

# Following in the footsteps of Forrest & Ludlow

Rekkie of the Wild Lunana Trek in Bhutan  
June 28<sup>th</sup> – July 24<sup>th</sup> 2008



A report written for the Alpine Garden Society by Carl E. Berthold

## **i. Acknowledgements**

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**(Note on abbreviations: On some plant names a CF. will appear between the Genera and species meaning that the Genus is correct but the species has yet to be confirmed –**

**Example: *Delphinium cf. glaciale.*)**

## **2. Part One – Introduction**

### **2.1 Introduction to Bhutan**

Bhutan is a little country which is situated between Tibet and India on the spine of the Himalayas which gives it its name Land of the Thunder Dragon, as it's like climbing up the back of a dragon.

It has a very small population of 0.7 million people and it is only 14% bigger than Switzerland. Its low population is due to the conditions the country offers and its isolation from the world till recently. Most of the population lives in the fertile valleys in the central parts of Bhutan. To the north, in the high mountains, only hermits and yak herders live and even then only for three seasons due to the harshness of winter. Bhutan is still quite a lost world to us as it has only been open to the world since 1978. So remote that we were informed that we were the first, or among the few who had done certain parts of the trek besides monks and hermits.

Also until recently Bhutan had been a kingdom but last year the king resigned and called for elections for a new president due to the pressure from western influences.

Before Bhutan became a kingdom it was a divided country owned by various warlords but in the 8<sup>th</sup> century it was unified by a fleeing Buddhist monk from Tibet, who they named the Guru Rinpoche. After this Bhutan suffered various invasions from Tibet as this monk brought with him an artefact of great value to the Tibetan monks. To protect each province from this threat the Guru Rinpoche ordered Dzongs or fortresses to be built in every province. These served as temples for the monks, but also as protection and administration of the province. They are still used today half by monks and the other by the government.

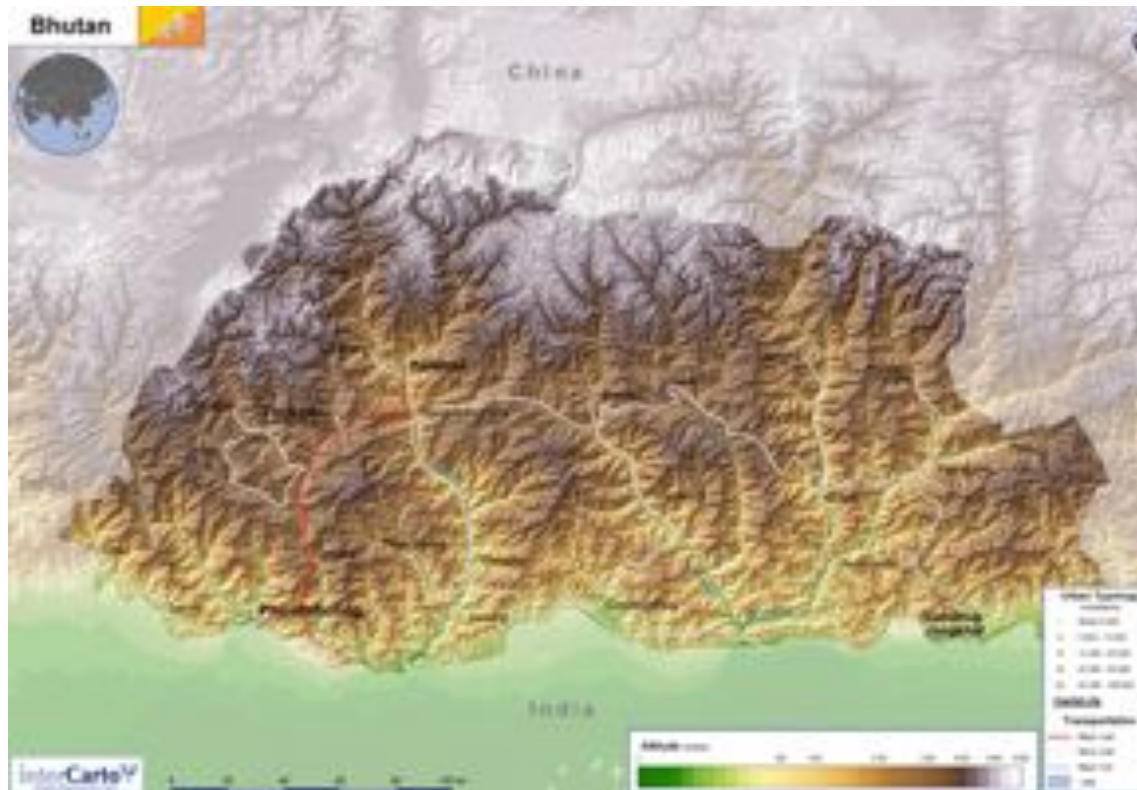
Buddhism is by far still the biggest religion but due to recent treaties with India, Hindu also makes up a quarter of Bhutan's religion as most of the workforce for the construction and road works comes from India.

When we went there I found the people to be very helpful indeed and in ways just as curious as we were about each other. The variety of ways of living and influences of western culture are only too evident after opening itself to the world. In places like

Lunana were it takes five days to get to civilization people still go by the old ways of living. Most food, clothing, shelter and even income come from the yak. They live in huts or shacks and are deprived of education, electricity and sanitation. In contrast to this people in the cities like Thimpu, were all living in apartments, mostly all educated and dressing in western style clothing. Most things we would find in our country were there. But even with all those things I found that the people that still lived by the old ways looked happier than those in the cities. Why, well I can think of many but when you live in such harsh conditions every day you survive is to be grateful for. Also due to the isolation seeing people is always a joyous moment.



Map 1 – Contains the different provinces within Bhutan. The Lunana trek starts off in Bumthang, passes Wangdue and finishes in Trongsa district (Amicus, 2009)



Map 2 – Geographical map of Bhutan showing the mountain range increases from south to north (InterCarto, 2009)

## 2.2 Reasons for going

When I first heard of Bhutan, a long time ago, it sounded like one of these fairy tale kingdoms where the world of today ceased to exist. So when I heard of the trip after my Tibet trip was cancelled I did not waste a second in applying for it. From reading and pictures it was truly what I had heard as a child. The huge mountains and hidden lakes rich in both fauna and flora and views that could make a Man forget that he was on earth.

This and also my eagerness to learn more about alpine and their unique ability to survive such harsh conditions combined with my ambition to one day lead young students on botanical trips made me go on this trip no matter what.

## 2.3 Itinerary

30<sup>th</sup> of June – Kathmandu to Paro

1<sup>st</sup> of July – Hike to Pele La Pass (3300m)

2<sup>nd</sup> of July – Hike from Dochula Pass (3050m) to Nahee (Overnight in Punakha)

3<sup>rd</sup> of July – Drive from Punakha to Jakar

4<sup>th</sup> of July – Trek begins: Dur (2688m) to Chuzombe (3200m)

5<sup>th</sup> of July – Chuzombe (3200m) to Tsochenchen (3920)

6<sup>th</sup> of July – Tsochenchen (3920m) to Jule Tsho (4190m)

7<sup>th</sup> of July - Jule Tsho (4190m) to Dur Tsachu (3310m)

8<sup>th</sup> of July - Dur Tsachu (3310m) to Warthang (4455m)

9<sup>th</sup> of July - Warthang (4455m) to Minchugang (4210m)

10<sup>th</sup> of July - Minchugang (4210m) to Base Camp of Gankar Puensum (4900m)

11<sup>th</sup> of July - Base Camp of Gankar Puensum (4900m) to Tsorim (5035m)

12<sup>th</sup> of July - Tsorim (5035m) to Danji (4540m)

13<sup>th</sup> of July – Rest day at Danji

14<sup>th</sup> of July - Danji (4540m) to Tsochena (4960m)

15<sup>th</sup> of July - Tsochena (4960m) to Jichu Dramo (5060m)

16<sup>th</sup> of July - Jichu Dramo (5060m) to Chukarpo (4450m)

17<sup>th</sup> of July - Chukarpo (4450m) to Tempe Tsho (4355m)

18<sup>th</sup> of July – Rest day at Tempe Tsho

19<sup>th</sup> of July - Tempe Tsho (4355m) Maroothang (3698m)

20<sup>th</sup> of July - Maroothang (3698m) to Nikka Chhu (2627m): Trek ends, overnight in Punakha

21<sup>st</sup> of July – Punakha to Thimphu: day in Thimphu

22<sup>nd</sup> of July – Thimphu to Paro

23<sup>rd</sup> – Flight back home

### **3. Part Two**

#### **Start of the journey in Bhutan, 30<sup>th</sup> of June 2008-09-02**

##### **3.1 Arrival and Acclimatisation Treks**

###### **3.1.1 Day one – Kathmandu to Paro, Bhutan**

After departing Kathmandu we took a 50min flight to Paro, Bhutan with Bhutan's own airline that consisted of two aircraft (See Plate 2). The flight itself was a great start as we saw many of the famous Himalayan peaks such as Mount Everest (See Plate 1) which was just amazing.



**Plate 1. Mount Everest breaking through the clouds.**





**Plate 2. Our Plane in Paro airport with lovely views up to the Dzong just visible up from the plane and the incoming monsoon.**

We arrived at the airport in good time and after going through customs we were greeted by Sonam, our tour guide for this trip. We were then driven to Pelri Cottages where we were going to stay for the following three nights. On the way there everybody started to look in amazement at our surroundings. At the start it was the amazing architecture and colours people used in their houses, but it soon changed to the plants as we saw cannabis growing quite happily in the hedges. This was quite a funny shock to me but soon many other plants started to appear which none of us had seen so we all ordered a halt at the closest lay-by to botanise the surrounding area. At first glance to the soil it was very red and sandy so I presumed it to be a low pH. Another thing I noticed was the constant high level of humidity that remained constant below the 2500m.

The first plant I spotted was *Arisaema consanguineum* (See Plate 3) in a shady spot in the shrubs.



**Plate 3. *Arisaema consanguineum* in full bloom**

After coming back and doing my research on it I was intrigued by its variability in colour patterns as this *A. consanguineum* did not have its stripes but its adaptation to green must be due to its shady position and trying to maximize photosynthesis. Next I saw a lovely species of *Datura* (See Plate 4) which just won me over due to its spikes. You would think being poisonous was protection enough but this chap went for full armour.



**Plate 4. *Datura* spp's growing on the roadside in Paro.**

We also saw some lovely *Verbascum*'s but unfortunately we could not identify them as they were not in flower. But after seeing past reports and looking at the Flora of Bhutan I may presume it is *Verbascum thapsus*. Covering the hillsides was *Pinus Wallichiana* (See Plate 5) with its long needles in groups of three and lovely long cones.

That night back at the cottages we were treated to a very interesting meal, all of it spicy. This was to be a funny surprise for us as we kept eating something that made us down a gallon of water and we eventually found out that what looked like French beans were infact green chillies!



**Plate 5. *Pinus wallichiana***



### 3.1.2 Day Two – Pele La Pass

Last night we agreed to leave Tiger's Nest till last and do Pele La Pass with the group that was doing the Jhomolhari Trek. We started quite early and soon enough after half an hour we had to stop as the sighting of new plants was getting too much to not stop. Our first sighting was huge colonies of *Primula sikkimensis*. I never thought any *Primula* could be so widespread but throughout most of the trip this plant was ever present. As soon as I found a way into the scrub I soon discovered a lovely specimen of *Euphorbia griffithii* (See Plate 6) and a *Cassia sophera* which I'd never think of encountering here as the only ones I knew came from the Canary Islands.



**Plate 6. *Euphorbia griffithii*.**

In our first stop we also found a species of *Philadelphus* and *Pieris*. An awaited find would be at our next stop on the way up with *Roscoea tibetica* (See Plate 7) growing quite content among the leaf and pine litter. It was the first time I had ever seen it not in a picture so it was a great start for the day.

Walking up the road I encountered a lovely specimen of *Rhododendron cinnabarinum* which was happily growing under the canopy of *Abies spectabilis*.



**Plate 7. *Roscoea tibetica*.**

At our next stop we encountered yet more new plants from a lovely *Pedicularis siphonantha* to *Bistorta macrophylla* which we would find it was a lovely ground cover plant further up in the mountains. While I was trying to find anything new I heard a shout from Koenraad which proved to be an exciting new discovery! *Arisaema speciosa* and *costata*, these shade loving plants in full bloom and a lovely specimen besides! But if that was not enough just beside it was a *Smilacina atropurpurea* (See Plate 9) in full flower as well! Again I'd never seen one before so I was blown over with the beauty of the flowers. Growing in these woodland conditions we soon found out that they had a good population in this region.

A short walk up the road proved to be even more fruitful with the discovery of *Megacodon stylophorus* (See Plate 10). With flowers just like Lilies or even a larger, greener version of *Swertia virescens*.



**Plate 8. *Pedicularis siphonantha***



**Plate 9. *Smilacina atropurpurea***

After a short drive we found a big yellow pillar in the middle of a big field. We stopped and soon we found out it was *Meconopsis acuminata* (See Plate 11) at the end of bloom.

After this finding we decided to drive to the top no matter what now as the day was progressing on fast. Once we got to the top we had a lovely lunch which consisted of



my favourite, noodles! We then set off along the Pele La ridge with the aim to reach the highest point and walk back.



**Plate 10. *Megacodon stylophorus***



**Plate 11. *Meconopsis acuminata***

We soon encountered prayer flags which lined a long way from the start of the path in all colours, shapes and sizes.

The group split up and went in two directions and the finds of both were equally rewarding. I found an amazing *Primula cf. glabra* (See Plate 12) which I was amazed by the size and lovely flower on it. It would have been passed by if you had not been looking carefully. In full size it was not much bigger than a £2 coin!



**Plate 12.**  
*Primula cf.*  
*glabra*

We also found on the way up *Berberis hookeri*, *Ponerorchis cf. chusa*, and our first Himalayan poppy of the trip! *Meconopsis horridula* (See Plate 13) in a lovely shade of blue/lavender. I also found out why they call it *horridula* due to its distinguished spiky stem which does hurt if you touch them! I was also informed by Tim on our group that there is great variability in colour in *Meconopsis* which I found out during the trip.



**Plate 13.**  
*Meconopsis*  
*horridula*

As the mist started to roll in, things started to get a bit spooky with the looming figures of dead trees lining the hillside all the way up. But no ghosts were going to put us off our quest to reach the top that day and soon just before the top I met with another



familiar, *Clematis tongluensis* which I first mistook for *montana* as they are very similar but they differ in their pedicels being longer and their anther being purple which is visible in Plate 14.



**Plate 14. *Clematis tongluensis***

After a very hard climb, in zero visibility, we reached the top and were glad for the break for once. Our GPS reading recorded us at 3987m high and it sure felt like it as well. Near to where we were resting we found another jewel, *Anenome obtusiloba* (Plate 15) which was in full bloom and by far the showiest plant we had seen that day.



**Plate 15. *Anenome obtusiloba***

On our way down we decided to go back a different route to see if we could encounter any more new plants. But not until we had reached the beginning did we find a new plant which was *Meconopsis simplicifolia* (Plate 16) and we would not have spotted it had I not looked back just that moment, so a lucky find indeed! I learned it differed to *horridula* mainly by not having such fierce spikes and only having one flower per stalk. Colour variability is equal among them, from pink to blue.



**Plate 16. *Meconopsis simplicifolia***

As we reached the prayer flags again we got a good view of the valley bellow us and I was captured by its mystical appeal (Plate 17). It's like you were propelled back into the time of Ghenkis Khan with nothing around you but the mist, prayer flags and the green rolling mountains that went on as far as the eye could see.



**Plate 17. Truly the land of the Thunder Dragon**

As the group got back together we headed off further down the road to look for more plants and despite the rain we saw a lovely collection quite close to each other. Firstly we saw *Lloydia serotina* var. *serotina* which is native in the Welsh mountains according to Tim Lever. The last plant we found that afternoon was a lovely *Ponerorchis obtusa*.

### **3.1.3 Day three – Dochula Pass to Nahee**

We woke up early today to a lovely view of the Paro valley after arriving very tired last night from the journey up Pele La. Today we also had to say goodbye to the other group doing the Jomolhari Trek (See Plate 18). It was a bit sad as we already got to know each other well during the few days we had been together.

After our goodbyes we set off on the road to Dochula Pass and after about half an hour we came across a lovely little lilly, *Notholirion macrophyllum* (See Plate 19) which was by far the best specimen of the whole trip.



**Plate 18. The two groups sent to Bhutan to botanise.**

We also saw a species of *Roscoea* which we did not get to identify the species unfortunately due to time. Our fern expert with us, Noleen, also had a good chance to test her knowledge along the road finding many genus and species which she is still confirming the identity.

Not long after our brief stop, we reached our starting point and it was a sight to behold indeed. It was a huge monument dedicated to the old king who led his army against an invading rebel army from India. The monument was built after in recognition of the king's bravery in battle (See Plate 20).





**Plate 19.** *Notholirion macrophyllum* in full show for us.



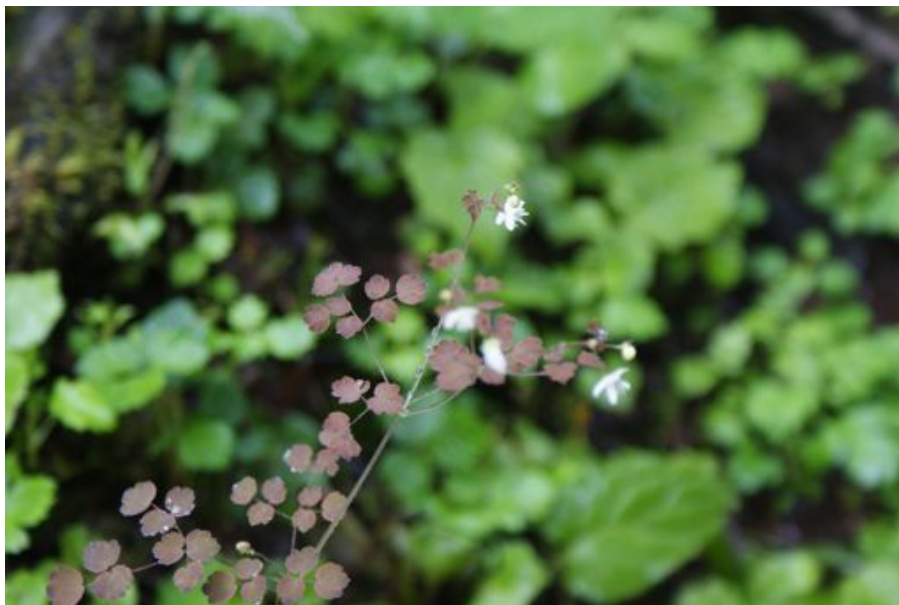
**Plate 20.** Dochula Pass monument.

As we moved in I immediately found myself for the first time in a sub-tropical forest. It was very humid and everything was wet but the difference in flora was different as well. Our first find was *Arisaema jacquemontii* and it was not to be the last one either of these. In woodland conditions, which accounts for a lot of Bhutan, these species seemed to proliferate more than any others. Further on we found one of the best trees of the whole trip for me, a lovely *Magnolia globosa* (See plate 21).



**Plate 21. *Magnolia globosa*, an evergreen species, just about to open – growing mostly under the cover of other larger trees.**

The first part that led us to the Monastery was mostly uphill with some light drizzles and a good measure of mud. Going through the forest we noticed it was mostly Rhododendron and Hemlock. What most amazed me in this part of the walk was the variety of life. Ferns and rhododendrons growing on tree branches & bracket fungi on trunks that made them look like they were lamp shades. Under these were growing lovely plants like *Thalictrum c.f. edgewortii* (See Plate 22).



**Plate 22. *Thalictrum c.f. edgewortii* growing in deep shade among the woodland.**

I also got to know Lhendup our other Bhutanese companion who came from the Bhumtang region in Bhutan. I found out that he was writing an article about us and the trip that we are doing for the national paper which I found amazing that the population would be interested in such things.

But soon our attention was diverted by other amazing plants. Down the bank side along the path was growing a lovely specimen of *Arisaema griffithii* (See Plate 23), *Pleione hookeriana* and a species of *Smilacina* which was not identified (See Plate 24).



**Plate 23. *Arisaema griffithii* in full splendour.**



**Plate 24. *Smilacina* species just about to flower.**



Shortly after, walking by myself, I came across some shouting coming from ahead of me. Speeding up to see what the trouble was I came across a bunch of young army lads playing javelin, a widely played sport, in a clearing in the forest (See Plate 25).



**Plate 25. A group of army lads playing javelin in a clearing.**

Just past these people there were two lovely plants waiting. The first was a lovely *Iris clarcki* (See Plate 26) and *Prunus serrula* (See Plate 27).



**Plate 26. *Iris clarcki* with its owner showing off for a picture.**





**Plate 27. *Prunus serrula* in a size I've never seen before. Lovely bark making it stand out in the forrest.**

Reaching the Monastery of Lunchuzy we had a light lunch and were greeted by monks which offered us very nice coffee (which was later to be taught the cause of my illness the next days). We were allowed to go inside the temple but with no shoes on which was a welcome relief to all the walking. Inside, the walls were colourfully painted with many altars inside which had gold leaf on them (See Plate 28).

The monk blessed us with holy water on our heads and to show our gratitude we left a donation of 20 ngultrums each.

The monks themselves interested me. In the departure gate in Kathmandu coming to Bhutan I saw a monk with tennis shoes and an Ipod, I found that these monks were not far off having these luxuries. Maybe changes in the religious system has allowed for monks to have valuables.

The second part of our walk was mostly downhill and it was what completely decimated our strength. However, it was also the most botanically interesting part.



**Plate 28. Monastery of Lunchuzy – consisted of a temple and housing for the monks but all very well kept.**

Looking up into the branches of *Abies grandis* (*spectabilis*?) it almost looked like a huge hairy spider (See Plate 29) and its cones were a lovely purple colour typical of the *Abies* family.



**Plate 29. With a bit of imagination it sure looked like a big hairy spider or a scorpion!**



Growing on these was what looked like lamp shades which were in fact fungi. The wildlife seemed to come out with many Coleopteran insects coming out the woodwork. The adaptations from huge pincers to lovely colours just showed how varied life is in that forest (See Plate 30 and 31).



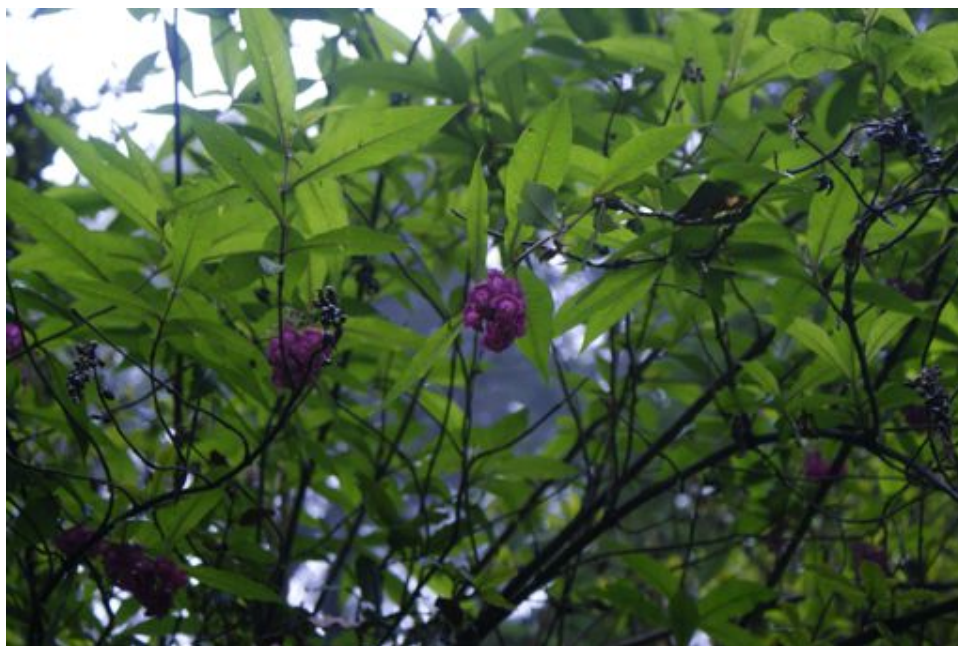
**Plates 30 and 31. On the left a huge thumb sized beetle waddled its way through the undergrowth. On the right a brightly coloured beetle poses for a picture.**

Right next to these chaps was a lovely *Pedicularis megalantha* in full bloom (See Plate 32). It was growing on the bank sides in a valley clearing we happened to cross and which was, according to Sonam our guide, one of the old major trade routes crossing the country. From what we would see later and what we saw there we could presume that they like moist, fertile soils in full sun. They also seemed to do well with competition from plants around it as we found it growing amongst wild strawberries.



**Plate 32. *Pedicularis cf. megalantha*.**

One of my all time favourite plants was waiting just down a stream path we followed: *Buddleja colvilei* blooming high in the branches (See Plate 33).



**Plate 33. King of Buddlejas – *Buddleja colvilei*.**

I first met this plant in Ray and Shirley Clemo's garden in Cornwall. Ray explained to me that it should never be pruned unlike other Buddlejas due to its habit to grow into a tree. And he was not wrong. The specimens we saw were huge and making a tunnel as we went under them looked beautiful with their bell shaped flowers.

Going further into the jungle the path got very hard to manage. But after about 2-3 hours we hit a plane with a dense population of cannabis plants which surprised me indeed! By this time our energies were running very low and we were surviving on energy tablets to keep us going.

Further on we found yet another great specimen plant. This time it was *Brassaiopsis cf. mitis* which had stunning foliage and reached great height growing near streams (See Plate 34).

One of the final hurdles we had was a river crossing. We set up a rudimentary bridge (See Plate 35) and began crossing. After testing the bridge I opted to crossing the river bare footed which was a gift to my hot worn feet. I was to regret this as after a half an hours walk to the road where the pick up point was we had a check for leaches. I was surprised to find a total of 12 on me! All that can be said is that I won the free drink that night for most leaches.



After pulling them off with salt we set off in our drive to Punacka were they made beer out of cloves! Very strange taste indeed. Dinner was very nice and plentiful like all meals to that point. We capped the night off in our rooms by having to chase thumb sized cockroaches with Deet.



**Plate 34. *Brassaiopsis mitis* in full splendour.**



**Plate 35. Makes the film “A bridge too far” seem like a stroll in the park**

#### 3.1.4 Day four – Punakha to Jakar

This was the start of a very bad sickness that lasted two and a half days. I woke up at 3am and did not get back to sleep. We drove from the hotel with me taking as many antibiotics as possible to avoid any stops along the way. I don't remember much of the journey as it was like comparing Dante's journey through hell. All the turns and bumps did not aid my situation whatsoever. It serves as a warning that no matter your health you have a 50-50 chance of getting a bug and fall very ill. What I do remember was a sighting of a lovely *Lillium nepalense* (See Plate 36) growing on the side of an eroding bank side.



**Plate 36. The only sighting of this showy lily which is much sought after by collectors and botanical gardens alike.**

## 3.2 Trek start

### 3.2.1 Day five – Dur to Chuzombe

I started the day still very ill but upon having some coke I recuperated at a dramatic speed. After what must have been an hour I was more active than ever!

After a short drive to our starting point we met up with our sherpas and ponies which would be carrying our gear for the lower parts of the trek.

They all seemed very friendly and hard worn from the harsh conditions that area has.

We started by crossing the river Dur Chu on a suspension bridge (See Plate 37)



**Plate 37. I wonder if this bridge would pass a health and safety test in the UK?**

and on our way up we found many interesting plants growing under the trees like *Paris podophylla* with amazing orange seeds and *Chimophylla japonica*. At lunch we stopped in a clearing among low growing bamboos where we had a nice lunch but I only ate half as my stomach bug came back again. Shortly after starting the second part it started raining and it did not stop all day till 9 at night were the sky went clear.

Throughout the afternoon we saw some amazing plants like *Hypericum petiolatum* (See Plate 38), *Tradescantias*, *Notholirium cf. macrocarpum*, *Rhododendron lepidotum* but the most amazing for the whole trip for me was finding *Corybas himalayensis* (See Plate 39, 40).



A very rare and endangered orchid about the size of my thumbnail in total but the markings and shape of the flower were amazing.

It was growing in a very mossy, leaf litter in part shade. There were only 5 or 6 plants that I could notice I only hope that they are a growing community.



**Plate 38. Hanging over a lovely mountain stream – *Hypericum petiolatum*.**



**Plates 39 and 40. Sometimes it's the small details that catch our eye and this chap sure fascinated me.**



Two hours before camp we had to travel through a bamboo forest on a very muddy path which most of the time you had no choice but to go right in it to pass. Just at the last corner Martin sighted a lovely orchid *Calanthe spp*'s which was in deep shade among dense shrubbery (See Plate 41).



**Plate 41. A find in the dark – *Calanthe spp*'s.**

The clearing to our camp was like an opening to heaven. The monsoon did a serious damage to us all that day.

### 3.2.2 Day six – Chuzombe to Tsochenchen

Started to notice a weather pattern – from about 6 at night till 11am the sky is clear and it is lovely and warm. The other part is mostly continuous rain.

Today was a long uphill walk but one of the most botanical interesting ones none the less.

We started with a walk up the Gorzam Chu with lovely views of the fast flowing river (See Plate 41), but also some very nice plants just a few meters away from camp: A *Delphinium spp*'s (See Plate 43) and a lovely *Cardiocrinum giganteum* (See Plate 44) both of which were stunning in flower. The last proving a great fight to get to as we had to go up a steep incline in a nettle forest. We soon found out that Himalayan nettles sting far worse than our European counterparts.



**Plate 42. Great views on a lovely day – Gorzam Chu river.**

As the day turned out it was keeping its good weather for longer than usual which we took full advantage of by searching for nice views and plants (See Plate 45) most of which we found included a species of *Pedicularis siphonantha*.



Plate 43. Growing at around 30cm high this lovely *Delphinium* spp's had a lovely tone of blue/purple.



Plate 44. *Cardocrinum giganteum* in full splendour.



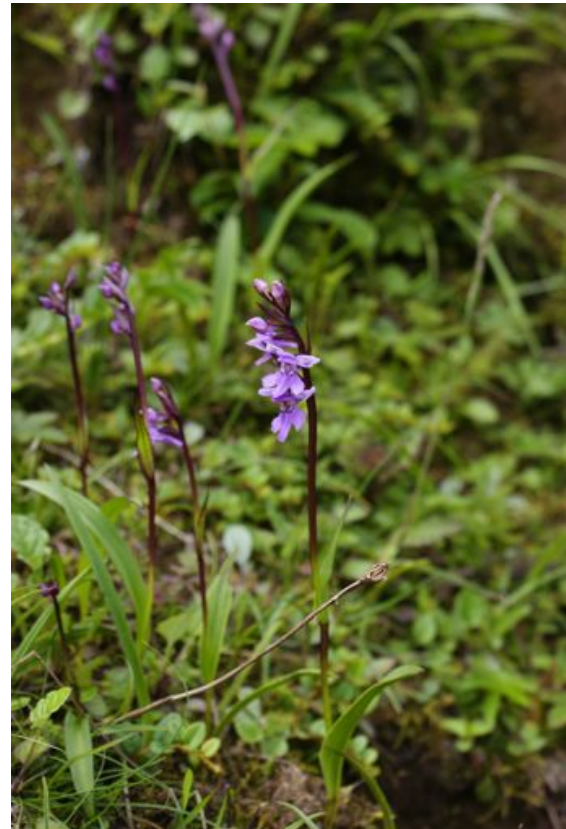


**Plate 45. Views of the Himalayas from fields of *Pedicularis siphonantha***

At lunch time we sat down on an abandoned farm field and noticed that we were surrounded by what looked like at first *Dactylorhiza* orchids but soon found that it was *Ponerorchis chusa* (See Plate 46).

**Plate 46.**

**Large expanses of these orchids were growing quite well in open hillsides along the way. Their needs did not seem to vary much from their close relatives *Dactylorhizas*.**



And soon after this we found growing on a marshland a lovely scented *Primula involucrata*. I must admit that I was never a big fan of Primulas due to my upbringing with the use of bedding varieties but im glad to say that due to this and some others I met along the way im slowly but surely changing my mind.

Our best finds of that day were yet to come. About an hour later we ran into a lovely *Cypripedium spp*'s which we could not identify (See Plate 47) but which we also saw on our second day in Bhutan.



**Plate 47. Blending in like a chameleon was this lovely *Cypripedium spp*'s.**

From this plant we looked sideways and found another great plant: *Lillium sherriffii* (See Plate 48) which was lovely in bloom and quite different from the ones I have grown in the garden.

Further up still was two other *Cypripediums*: *Cypripedium tibeticum* (See Plate 49 and 50) and *C. himalaycum* (See Plate 51 and 52) both of which were of stunning beauty and since seeing them have made me carry our further research and use them for University projects.



**Plate 48. What is for me the king of lilies – *Lillium Sherriffii*.**



**Plate 49. *Cypripedium himalaycum***

**We noticed that it was a growing population and many had already been pollinated. Luckily Bhutanese people do not pick these plants so they are left to flourish.**

**Plate 50. *Cypripedium himalaycum***

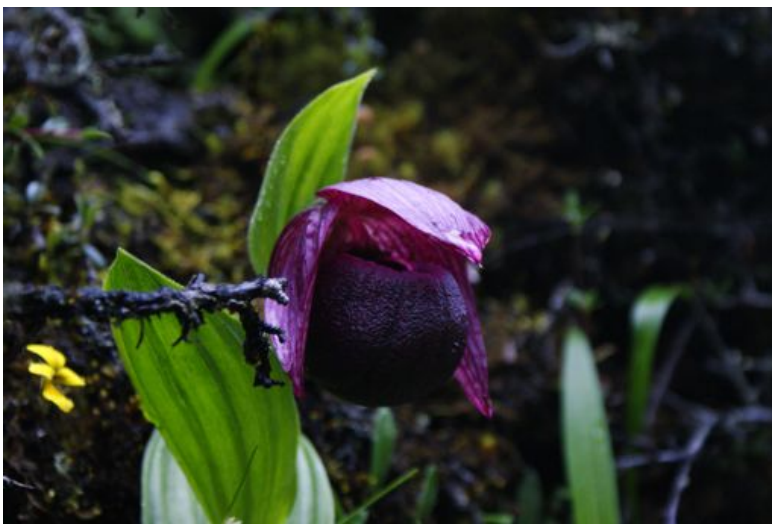
**Growing among lovely *Primula cf. Sikkimensis* in sandy loam soil. But also in sandy/gravelly soils.**





**Plate 51. *Cypripedium tibeticum***

**The largest flowering that we saw on our trip it was indeed the star of the show.**



**Plate 52. *Cypripedium tibeticum***

**Home to many a bug, its pouch is protected by a canopy to stop rain filling it.**

After spending near an hour in this location we had to catch up otherwise we would be arriving in the dark. As we sped along the path we could not help noticing other amazing orchids that popped out at us. Standing at 2 feet high was a lovely *Oreochis cf. porpyronthes* with a lovely striped leaf and tall flower stalk (See Plate 53). Also along the way we found *Meconopsis bella*, *Pedicularis clarkii* and *Rhododendron lepidotum* and a few others from before.

One that did stand out also was a lovely *Rubus spp*'s (See Plate 54) which at first looked like some kind of orchid flower but once I traced it back to its leaves I realised that it was a spiky plant and I put my finger right on one of its prickles!

Most of the walk was now a steep incline following a very noisy but spectacular river. As we climbed and passed the 4000m mark I felt the air get considerably harder to breath and every step much harder to take but none the less the prospect of a nice hot chocolate and sitting down looking at peoples finds was enough to spur me and the others on.



**Plate 53. *Oreorchis porpyronthes* hiding among low shrubbery.**



**Plate 54. If only my garden brambles had these flowers...**



We made it back to camp in the dark after making a bridge crossing over the river and walking through an alpine meadow, which we could not botanise unfortunately due to low light levels.

One thing I did notice that night was the stars that night. They were so big and close you could almost stay out and watch them all night but the cold drove us all in fast to bed.