An indication of frequency of sightings is given by the number of days out of 16 a species was seen on – thus 4/16 means a species was noted on four days during the holiday.

Tibetan Snowcock	<i>Tetraogallus tibetanus</i>	7 flew over the Cho La Pass landing and allowing great 'scope views (IG only!)
Tibetan Partridge	<i>Perdix hodgsoniae</i>	2 en route to the Dzo Dala and between Ganze and Litang. 2/16
Chinese Bamboo Partridge	<i>Bambusicola thoracica</i>	2 in the Chengdu Panda Research centee
Koklass Pheasant	<i>Pucrasia macrolopha</i>	feathers on the Balang Shan
Ruddy Shelduck	<i>Tadorna ferruginea</i>	6 on a pond just short of Ganze and 2 Luo Gou Haii
Rufous-bellied Woodpecker	<i>Dendrocopus hyperythrus</i>	1 north of Ganze
Hoopoe	<i>Upupa epops</i>	common west of Balang Shan. 6/16
Eurasian Cuckoo	<i>Cuculus canorus</i>	widespread. 10/16
Himalayan Swiftlet	<i>Collocalia brevirostris</i>	2+ Chengdu
Fork-tailed Swift	<i>Apus pacificus</i>	locally common. 6/16
Little Owl	<i>Athene noctua</i>	2 south of Ganze
Rock Pigeon	<i>Columba livia</i>	widespread, mostly native forms! 7/16
Hill Pigeon	<i>Columba rupestris</i>	widespread. 12/16
Snow Pigeon	<i>Columba leuconota</i>	2 on the Dzo Dala and also seen on the Cho La Pass
Oriental Turtle Dove	<i>Streptopelia orientalis</i>	widespread. 8/16
Black-necked Crane	<i>Grus nigricollis</i>	1 flew over Danba!
Ibisbill	<i>Ibidorhyncha struthersii</i>	2 along the river between Luhou and Ganze, also seen at Ganze and between Ganze and Maniganga. 2/16
Common Tern	<i>Sterna hirundo</i>	1 between Ganze and Maniganga
Lammergeier	<i>Gypaetos barbatus</i>	scattered throughout, up to four a day seen. Some incredible views! 8/16
Himalayan Griffon Vulture	<i>Gyps himalayensis</i>	widespread in small numbers though 15+ at a carcass en route to the Dzo Dala. 12/16
Golden Eagle	<i>Aquila chrysaetos</i>	a total of 5 seen. 3/16
Eurasian Sparrowhawk	<i>Accipiter nisus</i>	a male between Rilong and Danba
Northern Goshawk	<i>Accipiter gentilis</i>	1 Luo Gou Haii
Upland Buzzard	<i>Buteo hemilasius</i>	3 near Maniganga and singles either side of the Cho La Pass. 3/16
Common Buzzard	<i>Buteo buteo</i>	just 2 seen
Black Kite	<i>Milvus migrans lineatus</i>	scattered. 3/16
Common Kestrel	<i>Falco tinnunculus</i>	2 on the Dzo Dala were the only ones seen!
Striated Heron	<i>Butorides striata</i>	1 in Chengdu (IG only)
Cattle Egret	<i>Bubulcus ibis</i>	flock near Maniganga
Intermediate Egret	<i>Mesophoyx intermedia</i>	1 near Chengdu
Grey Heron	<i>Ardea cinerea</i>	1 near Chengdu
Grey-backed Shrike	<i>Lanius tephronotus</i>	widespread. 13/16
Red-billed Blue Magpie	<i>Urocissus erythrorhyncha</i>	a few in the Wolong area. 3/16

Magpie	<i>Pica pica</i>	widespread west of Balang Shan. 10/16
Hume's Groundpecker	<i>Pseudopodoces humilis</i>	c.12 between Luhou and Ganze, and common Maniganga, Ganze and Litang areas. 5/16
Red-billed Chough	<i>Pyrrhocorax pyrrhocorax</i>	widespread. 9/16
Yellow-billed Chough	<i>Pyrrhocorax graculus</i>	higher passes. 5/16
Raven	<i>Corvus corax</i>	widespread. 10/16
Carrion Crow	<i>Corvus corone orientalis</i>	widespread. 7/16
Daurian Jackdaw	<i>Corvus dauuricus</i>	widespread west of Balang Shan. 7/16
Large-billed Crow	<i>Corvus macrorhynchus</i>	along Yilong River. 2/16
Long-tailed Minivet	<i>Pericrocotus ethologus</i>	a female in valley north of Luhou
Black Drongo	<i>Dicrurus macrocercus</i>	1 between Ganze and Maniganga
White-throated Dipper	<i>Cinclus cinclus</i>	scattered along rivers. 3/16
Chestnut-bellied Rock Thrush	<i>Monticola rufiventris</i>	immature seen between Yajling and Zhedou Shan
Blue Rock Thrush	<i>Monticola solitarius</i>	scattered. 3/16
Blue Whistling Thrush	<i>Myophonus caeruleus</i>	scattered, mostly eastern. 4/16
White-collared Blackbird	<i>Turdus dissimilis</i>	2 between Luhou and Maniganga
Blackbird	<i>Turdus merula</i>	singles Balang Shan and near Litang
Chestnut Thrush	<i>Turdus rubrocanus</i>	widespread. 8/16
Kessler's Thrush	<i>Turdus kessleri</i>	common west of Luhou, but also noted on the Zhedou Shan. 8/16
Golden Bush Robin	<i>Tarsiger chrysaeus</i>	scattered. 4/16
Red-flanked Bluetail	<i>Luscinia cyanura</i>	a pair near Danba
White-tailed Rubythroat	<i>Luscinia pectoralis</i>	a male on the Cho La Pass, female on the Zhedou Shan and a male Luo Gou Hai. 3/16
Black Redstart	<i>Phoenicurus ochrurus</i>	common west of Luhou and Litang. 7/16
Daurian Redstart	<i>Phoenicurus aureus</i>	noted between Danba and Luhou
Blue-fronted Redstart	<i>Phoenicurus frontalis</i>	scattered. 6/16
Hodgson's Redstart	<i>Phoenicurus hodgsoni</i>	a male between Ganze and Maniganga and also noted Cho La Pass
White-throated Redstart	<i>Phoenicurus schisticeps</i>	common in the Rilong and Danba areas, also noted Luo Gou Hai. 4/16
White-winged Redstart	<i>Phoenicurus erythrogastor</i>	a female on the Balang Shan and a male on the Dzo Dala
White-capped Redstart	<i>Chaimarornis leucocephalus</i>	common along all watercourses. 14/16
Plumbeous Redstart	<i>Rhyacornis fuliginosa</i>	common along all watercourses. 14/16
Slaty-backed Flycatcher	<i>Ficedula hodgsoni</i>	1 between Ganze and Maniganga and 1 near Dege
Rufous-gorgetted Flycatcher	<i>Ficedula strophciata</i>	a male between Danba and Luhou
Grandala	<i>Grandala coelicolor</i>	wow! 1 seen very well on the Dzo Dala and 1 glimpsed on the Cho La Pass
Oriental Magpie Robin	<i>Copsychus saularis</i>	Chengdu Panda Research Centre
Stonechat	<i>Saxicola torquata</i>	scattered. 3/16
Wallcreeper	<i>Tichodroma muraria</i>	2 in gorge just above Wolong, 1 between Rilong and Danba, and 2 at very close range on the Dzo Dala
Rufous-vented Tit	<i>Parus rubidiventris</i>	1 between Ganze and Litang
Yellow-bellied Tit	<i>Parus venustulus</i>	2 lower slopes of Balang Shan
Eastern Great Tit	<i>Parus minor</i>	scattered. 5/16

Green-backed Tit	<i>Parus monticolus</i>	Balang Shan
Black-throated Tit	<i>Aegithalos concinnus</i>	Chengdu Panda Research Centre
Eurasian Crag Martin	<i>Ptyonoprogne rupestris</i>	scattered. 6/16
Sand Martin	<i>Riparia riparia</i>	Ganze
Barn Swallow	<i>Hirundo rustica</i>	scattered. 3/16
Red-rumped Swallow	<i>Hirundo daurica</i>	scattered. 6/16
Asian House Martin	<i>Delichon dasypus</i>	widespread. 7/16
Brown-breasted Bulbul	<i>Pycnonotus xanthorrhous</i>	1 in Rilong
Light-vented Bulbul	<i>Pycnonotus sinensis</i>	Chengdu and Wolong. 3/16
Collared Finchbill	<i>Spizixos semitorques</i>	Wolong. 2/16
White-browed Tit-Warbler	<i>Leptopoeile sophiae</i>	between Yajling and the Zhedou Shan
Crested Tit-Warbler	<i>Leptopoeile elegans</i>	family party Luo Gou Haii (IG only)
Buff-barred Warbler	<i>Phylloscopus pulcher</i>	woods east of Maniganga and also on the Zhedou Shan
Tickell's Leaf Warbler	<i>Phylloscopus affinis</i>	2 on Dzo Dala and several Zhedou Shan and Luo Gou Haii
Yellow-streak Warbler	<i>Phylloscopus armandii</i>	great views of a pair on the Balang Shan
Lemon-rumped Warbler	<i>Phylloscopus chloronotus</i>	scattered. 5/16
Chinese Leaf Warbler	<i>Phylloscopus yunnanensis</i>	singles both days at Wolong, the very odd song is quite different from other <i>Phylloscopus</i>
Large-billed Leaf Warbler	<i>Phylloscopus magnirostris</i>	Rilong and Danba areas. 2/16
Blyth's Leaf Warbler	<i>Phylloscopus reguloides</i>	?possibly this species both days at Wolong
Giant Laughingthrush	<i>Garrulax maximus</i>	3+ valleys south of Yajling, feathers north of Luhou!
Elliot's Laughingthrush	<i>Garrulax elliotii</i>	widespread. 12/16
White-browed Laughingthrush	<i>Garrulax sannio</i>	Chengdu Giant Panda Centre
Chinese Babax	<i>Babax lanceolatus</i>	valleys south of Yajling
Red-billed Leiothrix	<i>Leiothrix lutea</i>	Chengdu Giant Panda Centre
White-collared Yuhina	<i>Yuhina diademata</i>	Wolong and Rilong. 3/16
Vinous-throated Parrotbill	<i>Paradoxornis webbianus</i>	a flock at Chengdu Giant Panda Centre
Ashy-throated Parrotbill	<i>Paradoxornis alphonisianus</i>	1 at Chengdu Giant Panda Centre
Hume's Short-toed Lark	<i>Calandrella acutirostris</i>	1 seen well on pass south of Litang
Oriental Skylark	<i>Alauda gulgula</i>	scattered. 4/16
Horned Lark	<i>Eremophila alpestris</i>	high passes. 4/16
Mrs Gould's Sunbird	<i>Aethopyga gouldiae</i>	probably same stunning male seen both mornings at Wolong!
Japanese White-eye	<i>Zosterops japonica</i>	Chengdu Giant Panda Centre
House Sparrow	<i>Passer domesticus</i>	1 in Rilong!
Tree Sparrow	<i>Passer montanus</i>	widespread. 13/16
Russet Sparrow	<i>Passer rutilans</i>	scattered. 4/16
Rock Sparrow	<i>Petronia petronia</i>	Ganze area. 2/16
Tibetan Snowfinch	<i>Montifringilla adamsi</i>	1 on Dzo Dala (where many other snowfinches remained unidentified) and 15+ on tundra south of Litang. 2/16
Citrine Wagtail	<i>Motacilla citreola</i>	a male near Ganze and recorded along the Yajling River. 2/16
White Wagtail	<i>Motacilla alba</i>	widespread. 12/16
Grey Wagtail	<i>Motacilla cinerea</i>	scattered. 5/16
Rosy Pipit	<i>Anthus roseatus</i>	scattered. 6/16

Olive-backed Pipit	<i>Anthus hodgsoni</i>	South of Litang and Zhedou Shan. 2/16
Water Pipit	<i>Anthus spinoletta</i>	race <i>coutellii</i> . 1 on the Dzo Dala and also several Zhedou Shan and Lou Gou Haii. 3/16
Alpine Accentor	<i>Prunella collaris</i>	singles Balang Shan, Dzo Dala and both days on the Cho La Pass. 4/16
Rufous-breasted Accentor	<i>Prunella strophciata</i>	scattered. 6/16
Robin Accentor	<i>Prunella rubeculoides</i>	1 on Dzo Dala (IG only)
White-rumped Munia	<i>Lonchura striata</i>	Chengdu Giant Panda Centre
Brandt's Mountain Finch	<i>Leucosticte brandti</i>	2 on the Balang Shan
Plain Mountain Finch	<i>Leucosticte nemoricola</i>	most high passes. 3/16
Grey-capped Greenfinch	<i>Carduelis sinica</i>	an immature by Yajling River
Black-headed Greenfinch	<i>Carduelis ambigua</i>	2 near Danba
Twite	<i>Carduelis flavirostris</i>	pairs east of Maniganga and on pass south of Litang. 2/16
Rosefinches – this was an amazing tour for these beautiful birds with a dozen species seen. Almost as good as the flowers!		
Long-tailed Rosefinch	<i>Uragus sibiricus</i>	a stunning male singing on pass south of Yajling
Beautiful Rosefinch	<i>Carpodacus pulcherrimus</i>	Rilong, Danba and Cho La Pass. 3/16
Red-fronted Rosefinch	<i>Carpodacus puniceus</i>	4 of these large birds on the Balang Shan
Common Rosefinch	<i>Carpodacus erythrinus</i>	males north of Luhou and below the Cho La Pass
Pink-rumped Rosefinch	<i>Carpodacus eos</i>	4 of these rare and beautiful birds on a pass south of Litang (IG only)
Vinaceous Rosefinch	<i>Carpodacus vinaceus</i>	a male east of Dege
Dark-rumped Rosefinch	<i>Carpodacus edwardsii</i>	2+ on pass south of Yajling
Dark-breasted Rosefinch	<i>Carpodacus rubescens</i>	a male on the approach to the Balang Shan (IG only)
Spot-winged Rosefinch	<i>Carpodacus rhodopeplus</i>	a male east of Ganze
Chinese White-browed Rosefinch	<i>Carpodacus thura dubius</i>	noted on the Balang Shan and near Rilong. 2/16
Streaked Rosefinch	<i>Carpodacus rubicilloides</i>	stunning large rosefinches, the name hardly does them justice! 20+ at close range on the Dzo Dala, also on passes south of Litang and Yajling. 3/16
Crimson-browed Finch	<i>Propyrrhula subhimachala</i>	Pat showed me a good photo of this uncommon bird taken on the Cho La Pass!
Grey-headed Bullfinch	<i>Pyrrhula erythaca</i>	3 on lower slopes of the Balang Shan and 2 between Luhou and Ganze
White-winged Grosbeak	<i>Mycerobas carnipes</i>	2 below the Zhedou Shan and a female Luo Gou Haii (both IG only). 2/16
Godlewski's Bunting	<i>Emberiza godlewskii</i>	scattered. 6/16

Systematic List Number 3 Mammals

Tibetan Stump-tailed Macaque	<i>Macaca thibetana</i>	1 on roadside below Wolong
Tibetan Fox	<i>Vulpes ferilata</i>	6+ on night drive from Maniganga
Red Panda	<i>Ailurus fulgens</i>	1 at night in a valley close to Wolong (IG only) and what sounds exactly like one walked past Rhoddy as she was having lunch in the wood on the lower slopes of the Balang Shan. Oh to be sat next to her!
Crab-eating Mongoose	<i>Herpestes urva</i>	1 ran through crops by the small village we stopped at between Ganze and Maniganga, looked like this species, but altitude of around 3000m is a bit high!
Hog Badger	<i>Arctonyx collaris</i>	close up meeting on rocks below the screes above Luo Gou Haii (IG only)
Indian Muntjac	<i>Muntiacus muntjak</i>	1 seen through the 'scope grazing on slopes of Balang Shan
White-lipped Deer	<i>Cervus albirostris</i>	1 on night drive east of Maniganga
Goral	<i>Naemorhedus goral</i>	excellent views of 1 on Cliffside close to Wolong at night (IG only)
Blue Sheep	<i>Pseudois nayaur</i>	Richard spotted 3 on the approach to the Dzo Dala and we all had good 'scope views
Woolly Hare	<i>Lepus oiostolus</i>	singles near Maniganga and Litang
Black-lipped Pika	<i>Ochotona curzoniae</i>	not uncommon around Maniganga and the Cho La Pass
Kansu Pika	<i>Ochotona cansus</i>	woods on the west side of the Balang Shan, also 1 on the Zhedou Pass
Grey-headed Flying Squirrel	<i>Petaurista caniceps</i>	a 'giant' flying squirrel with grey head and rufous-red body and tail seen very well at night (IG only) close by Wolong was probably this species
Père David's Rock Squirrel	<i>Sciurotamias davidianus</i>	1 near Ganze
Swinhoe's Striped Squirrel	<i>Tamias swinhoii</i>	1 above Wolong
Perny's Long-nosed Squirrel	<i>Dremomys pernyi</i>	2 roadkills noted near Kangding!
Himalayan Marmot	<i>Marmota himalayana</i>	widespread in the mountains

Systematic List Number 4 Butterflies

Many thanks to Tony Mundell for identifying the following.

Papilionidae

- Papilio xuthus* Asian Swallowtail. Between Ganze and Litang
Papilio bianor Chinese Peacock. This or similar species between Kangding and Ya'an

Pieridae

- Anthocharis bieti?* an Orange Tip with angular forewing tips. Between Danba and Luhou
Aporia crataegi Black-vened White. Scattered throughout
Aporia hippia? like Black-vened White but un hw rich yellow and tips of fw un also yellow. North of Ganze
Aporia procris? very pointed, narrow wing shape like some Acraeidae. Un hw and un fw both deep yellow with strong black viens and sumarginal V-shaped black marks. Uppers white with strong black viens. Just east of Ganze
Aporia sp.? similar in shape to *Aporia procris* above but hw und white (not yellow) and with much wider black stripes on viens. South of Ganze
Colias crocea? probably same as British Clouded Yellow, deep orange up fw showing through from underside. Between Yajling and Zhedou Shan

Lycaenidae

- Lycaena hippothoe* Purple-edged Copper. Photos of underside and uppers. Keys to this in Lafranchis, the high altitude form that lacks purple edges and has a narrow brown border. North of Ganze
Lycaena li a Copper with striped underside and pair of orange tails. Rilong

Nymphalidae

- Melitaea agar?* very similar to *Melitaea didyma*, Spotted Fritillary, and possibly that. Scattered throughout
Limnitis cottini several seen north of Ganze
?Limnitis homeyeri something like a common Glider but all white marks smaller and less distinct. Between Danba and Luhou
Argynnis adippe High Brown Fritillary. North of Ganze

Satyridae

- Aphantopus hyperanthus* Ringlet - same as in Britain. North of Ganze
Coenonympha tullia? probably a form or subsp. of Large Heath. 6 indistinct ocelli on und hw and at least 4 on un fw. Between Luhou and Ganze.
Coenonympha sp? similar to Large Heath but with submarginal row of orange chevrons outside the ocelli. North of Ganze
Ypthima asteropis? or *Ereloia cyclopius?* Upper view only. Almost black all over with single large orange ring containing pair of white spots on up fw and a tiny red ring with white spot on up hw. North of Ganze

Hesperiidae

- Carterocephala houangty* Skipper, mostly pale yellowish with black markings. Luhou to Ganze