YUNNAN , CHINA
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Acknowledgements

China isn't too close to Britain and I have never travelled so far before, so I admit I was petrified. I am from a small town in New Jersey, USA, 18 miles outside of Manhattan, and so this was a huge trip for me. I could not have realised my own confidence and overcome my silly fears without my husband Andrew, through his constant support and reminders of the wonderful things in life.

My family and friends all said *Go for it*, it's a once in a lifetime opportunity; and they were right, so I thank them.

And to my work managers and colleagues, I thank them for their support and encouragement through all my learning ventures, as well as Jim Gardiner whom supported and inspired me to go. In addition I would like to thank Alison Evans, Yvonne Golding and Tim Pyner of the British Pteridological Society, for sharing their information of the ferns of Yunnan, and continued ferny inspiration.

And lastly to my fellow tour members and tour leader Phillip Cribb and his wife Marianne whom I am thankful to have experienced such a unique opportunity with such a cool group of people and grateful for all the knowledge they shared.

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Abstract

I have broken down my paper into two basic parts: firstly I shall give a brief description of the tour and the region. Part 2 describes the hikes we took in two separate sections, first being *Southern Regional Hikes* and secondly *Moving Northwards*. To the best of my ability I have tried to supply plant names and the location we were at for the specific plants. The photos I am second guessing about I have simply put sp., at its end. There are many plates, as I hope it gives good images of not just the plants but also their habitats. Part 2 of the paper, Inspirations and Methods, is a brief description of what I have taken from the trip and hope to put towards my work and projects as a gardener. There are a few following images from both my work projects and from Yunnan that I hope will illustrate this. Lastly in the Appendix there is a map of Yunnan with some highlights of the areas we were in.

Introduction

Going to China this past June I heard from many, wow that's a once in a lifetime opportunity. So as I I came home to digest all I saw and experienced whether it was botanical, environmental, political, cultural and spiritually even , a possible once in a lifetime opportunity could perhaps make a an impact, no?

When returning from seeing such new amazing landscapes, plants I was familiar with in their native habitat and plants new to me I thought I would have the biggest fire inside towards my work as a gardener. However, with all that I saw and learned I actually came home quite dismayed, overwhelmed by what I didn't know botanically and lost as a former art student career changer whom has a fervent passion to build and create. Where do fit in if I don't know what they know?

Unexpectedly, the trip to Yunnan became a platform for me as a professional gardener to ask what I love most and whether or not I felt this was viable in this industry. This paper will show and tell of the incredible plants and places we saw as the evidence of what became the instigator to question and then accept my role as professional gardener and whether or not this was ok with me.

So I apologize that the paper introduces and concludes more than just plan, but being a once in a lifetime opportunity, this trip to Yunnan presented a prospect for me to think a lot more about the botanical and horticultural world we are a part of as individuals.

Overview of Trip Design and Travel Path

This trip to the Yunnan was designed to follow in the footsteps of some of history's greatest plantsmen. Men such as George Forrest, French Missionary Jean Delavay, Frank Kingdon Ward and Joseph Rock. In essence the trips direction highlighted two things: one being how much easier it was for us in the comfort of modern age technology, tourism and transportation, and possibly, if I dare say, politically. The second aspect made by traveling from the sticky hot south to the cooler higher north really drove home the drastic and dramatic change in landscape of the south western part of Yunnan. Travelling in this direction they would have been coming in from the hot humid forests of Burma and Tenchong to make their way through the arid areas of the mid portion of the province, following the rivers up to the steep screes of Zhongdian and the Sichuan and the Tibetan Borders. All along the way the landscape and plant communities varying and changing.

We began the trip in Kunming and then travelled by plane to Chengdu and lastly Tengchong. After a few days we worked our way north-east to Dali. We then commenced northward to Zhongdian (or Shanggri-La, where we stayed as a base to explore several areas, such as the further north Hongshan and Deqin. Towards the end of our trip we travelled to Lijiang to depart to Chengdu to return back home. These areas will be better described throughout the paper.

Overview of the Yunnan Region

The Yunnan region is a diverse province within China, culturally and geographically with different tribal communities and steep peaks (think vegetative woodland). The province borders Vietnam, Laos and Myanmar to the south and west and in the north a small portion of Tibet. Like its southerly neighbours the south west has a tropical rainforest climate. In the north, where portions of the Himalayas influence mountain ranges in Yunnan, some peaks are continually snow-covered, which contributes towards creating a cooler climate. The region also undergoes a monsoon season, however Yunnan has also been suffering through years of drought in the northern part of the country.

Southern Regional Hikes in Yunnan

Our first day out was more of a taster, visiting tourist areas of **Tengchong** such as a War Memorial cemetery and the ancient town of **Henshun,** which gave me an understanding of its suburban horticulture and botanical make-up. Throughout the region tourism is increasing and government and towns are doing their best to build better facilities and roads to accommodate visitors, and this includes improving their town landscapes as construction ensues. Many of the trees planted were installed as semi-mature specimens, which is a shock to see both their survival and detriment throughout the towns. Irrigation is wildly used, however not all places have been so lucky. Some of the dominant street trees were *Gingkgo biloba, Cedrus deodara, Cunninghamia lanceolata, Cryptomeria japonica* and *Magnolia grandiflora.* The *Cedrus deodora* being a curious choice to me as its branches can reach heights and widths of greater than 25 feet.

Plate 3 Above: *Ginkgo biloba* street trees tolerating great amounts of pollution and pavement compaction.

Plate 4 Below: *Bouganvilla* dominant in southern towns

Plate 5: *Cedrus deodara* street tree

The old town of **Henshun** provided me with a taste of their ornamental Landscaping with some images below depicting their uses of water features, ferns and shrubs that demonstrated the use of mimicking a landscape in a way as their garden, rather than plants that complement each other for colour and bloom.

Plate 6 Left: Old Town of Henshun with *Polystichums* that border a water feature with a ground cover of a *Persicaria sp.* back-lifted with stone.

Plate 7 above: dwarf Japanese *M*aples and Gardenia shrubs border the water feature that almost imitates a stream in the wild with diversified mixture of sizes and plants flanking a natural stream.

The Tenchong Graveyards of National Heroes succeeded to be a quietly contemplative landscape which I felt only more by its choice in the minimalist plantings. It also reminded me again what a simple *Carex* or ornamental grass can achieve in a subtle way when planted in the right place en masse, and in this case *Ophiopogon bodinieri.* This small groundcover provided a green carpet around the graves with subtle white flowers speckled throughout, making the memorial dignified with its simplicity. The surrounding trees were *Schima khasiana* and *Pinus yunnanensis* that were limbed up high providing light for ground growth, and a wonderful atmospheric light that fell over the stones.

Plate 8 and 9: Tenchong Graveyards of National Heroes with Ophiopogon and other groundcover grasses making a big impact in it's quiet way (at least I thought so)

Another landscape in a town environment that made me think more about design was actually in the North, in Chengdu in the Sichuan province. Visiting the well-known **Poetry Park** I saw their landscape design filled more with textural foliage combinations that were tough enough to undergo easy, if any, maintenance regimes. Amazing *Woodwardias* with fronds of lengths of nearly four feet long mixed with a sturdy *Polystichum* species with an altogether different foliage. Below this bordering the pathways was either a *Liriope sp*.or *Ophiopogon* sp. Drifts of *Nandina* foliage peaked out through *Polystichums* while towering rampant Bamboos made a wild backdrop to this luscious foliage

Plate 10 Left: *Woodwardia sp, Ppolystichun* and purple variety *Ophiopogon* filling as a groundcover in the beds under small trees and Bamboos at Poetry Park Chengdu.

Plate 11 Right: Bamboo pathway at Poetry Park in Chengdu

The **Tengchong** area in the southern portion of Yunnnan is predominantly warmer, high in humidity and also on the edge of the Monsoon season when we arrived. This portion of the province demonstrated the world of Epiphytes in the way of Orchids and Ferns, dangling, clinging and even dominating the branches above us. In the **Western Burmese Border town of Langyahan Shan** which climbed to about 3,000 metres, with wooded areas mixed with conifer and deciduous trees. Some of which were *Pinus yunnanensis, Tsuga forresti, Alnus nepalense,Sophora davidii and Catalpa fargesii*. One of the most dominant trees that was agriculturally planted was *Juglans sp.* Incidentally, it was the shrubs that were making an interest to the mix with wild roses, *Cornus*, *Hydrangeas* and *Rhododendrons* adding to a thick undergrowth. *Pieris formosa, Sambucus chinensis, Rosa multiflora; R. bracteata R. sericea; Viburnum erubescens* and *Clematis montana* climbing in white clouds over the understory here and there made a great impact.

Plate 11 Top: Langyahan with *Juglans* in the foreground

Plate 12 Bottom: *Cornus capitata* with *Pinus yunnanensis* that would light up patches along the woodland edges

Plate 13 Top Left: *Cornus capitata* Langyahan Shan, Burmese border

Plate 14 Top Right: *Rhododendron decorum* Langyahan Shan, Burmese border

Plate 15 Bottom Left: *Hydrangea acuminata* Langyahan Shan, Burmese border

Plate 16 Bottom Right: *Hydrangea heteromalla* Langyahan Shan, Burmese border

Plate 17 Top: *Rosa multiflora* and *Clematis montana* commonly carpeted shrubs along roads to Langyahan Shan

Plate 18 Bottom: Possibly *Dryopteris wallichiana* with *Osmunda* regalis behind to Langyahan Shan

June 5th, the first day of seeing *Arisaemas*, but not quite in the form I expected as they were selling the bulbs for medicinal use in the hotel, along with orchids as well. The 6th was my first day to ever see an Asian *Arisaema* in the wild. Growing up in New Jersey along the East coast of America I'm used to seeing our wonderful *Arisaema triphyllum* carpet our mixed deciduous woodland floors. *Arisaemas* are a plant I grow quite a lot at Harlow Carr so seeing these in the wild was an important part of the trip for me as they are becoming of great interest to visitors in the garden, and I am learning how to put them into the landscape for them to enjoy as well as how to propagate and cultivate healthy plants. On a steep wet hillside where water must quickly run down but stay relatively moist with thick shrub growth to keep the ground cool was *A*. *consanguineum*, one with an amazing orange coloured stem. Further onto OUR walk to Langyahan Shan was *A. erubescens and A. yunnanese* under a high branched canopy of Mixed deciduous and *Pinus yunnanensis*

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Plate 19 Top: Possibly *Arisaema* tubers for sale for medicinal use.

Plate 20 and 21 Bottom Left and Right: *Arisaema consanguineum* flower and leaves at Langyahan Shan

Plate 22 Top: Forest of Langyahan Shan

Plate 23 Bottom left: *Arisaema yunnanense* at Langyahan Shan

Plate 24 Bottom right: *Arisaema* squeezing itself from bottom of stone at Langyahan

One of the individuals accompanying the *Arisaema consangunium* on our steep hillside was *Lilium brownie*; tall and majestic, it was incredible to see the lily grow in such a cool but open sky placement, along with a cobra lily which is an element I am working to expand on in our woodland edge areas for late flower colour and impact in partly shaded areas.

Plate 25 Top: *Lilium brownii* found near Langyahan Shan

Plate 26 Bottom: Height comparison of *Lilium brownii* to trip members. The lilies were found on bank edges under open sky in cool dampish conditions, this one on a steep slope

Surprise architectural elements; on rock, with rock, in tree, on ground bordering path at Langyahan Shan.

Plate 27 Top Left: A great specimen of possibly *Dryopteris wallichiana* next to a mossy tree stump

Plate 28 Top Right: *Lycopodium sp*. bordering the edge of the path

Plate 29 Bottom Left: Several *Coelogyne corymbosa* clumps growing on a rock

Plate 30 Bottom Right: *Coelogyne longipes* growing in a tree

Another southern trek out was to **Gaoligongshan, East of Qu Shi** town on the west flank of **Galolang mountains,** which was even more of a representation of a sub-tropical forest, rising up to about 2005 meters. With high temperatures and a strong environment of moisture, Epiphytic orchids and ferns dominated tree tops and large ferns covered the forest floor. Trees here were thankfully saved from any forestry work and were good mature sizes. The canopy was made of specimens such as *Manglietia hookeri, Schima khasiana, Betula alnoides, Padus wilsonii, Castanea cathayana* and even along the way seeing flowering *Catalpa ovata* with wonderful shaped leaves.

Interesting textural shrubs and herbaceous plants took stage here standing out under towering trees. Such as *Mahonia lomarifolia, Aralia elata* which for me only created more contrast with stands of *Amomum subulatum* that grew nearby. Surprisingly *Phytolacca acinos* was spotted with large leaves which again was interesting to for me to see as I grew up with the very common *P.americanos,* which makes me wonder if this species could hold as much ornamental value as the North American type, though it may not be as hardy. I also wonder if it holds the same amount of poisonous value and if there are any indigenous uses for it as there is with so many other plants. Adding to the exotic feel were *Bulbophyllum* sp. and a wonderfully red specimen of *Aeschynanthus linearifolius* growing off a tree.

Plate 31 Left: *Aeschynanthus linearifolius* growing on a tree in the Gaoligongshan

Plate 32 Right: A world of Epiphytes high above in the trees at Gaoligongshan

Plate 33 Top Left: *Mahonia lomarifolia* under the dense canopy at Gaoligongshan

Plate 34 Top Right: *Aralia elata,*

Plate 35 Bottom: Stands of *Amomum* subulatum at Gaoligongshan

But again it was the *Arisaemas* that made the greatest impression on me with stands of possibly *A. yunnanense* with a great specimen of *A. erubescens* in really leafy rich cool soil, with *A. consanguineum* at heights of nearly four feet, (I don't exaggerate) at this height you would find them bent through fern fronds. One of the best discoveries was the *Disporum cantoniense* at a height of nearly 3.5 feet, extremely graceful. This is a plant I have failed to grow well at Harlow Carr and now I'm wondering if I am not giving it the heat it may need to flourish to grow to that great architectural impact.

The rich fern growth was unbelievable and provided endless inspiration amongst, along and on all the trees and logs and pathways. One of the dominant ferns possibly being the *Dicranopteris* sp., which was punctuated with singular specimens of *Pteris* and stunning *Woodwardias and Dryopteris.*

Plate 36 and 37 Above Left and Right: *Arisaema erubecens* at Gaoligongshan

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Plate 43 Top Right: Epiphytic Fern species up a tree

Plate 44 Bottom: A possible *Pteris* species that resembles a *Woodwardia*

Gaoligongshan

The last trek in the south at **Datang, Gaoligong Shan National Park** did not highlight that many plants for me, but rather many moments that nature creates without intent, that are an inspiration for me to work from in the garden. They are the surprises, the elements left to be discovered, the chaotic symmetry that the world around us does so well, when man's hands are left out of the picture to organize it. Walking to see plants in their natural habitats reminds me how much our gardens don't tell the story of where they're from that in turn make the plants display more of their beauty and the unique qualities that we search all over the world for. The rocks, water, the fallen trees and spotted grasses the fungus and many other elements that are just as much as a part of that beauty than just the petals themselves on the plants. When removing these plants from their natural surroundings are we taking away the adventure? The foreign qualities? Individual plants will always remain unique in their way without their surroundings, but I question what we're losing when we put them in our organized gardens without re-creating or building the unintentional aspects into gardens.

Here at **Datang** the mountain rainforest created a diverse environment. It was a temperate mix with rainforest, no conifers but broadleaf deciduous trees surrounded by high mountains that end up generating the high rainfall. It's an area that goes through the monsoon season that was once a volcanic area. *Quescus* sp, *Juglans* sp and *Manglietia* trees dominated the upper story, creating shade and locking in moisture in the air. The undergrowth was a mix of shrubs, such as s *Ilex pernyi, Daphne sp., Rhus toxicaria, Stachyurus himalaicus*, *Salix fargesii* and *Sarcoccoca hookeriana*. Mapels were a common species, with varieties such as *Acer pectinatum; A. cappadocicum var. sinicum; A. davidii; A. campbellii.* However it was the *Schefflera delavayi* growing out towards the sun, making tall skinny umbrella-like stands that gave the area a tropical feel

Yet overall the overriding plants were *Girardinia diversifolia* the large leaf nettle, ferns and some climbers. The ferns here were amazing and only infused my passion for wonderful fronds and to share them within the garden even more. Impatiens made good stands here with species like *I. argute and I. kingie. Cardiocrinum yunnanese* grew here, though we saw none in flower, just leaves. *Galeola lindleyana* and *Calanthe lamellose* orchids were found with other herbaceous such as *Iris confusa*, *Arisaema nepenthoides, Thalictrums sp*. And a wonderful *Paris polyphylla* growing directly on a sloping bank very near a *Mainanthmum sp*.

However, the goal of our trek was too see the type of specimens of *Rhododendron protistum var. giganteum,* the surviving plant from George Forrest's collection. It's a sizable tree and I feel lucky to have seen it, however that wasn't what made the plant of the day for me (please forgive me). After this long hike over slippery rocks and falling humans was a massive stand of *Arisaema utile*, almost as if it was trying to show up this historical Rhododendron. And I'm sorry to say, he kind of did it for me!

Plate 45 Top Left: Datang, Gaoligong Shan National Park with its large river/steam bed that runs straight through it

Plate 46 Top Right: *Paris polyphylla* at Datang, what a great find

Plate 47 Bottom Left: Our guide who used his large knife for clearing pathways as well as to fish with by delicately moving the blade under rocks to scare them out

Plate 48 Bottom Right: *Galeola lindleyana* orchid at Datang

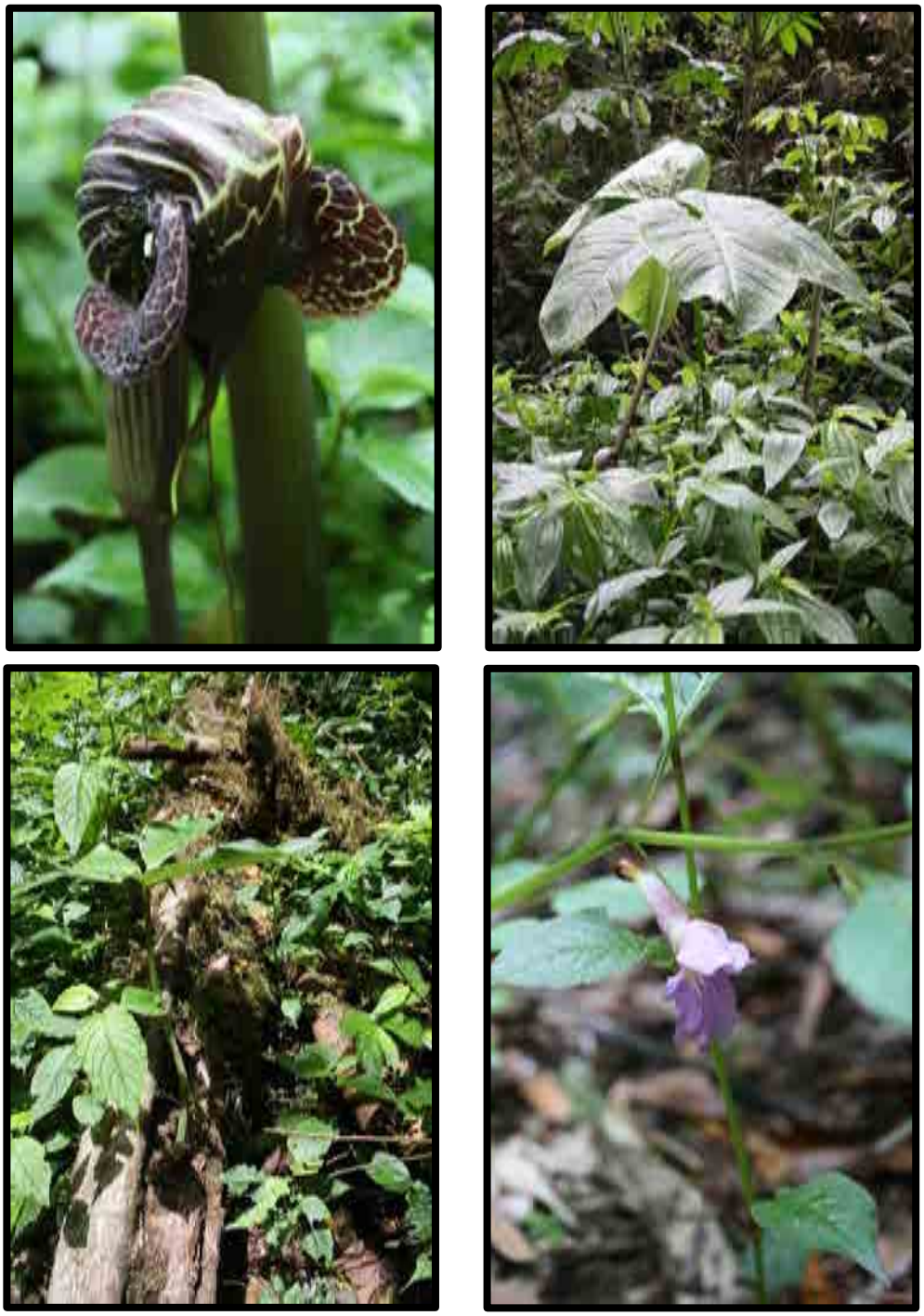


Plate 49 and 50 Top Left and Right: *Arisaema utile*, Wow, at Datang

Plate 51 Bottom Left: *Arisaema* growing from a log, Datang

Plate 52 Bottom Right: *Impatiens arguta*, Datang

Moving Northwards

On June the 9th we began our trek northwards to **Dali**, in the **Cangshan Mountains**, getting a first small feel of plant communities at a higher altitude. It was also the first time actually seeing a definitive difference in the landscape, as if someone drew lines where one plant environment should grow and where the next should begin, formed by altitude, climate, temperature and the physical changes in the landscape itself. An incredible way of seeing this is through a cable car, where overhead you can see the tree tops change and rhododendrons creep in to lead to tougher coniferous specimens as we went to 4,000 metres.

The lower elevation was a forest made of *Pinus yunnanaesis*, *Populus delavayi*, *Juglans* sp, and Bamboos; shrubs like *Enkianthus* sp., *Acer cambelli, Tsuga dumosa* and *Pinus armandii* and then undergrown with some of our first larger leaf Rhododendrons. But it was the vines that you saw in a whole new way from this rare perspective of the cable car, clambering over the tops of the crowns of the trees. I have now a new respect and inspiration for *Clematis montana*, for the wild impact it made as well as its competitor *Berchemia yunnanensis*. Though in the garden vines can do more damage to trees if left neglected, when cared for they can bring you back to that landscape where growing guidelines are unknown and the unexpected is cherished. Furthermore, the tremendous growth put on these vines seen from a lower perspective gives that window to remind us of scale or actually our scale and size in comparison to what can be growing around us. It instantly reminds me of a *Vitis coignetiae* growing up an oak at work that stops visitors all the time in amazement of its size and vigour, a true representation to us of the power of plants.

The summit seemed to have an imaginary line where it immediately changed to Rhododendrons and *Juniperus squamosa* punctuated with *Abies delavayi*, like entering into a whole different country and climate. It was these *Abies* that gave this landscape the poetic feel that you imagine when one thinks of hilltops in Asia, at least from this Westerner's point of view. The mix of small and large leafed rhododendrons that were dwarfed by the high altitude weather and climate created a carpet for these highly architectural Fir trees to show off their beautiful structures. It made me re-think there and then: do we celebrate the natural beauty of our trees enough in our public gardens in the right way, with the right or any plant companions or do we nearly just collect, place and plant?

The rhododendrons were dominantly the larger leaf *Rhododendron taliensis*, with white flowers along with small leaf varieties like *Rhododendron hippophaeoides*, *R. fastigiatum*, *R. haematodes*, *R. lacteu*, as well as *R.rubiginosum* that has been successful at Harlow Carr.

The shrubs that the herbaceous plants seemed to weave themselves around or under were *Juniperous squarrosa, Sorbus micrphylla, Spiraea canescens, Niellia tibetica* and a genus that I once disliked fervently but from this trip has redeemed itself, *Berberis*. Amongst this diverse dwarfed landscape was *B. stiebnitziana* with yellow drooping small flowers that were delicate in their thorniness.

The herbaceous demonstrated the characteristic moisture of the landscape where air humidity and rainy season down pours create not a flooded landscape but one that benefits from having a soil makeup that holds onto that water in some parts as well as free draining it through their root system just enough to keep them moist but not wet. These took form in grassy wet meadows with tricking streams where there was an array of Primulas, like the wonderful yellow *P*. *sikkimensis*, the very sweet *P. amethystina*, and the lavender *P. calliantha*. Also was *P. serratifolia; P. orbicularis*. These Primulas were my introduction to wonder what other ones could I be growing successfully outside of the wild environment? What ones could be outside of the alpine house and out of the typical rock garden?

Also in this great damp tapestry was *Megacarpaea delavayi, Omphalogramma delavayi, Anemone demissa, Pedicularis roylei, Saussurea nidularis, and Androsacea minor, A.spinulifera*. Mixed with the sedge *Kobresia* and really depicting the damp areas or nearly growing in the water like the *Pegaeophyton scapiflorum* with *Draba surculosa; D. oreades, Bergenia purpurecens, Caltha paulustris var. chinensis, Bistorta vivipara, Potentilla forrestii* and *Rheum forrestii. Veratrilla baillonii* stood out with a another plant to make an impression throughout the trip *Megacodon stylophorus*, for lovely cupped nodding flowers; but even better *Veratrum* like leaves carried up a sturdy stem making a statuesque plant. Obviously loving damp sites with drainage seen throughout the trip, I wonder could I grow this? (Please can I grow this?!)

The landscape highlight that introduced itself here that was to become a theme across the rest of our northern treks were the ‘shrub islands’ (as I refer to them). Shrubs or clusters of shrubs that acted as little sanctuaries for smaller herbaceous, providing coverage and protection from any severe wind and downpours and maybe frost, possibly even grazing animals too. They may have even provided that shade for them at this high altitude where the sun could be possibly severe on a clear day. Maybe there could also be a symbiotic relationship between some groups. The *Arisaema elphans* and *Polygonatum verticllatum* demonstrated this superbly with small communities taking refuge under Junipers and Rhododendrons. There were definite inspirations for work in the garden, though most of my education I learned that shrubs will steal the moisture away from other plants, I wonder where I have taken this too strictly and missed, with some particular plants, good opportunities to create great surprises and companionships.

Plate 53: Top of our walk at Cangshan at 3966 metres where prayer ribbons can be bought and tied up written with the names of loved ones

Plate 54 Top Left: Small streams that run through Cangshan

Plate 55 Top Right: *Berberis stiebnitziana*, Cangshan

Plate 56 Middle: Pegaeophyton scapiflorum, Megacarpaea delavayi, Caltha paulustris along the water, Cangshan

Plate 57 Bottom: Maianthemum forrestii and Arisaema elphans under a Juniperus squamata, Cangshan

On to Zhongdian

Travelling further north to Zhongdian, where we were to be based for a while, we encountered more habitats that constitute typical Alpine flora, first starting on a plain en route to what was once the most south easterly area of Tibet. Fields for raising barley and other crops and Yaks led way to hill sides and mountains where the flora became dwarfed by its exposure. Though along the roadsides and woodland thickets the varying trees, shrubs and herbaceous took me by surprise and have inspired me to take another look at many of the shrubs we could be using more of for interest in the woodland.

A beautiful plain covered in *Rhododendron hippophaeoides*; *R. racemosa* introduced us to sporadic swathes of pants such as *Thermopsis barbata*, *Incarvillea zhongdianensis, I. argute, Stellaria chamaejasme, Euphorbia stacheyi, E.jolkinii, Anemone trullifolia* and *Vincetoxicum forrestii*. Iris made an introduction here, leaving an impression on me for the rest of the trip to be inspired to use more at home. Seeing them out of the neat an organized garden in a more wild way with companion plants, I can envisage them being used more in wild settings. *Iris bulleyana* stood out along roadside thickets while the very tiny *I. barbatula* grew on the grassy grazed plain. In addition to the tiny plants was *Erigeron breviscapus* and the ever so mighty *Gentiana chungtianensis*.

Also on this plain were copses of *Betlua platyphylla* var. *szechuanica* that also opened into small glades, if you dared to enter. Covered on the ground were dwarfed evergreen *Quercus semecarpifolia* and with added sharpness *Q*. *monimotricha*, making a great contrast with the white bark of the birch with dotted yellow *Stellarias* about. Any glade gives magic, I rejoice them in British woods and here they had the same effect.

Plate 58: Flower filled plain near Zhongdian

Plate 59 Top Left: *Betlua platyphylla* var. *szechuanica* glade north of Dali

Plate 60 Top Right: *Thermopsis barbata*, North of Dali

Plate 61 Bottom Left: *Quercus semecarpifolia, Berberis mouillacana* and *Euphorbia jolkinii*

Plate 62 Bottom Right: *Stellaria chamaejasme* with possibly *Euphorbia stracheyi* and *Anemone trullifolia*

Shika Snow Mountain

Shika Snow Mountain in the **Zhongdian** area was a trek demonstrating a diverse landscape that once again changed with altitude, exposure and physical elements. You truly went from one landscape to a completely different one. We started again with a cable car that took us to 4,425 m with a 10km total trek descending. The top portion was exposed and covered with dwarf *Rhododendron hippophaeoides, R. trichostomum, R. russatum* and the very minute *R. nivale*. Intermittently were *Primula chionantha* var. *sinopurpurea*, *P. calliantha* and possibly *P. amethystine* and that eventually worked down the mountain to other species. Mixed along with *Corydalis pachycentra, Cassiope* sp. growing directly with the Rhododendrons and *Diapensia purpurea*.

Working our way down the mountain was when things got exciting, you eventually hit the tree line again which as a mixture of deciduous and also Rhododendron conifer forest. *Betula platyphylla, calcicola, B. delavayi, Populus rotundifolia, Sorbus rehderiana, Acer forrestii*, mixed with *Picea likiangensis, P. brachytyla, Abies delavayi*, and new to see were the start of more *Larix potaninii* and *L.griffithii* var. *speciosa*. The understory shrubs made me develop a new appreciation for genera such as *Syringa* with S. yunnanensis flowering throughout the hill sides with occasional *Deutzia zhongdianensis*. Wild scrambling *Rosa moyesii, R sericea* and *R.sweginzowii* made me look at what is normally a scrub hedgerow plant in another way as well, especially when light pale flowers lit up woodland edges. Large leaf Rhododndrons were *R. wardii, R.decorum, R. vernicosum, R.irriatum, R.roxieanum* and one of the most common *R. phaeochrysum*.

As we worked our way down, the herbaceous increased tenfold and demonstrated different habitats. Understory wet growth areas and meadows pre-dominated *Ligularia langkongensis* as well as *L. nelumbifolia; L. liatroides* along with *Cardamine tangutica, Rogersia aescolifolia, Caltha paultris* and *C.scaposa.*

Some of the standouts were an *Oreorchis erythochrysea* growing right along the edge of an embankment under open sky. A very simple *Triosteum himalayanum* got my attention for foliage effect with large ovoid opposite pubescent clasping like leaves and muddy coloured flowers. Primulas that made me wonder as a gardener were *P. deflexa, P.sonchifolia* and *P. polyneura* that were vigorous around the bases of shrubs.

Two plants that I came to see in China introduced themselves to me for the first time. One being the *Meconopsis* seeing *M. sulphurea* (possibly also known as *M. pseudointegrifolia*) and *M. lancifolia. M. sulphurea* confirmed to me the need for coolness in its habitat. We found it under rhododendrons with windows to open sky in areas where the ground was damp. It grew in open glades in the woods with *Ligularia* at its feet. *M.lancifolia* grew at the base of a limestone cliff with damp ground amongst *Corydalis* and small ferns and neighbouring *Rhododendrons*.

And what made me shriek (happily) on the trek? Seeing my very first Asian *Podophyllum*, *P.hexandrum* to be exact. Again I grew up with *P.peltatum* on the east coast of America and I have enjoyed growing them at Harlow Carr. Seeing their habitat elsewhere is a help to figure their best cultivation in the garden. It grew quite vigorously when we had reached a lower altitude of 3,000m approximately in areas that seem to possibly flood occasionally. It took refuge under Rhododendron and *Bereberis* with *Ligularia* and *Polygonatum verticllatum* and formed good clumps. This is very similar to its eastern relative's habitat in its woodland. It varied in leaf mottling and intensity of pink in its flower. Needless to say, I was a very happy Jersey girl, seeing my first , what we call Mayapple ,outside of the US.

Plate 63 Top: Shika Snow Mountain woodland with Rhododendrons from a cable car

Plate 64 Middle: Shika Snow Mountain Rhododendrons in bloom

Plate 65 Bottom Left: *Rhododendron nivale* and *Corydalis pachycentra*, Shika Snow Mtn.

Plate 66 Bottom Right: Possibly *Primula amethystine*, Shika Snow Mtn

Shika Snow Mountain

Plate 67 Top Left: *Primula chionantha. sinopurpurea*

Plate 68 Top Middle: *Polygonatum vertillatum*

Plate 69 Top Right: *Chrysosplenium* species

Plate 70 Bottom Left: *Meconopsis sulphurea*

Plate 71 Bottom Middle: *Meconopsis lancifolia*

Plate 72 Bottom Right: Bottom of this cliff face *Meconopsis lancifolia* was found with several Corydalis sp.






Shika Snow Mountain

Plate 73 Top Left: *Primula sonchifolia*

Plate 74 Top Middle: *Oreorchis erythrochrysea*

Plate 75 Top Right: *Triosteum himalaicum*

Plate 76 Bottom Left: *Primula polyneura* with *Pedicularis oederi*

Plate 77 Bottom Middle: *Ligularia* species possibly *L.nelumbiflolia* or *L.langkongensis*

Plate 78 Bottom Right: *Meconopsis sulphurea* with *Ligularia* species in damp ground

Shika Snow Mountain

Plate 79-81 Top and Bottom left: *Megacodon stylophorus* just showcasing itself behind a great structural tree stump

Plate 82 Bottom right: *Daphne retusa*





Plates 83-87: Showing *Podophyllum hexandrum* with different mottling leaves and habitat under shrubs,trees, and also in the open ground amongnst dwarf *Rhododdendron* species. P. hexandrum began its growth towards at the lower elevation of Shika snow Mountain.

Tianchi lake

Plate 88:Tianchi Lake

We had a few great discoveries on our way to and at **Tianchi Lake,** an area that sits at 3,900 meters. Another plant that I wished to see on this trip very much were *Cypripediums*, and on this day we were excited to find both *C. flavum* and the very small *C.guttatum*! How wonderful they were!! I have been experimenting with these outside in the garden and have had some success but after seeing them growing at the edge of a high bank, literally on a ledge, underneath the shade of a *Betula platyphylla, B. utilis, B.sikkemensis* as well as *Acer foresstii, A.stachypylla, Acer capitatum* and *Populus* sp., their habitat or way of growing made more sense. Everywhere they grew they were nearly on a slope to some degree and in company of plants like *Acanthocalyx nepalensis* var. *delavayi* and *A.nepalensis* var. *alba, Incarvillea zhongdianensis* and *Mainanthemums tatsiense* and *M.henryi* and *Osmunda* ferns. The *Nomocharis aperta* was also a real treat, growing in the same conditions under the same trees.

As we climbed altitude we were in more coniferous areas filled with *Picea brachytyla* and *P. lichiangensis* battling a tough 5 year drought. At one point we found a lovely glade/swathe of *Beesia calthafoila* with *Hackelia uncinata* in a framework of logs and stumps that only made it more enchanting. Not far away we also found *Adonis brevistyla* growing in the same area as *Primula deflexa* and *Arisaema elphans*. To grow Adonis outside… I can dream or try.

The lake itself was at a high in altitude and was dominated by what seemed to be a type of natural floodplain that was thick with *Rhododendron intricatum, R. impeditum, R. rupicola* amongst other large leaf ones. Very wet in places we were lucky to find *Lilium souliei* here, an almost black lily that grew through the thick rhododendrons. Beautiful. Simply Beautiful.

Lloydia tibetica managed its way through the thicket along with *Fritillaria cirrhosa, Alertis sp.* and *Cassiope pectinata* though *Rheum alexandrae* and *R. lichiangensis* did not have to try so hard. *Mainathemums henryi* was being collected on the plain for salad leaves, adding a touch of cultural reality to our plant exhibition. And to top it off *Meconopsis zhongdianensis* (possibly also known as *M*. *racemosa*) covering a limestone rubble hillside. Numerous plants were found on this stoney rubble that were rooted into the damper earth below and to make it more interesting they were companions with a *Gymnocarpium* sp. fern covering the ground as well. A great combination I was taken by surprise and pleased to see. *Gymnocarpium* covers a few old beds at Harlow Carr and Meconopsis grew there in mass at one time, so maybe I have begun to see the plans laid out by individuals before me?

Plate 89- 92: En route to Tianchi Lake the habitat of *Cypripedium flavum* (Plate 89 Top Left) and *C. guttatum*Under the open shade of Betula and Acer trees.

En route to Tianachi Lake

Plate 93 Top Left: *Cypripedium guttatum*

Plate 94 Top Right C. *flavum* growing on the steep embankment

Plate 95-97 Middle and Bottom: *Nomocharis aperta* and its habitat in sunny exposure deep in scrub

In route To Tianachi Lake

Plate 98 Top Left: *Maianthemum tatsienese*

Plate 99 Top Right: *Maianthemum henryi*

Plate 100 Middle: Drift of *Primula secundiflora*

Plate 101 Bottom Left: *Rosa moyesii*

Plate 102 Bottom Right: *Acer* sp. Possibly *Acer forrestii* with young new pink fruit

In route to Tianachi Lake

Plate 103 Top Left: *Beesia calthifolia*

Plate 104 Top Right: Valley settlement en route to Tianachi Lake

Plate 105 Middle: *Megacodon stylophorus* in amongst expansive drifts of *Beesia calthifolia* and blue flowering *Hackelia uncinata* under open sky in damp ground,see Plate 107 Bottom Right

Plate 106 Bottom Left: *Rheum alexandrae* at Tianchi Lake

Tianachi Lake

Plate 108 Top Left: *Lilium souliei*

Plate 109 Tiop Right: *Maianthemum* fruit

Plate 110 Middle Left: Lilium souliei growing in flooded ground amongst dwarf Rhododendron sp.

Plate 111 Middle Right: *Frittilaria cirrhosa*

Plate 112 Bottom Left: Local collecting Maianathemum henryi for salad leaves

Leaving Tianachi Lake area

Plate 113 and 114 Top: *Meconopsis zhongdianensis* growing on a stony hillside possibly Limestone

Plate 115 Middle: *M*. *zhongdianensis* growing with a *Gymnocarpium* sp. Fern

Plate 116 Bottom: *M. zhongdianensis* growing under shrubs where they were deeper blue in the shade

Hongshan

Another northerly trek that offered great insight into the landscape was the Mountains of Hongshan, where we were able to begin at a low altitude in wet meadows and woodland climb above the tree line at approximately 4,200 meters to see scree hillsides and then drop back down again to 3,200 meters. The changing habitats that really showcased themselves by the altitude change was amazing and it almost seems to cheapen it when I try to describe the journey. Travelling to such a high place where few go except the intrepid and mining industrialists makes me almost want to keep what we saw above secret so it can all lay peacefully alone and maybe undisturbed, but whether that's possible anymore, I'm not so sure.

With so much seen I will try and break it down into a few groups to demonstrate its landscape best. The rhododendron really illustrated the change with low altitude still being dominated by *R. phaeochrysum, R. yunnanese, R. wardii , R. oreotrephes;* and *R. venicosum* with the small *R. hippophaeiodes* and *R.racemosum* being nearly consistent throughout all the high and low altitudes. However, *R. primuliflorum* and *R. trichostomum* were also making wonderful swathes on hillsides and embankments. And others at the higher altitudes but still in areas of damp was the larger *R.roxianum* and the smaller *R. rupicola* var*. chryseum* a lovely yellow and the pinky-red small creature of *R. saluense*.

The trees above were the typical *Acer*, *Betula*, and *Populus*, however as we climbed evergreen oak grew high above with Lilac, *Lonicera* and *Philadelpus* as shrubs underneath. The open damp meadows and wooded areas offered diverse thick dense ground vegetation. *Rannunculus* sp., *Anemone rivularis* and *A. hupehensis*, Potentilla, *Mainathemum henryi, Thalictrum yunnanese, Aconitum*, *Geranium*, Columbine and *Petasities sp.,* formed carpets with *Podophyllum hexandrum*, *Gentians, Primulas* and *Arisaemas elphans* and *A. consanguineum* dotted here and there. *Podophyullums* were found along with *Iris chrysographis* and *I. bulleyana* at other points. Even the *I. ruthenica* var*. nana* showing up on a rockier bank. In a damp woodland we nearly missed the *Roscoea tibetica* which grew in the same woodland as a stunning specimen of *Clematis tibetina* scrambling over stone and up a trunk. Under part shade we also saw the slightly strange *Mandragora caulescens.*

At heights of 4,300 to highest of 4,616 metres we reached more scree areas where *Fritillaria delavayi*, *Lamiphlomis* sp., and *Lilium lophophorum* were exciting finds amongst slate like stone in a cold exposure. Corydalis were common but wonderful with *C. benecincta* being a stand out.

The *Meconopsis* growing along this journey up and down the mountain was a lesson in itself. We saw the yellow *M. sulphurea* in damp open fields, alpine meadows and woodland glades lower down, sometimes growing with *Primula sikkemensis* and *P. secundifolia* leading to *M. lijiangensis* (possibly also once known as *M. integrifolia*) nearly growing in water it seemed but between rocks at 4,000 meters. The *Meconopsis lancifolia* var*. eximea* in open stony areas with lots of neighbouring plants in a very wet area types seedlings seemed to be sporadic throughout the stony areas and scree. The scree beds demonstrated naturally our alpine crevice plantscapes with perfectly balanced and layered stones.

But the greatest for me was an *Adiantum* sp., found in a quiet corner, or actually very shaded wet bank near a streambed on our lunch break. It had young new pink, salmon and neon green growth and enjoyed the damp, cool location with dripping from above shrubs. Even better was to see its companion pants *Podophyllum hexandrum* and *Polygonatum verticillatum.* Nearby was even a *Epipactis tanguticus* growing in a flat semi shaded area in damp ground.

Hong Shan Area

Plate 117 Top Left: *Rhododendron primuliflorum*

Plate 118 Top Right: Possibly *Osmunda* sp. Growing amongst *Euphorbia* and *Stellaria*

Plate 119 Bottom: Great specimen of possibly *Lonicera deflexicalyx*

Hong Shan

Plate 120 Top Left: *Lilium lophophorum*

Plate 121 Top Tight: Natural Scree /Crevice arrangement

Plate 122 Middle Left: *Lilium* sp camouflaging amongst stone

Plate 123 Midddle Roght: *Corydalis benecincta*

Plate 124 Bottom: *Lilium lophophorum* on the scree hillside

Hong Shan

Plate 125 Top Left: *M. lijiangensis* growing amongst rocks basically in running water coming down the hillside Plate 126 Top Right.

Plate 127 Bottom Left: Lovely *Rhododendron rupicola* var. *chryseum* beginning to grow as we increased in altitude

Plate 128 Bottom right: *Primula boreiocalliantha* growing underneath the high limbs of large Rhododendrons in a damp shady area of woodland

Hong Shan

Plate 129 Top Left: Possibly *Iris chrysographes* or maybe *I. bulleyana*

Plate 130 Top Right *Clematis pseudopogonantha* growing in shaded woodland thicket

Plate 131 Middle Left: *Mandragora caulescens*

Plate 132Middle Right: Woodland groundcover of *Podophyllum, Thalictrum, Geranium and Aconitum*

Plate 133: *Roscoea tibetica*

Hong Shan

Plate 134 Top Left: *Adiantum* sp.growing with *Podophyllum hexandrum*

Plate 135 Top Right: *Adiantum* sp. Growing deep shade along wet bank

Plate 136 and 137 Bottom Left and Right: *Arisaema consanguineym* growing on a stream bank where the ground felt and looked as if the area could flood or become saturated at times during certain rainfall periods

Baima Shan

Baima Shan took us far North to the **Tibetan Border** of **Dequin**. The journey itself was a strange mix of beauty and bleakness. The Mountains especially with a southern exposure ached for moisture and lay what seemed barren, but I assume nature was finding a way to adapt and grow here, but we just couldn't see much except for scrub. As we took our journey north, hillside after hillside demonstrated how those facing north were green and lush and opposite to the southern facing ones, yet they were beautiful in their own forlorn way. Dry to wet in short distances was strange, in these rain shadow gorges.

The road was also a military road that took you to the border of Tibet, but it's the road we utilized and was also the cause to much of the environmental damage caused and lain open like a scar in the landscape. I felt a mixture of guilt utilizing this road as I saw the impact on the hills from the deforestation and erosion.

In the rocky embankments on the cooler exposed sides *Anemone rupicola, Corydalis sp, Primula zambalensis, Viola rockii, Pedicularis oederi* , and small leaf *Rhododendrons* were companions to a couple good specimens of *Paraquilegia microphylla*. Also in the area *Rheum liniangensis* stood out for its new red leaf growth whilst the *Polygonatum hookeri* was a delight surviving in dense growth of *Potentilla sp, Aster souliei* and *Aletris pauciflora*.

Ponerorchis chusua grew among the dwarf rhododendrons, maybe almost using them as a shelter or windbreak whilst *Cassiope pectinata* grew densely along with the woody stems of the rhododendrons. Underneath the *Cassiope* and dwarf rhododendrons stretching out above the foliage *Lilium lophophorum* whilst *L. nanum* was in more exposed areas without the shelter. *Spongiocarpella yunnanensis; S. polystichoides* were also creeping low on these hillsides, being a first sighting for me.

Over 4,400 meters we climbed a windswept hillside that demonstrated rhododendron growth over stones, almost taking refuge growing on rocks, which I questioned whether it was for their shelter, or utilizing the moisture or coolness they may obtain? *Cassiope* did the same at the very base of the stones. Other growing techniques were plants growing from other dead portions of plants as they decomposed. One example being the *Arenaria polytrichoides* dying out in its centre and *Thermopsis alpina* taking advantage to root into this organic matter. Out of place for me was the *Bergenia purpurascens* growing throughout these treeless hillsides, but it took advantage of the damp ground depressions.

In some very stony, almost rubble embankments that had suffered great tree loss at some point was a successful specimen of *Meconopsis zhongdianensis* (possibly once known as *M.racemosa*.) However it was the *Paeonia lutea* on a steep embankment that made me celebrate. Mature and tall it grew in sodden ground with no over-story growth to shade it at all, though it appeared at one time there must have been with a large stump and others close by. Seeing the Peony inspired me to hopefully utilize them in the garden more.

Baima Shan

Plate 138: Top Left: Dry Hillsides en route to Dequin, monastery right of center

Plate 139 Top Right: *Primula zambalensis*

Plate 140 Middle Left: *Polygonatum hookeri*

Plate 141 Bottom Left: *Ponerorchis chusua*

Plate 142 Bottom Right: *Paraquilegia microphylla*

Baima Shan

Plate 143 Top Left: Dwarf Rhododendron in this area took shelter at the bases of stones as well as growing over and up the sides of them

Plate 144 Top Right: *Rhododendron saluenense*

Plate 144 Middle Left: *Lloydia* sp., growing up through *Rhododendrons*

Plate 145 Middle Right: Thermopsis alpine growing on/through the decomposing centre of *Arenaria* sp.

Plate 146: *Cassiope pectinata*

Returning to Zhongdian

Plates 147-149: *Paeonia lutea* growing on an open hillside in extremely damp / wet ground that at one point may have been wooded with tree stumps around showing this

Napa Ha

And to save the best for last, **Napa Hai in Zhongdian.** One other reason I wished to go Yunnan was to see Cypripediums in their natural habitat, and at Napa Hai we were spoiled with them after believing we may not see them at all when the area has been deforested and suffered a great deal from a 5 year drought. This day was truly special because I had the choice of whether or not to go here or a monastery, which was a difficult choice to make as I did wish to see some of the traditional culture. But after seeing the remarkable way these orchids are surviving in such harsh conditions I have a new found respect for all plants adaptations, but also an honest realization of the havoc we can create as humans in an environment.

So I will get right onto the good stuff, the Orchids. On exposed hillsides facing northwards it still felt oppressively hot and dry at times. We were in what was Oak, Spruce and Pinewoods at time and now was filled with mostly tree patches and remnants and some rhododendron, Euonymus, *Lonicera*, *Rosa* and even *Gaultheria hookeri* shrub growth. It was on these shrub island/patches that we found the herbaceous plants taking refuge deep under the shrubs. We discovered *Cypripedium flavum, C. yunnanese, C.guttataum, C. tibeticum* and the ever so tiny *C. plectrochilum*. We were incredibly lucky to also find an area with some very large clumps with an age I wouldn't dare to say and can only hope they remain in the ground and not dug up.

It was the way they took shelter from in and under other shrubs and trees that gave me insight into their growing conditions. At a botanical garden that a local gentleman started to prevent orchid theft in the area, the woodland showed a more typical growth as well as the above ground organic matter that collected on top of the *Cypripedium* crowns, but it wasthe clay-like soil the roots were actually breaking into. On the deforested hillsides where they grew under remaining Pines and Evergreen Oaks they created a thick matt of needles and almost sharp holly like leaves of *Quercus semecarpifolia* .

Other incredible orchids we found that single day were the great yellow *Reorchis erythrochrysea*, the small white *Cephalanthera damasonium*, the purple *Calanthe delavayi* and *Platanthera chlorantha*.

Also in this habitat we found *Nomocharis aperta, Vincetoxicum forrestii, Lilium lophophorum, Aquilegia rockii, Euphorbia wallichii, Iris ruthenii* var*. nana* and the very small but forming great carpets *Gentiana chungtienensis*, taking advantage of the exposed sunny rocky positions. *Androsace bulleyana* was also a wonderful find at the botanical garden at Napa Hai that grew in vicinity of *Daphne calcicola*, whilst further in the shade *Scutellaria forrestii* stretched out to the light where nearby *Cypripediums* grew.

And so I think by general opinion I should hold the mature clumps of *Cypripediums* as my favourite of the day, maybe of the whole trip, but actually there was another that stimulated my gardeners mind and that was the small *Streptopus simplex*. Taking refuge under some dense scrub growth were the white bell like flowers that could have been easily missed, especially growing so close to a mature *Cypripedium flavum*. Maybe it' s the humble nature I see in the members of the *Convallariaceae* family, maybe a delicate femininity in the flowers or even the wild nature of their stem and leaves or the other plant genera companions they keep themselves. Without waxing on, I confirm it's the *Polygonatums, Maianthemums, Disporum, Ophiopogon* and *Streptopus* that I fell more in love with on this trip to the Yunnan.

Plate 150 Top: Napa Hai Valley

Plate 151 Middle: Head count please!!??! A mature clump of *Cypripedium yunnanese*

Plate 152 Botttom: Flowering meadow overlooking Napa Hai Valley with *Picea likiangensis and* Picea brachytyla with *Androsace spinulifera, Euphorbia sp., Erigeron breviscapum, Polygonatum sp,Vincetoxicum forrestii* and *Anemone rivularis* in the meadow

Plate 153 Top Left: Possible *Cypripedium tibeticum* almost finished flowering growing in the shelter of a shrub Plate 154 Top Right

Plate 155-156 Bottom Left and Right: The very petite *Cypripedium plectrochilum* growing in the shade and up through a thick mass of Pine needles

Napa Hai

Plate 157 Top Left: *Calanthe delavayi* Growing at Base of shrub

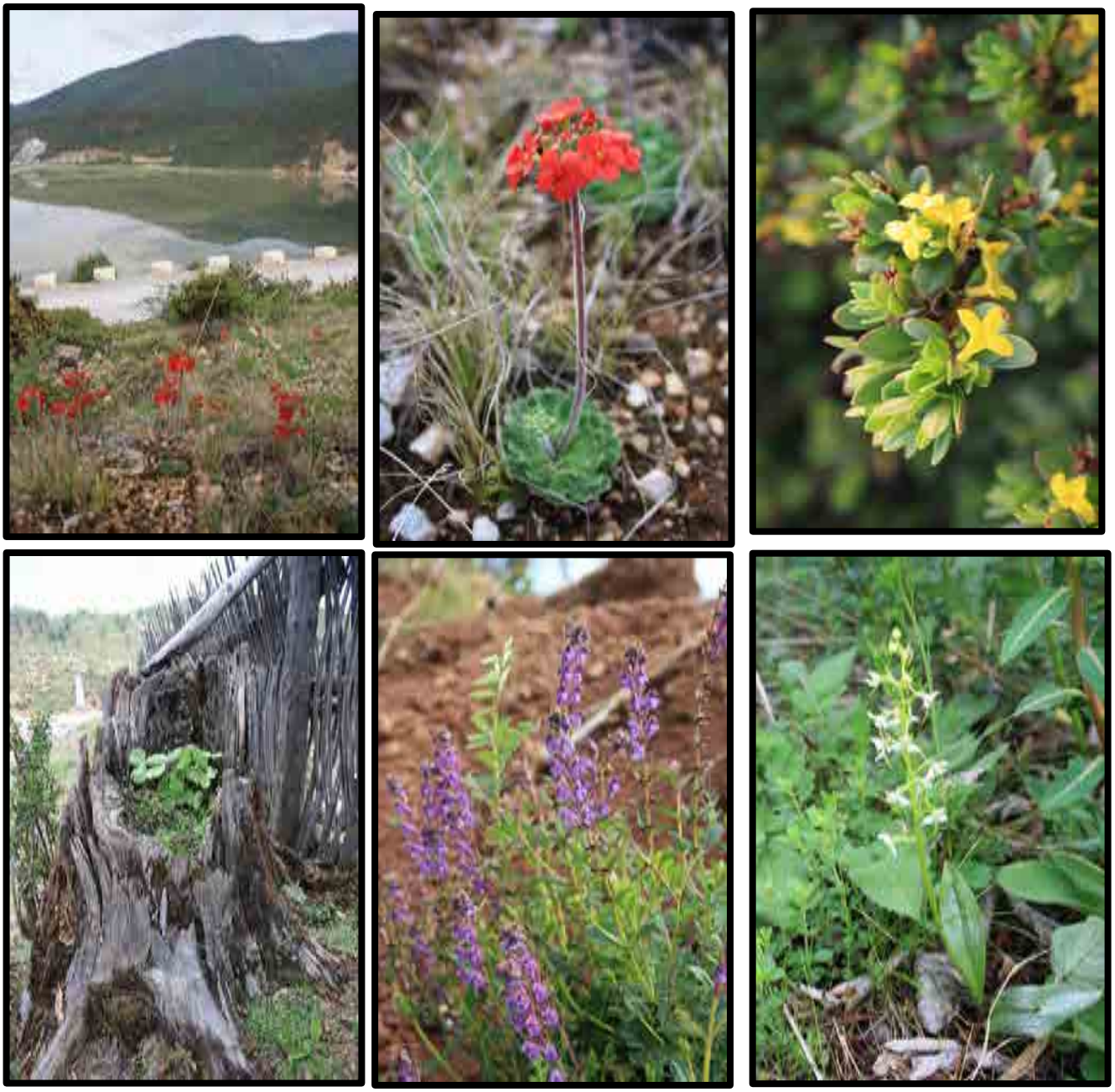
Plate 158 Top Middle: Lim Sum(I apologize for poor spelling) our wonderful ground leader at Napa Hai

Plate 159 Top Right: *Calanthe delavayi*

Plate 160 Bottom Left: *Cypripedium flavum*

Plate 161 Bottom Middle: *Cypripedium flavum* growing under the shrubs

Plate 162 Bottom Left: *Cypripedium yunnanese*



Napa Hai Botanical Garden

Plate 163 and 164 Top Left and Centre: *Androsace bulleyana*

Plate 165 Top Right: *Daphne calcicola*

Plate 166 Bottom Left: *Podophyllum* self-sown in a stump (outside Botanical Garden in valley)

Plate 167 Bottom Middle: *Scutellaria sp*.

Plate 168 Bottom Left: *Platanthera chlorantha*

Plate 169-170 Top: *Gentian asterocalyx*

Plate 171 Middle Left: The clay soil which many of the *Cypripediums* seemed to be growing in at Napa Hai

Plate 172: *Lonicera tangutica*

Plate 173 Bottom: *Streptopus simplex,* for me the best of the finds that day at Napa Hai, I'm hoping the tour leader will forgive me for not saying *Cypripediums*.

Part II

Inspirations and Methods

When going to Yunnan I went with ideas of spaces that needed development within the garden as well as an open mind to new inspirations that could be brought to my work. The RHS Garden Harlow Carr has a long history beginning as an old Victorian Baths Garden where sulphur wells are located on the property. Turning into the Northern Horticultural Society Botanic Garden in later years there are parts of the garden that have grown dense and others that need restoration.

The woodland vision project is set to now open overgrown areas of the woodland and streamside to introduce new species and reveal vistas across the garden. Having more light and rainfall penetrate through the canopy will also hopefully enable us to widen the plant palette and increase the diversity of the ground flora and lower level shrub and small tree growth This project so far has involved taking out some matures trees and many self-sown specimens as well as pollarding old Rhododendrons to encourage fresh growth. By increasing the diversity back into the woodland again I hope that it will demonstrate to visitors new planting ideas and that not all woodland gardening is wild but can be a combination of ornamental with a natural balance in its design approach and maintenance regimes. I also personally hope that new planting within the woodland areas will create new pathways and windows for the public to take inspiration from as our wildlife and find quiet pathways to reflect in. While opening up the woodland the pathways are now becoming areas to view wider parts of the woodland and create opportunity for windows for herbaceous plantings along the paths.

From Yunnan I'm thankful that we paid attention to the trees and shrubs as much as the alpine flora. Whilst travelling I developed a new appreciation for particular genera that are already staples within the garden but the species of which were different. Seeing them within their natural surroundings it helped me see them out of the strict formal setting I normally associate them with and more for their natural character that could make for interesting planting relationships. Some of the genera being *Euonymus, Berberis, Deuitzia, Lilac, Hydrangeas* and *Rosa.*

Another aspect that has helped me at the garden from travelling to Yunnan was seeing *Meconopsis* in their natural habitat. *Meconopsis* used to be greatly featured at Harlow Carr in the past and this past year we just finished a trial garden of the large Perennial Himalaya Blue Poppies with some great success. In an effort to put them back in the garden I have been experimenting with *Meconopsis* 'Lingholm' as well as other cultivars and also the species *M. punicea ,M. quinteplinervia and M. horridula* types in different locations on the northern end of the garden to see which situations work best. Seeing them in the Yunnan there were a few key features that were similar throughout the different types. One being coolness; growing at higher elevation even under the open sky they didn't seem to be scorched. Secondly, high air humidity was typical amongst all sites with stones and evergreen rhododendrons creating shelter around them to lock that moisture in around the plants. Thirdly, moisture with free drainage. None of the specimens were ever in areas too dry and were either growing in damp rocky ground or even wet stoney organic matter filled ground.

Finding some of these specifics in the garden can be difficult, especially at a lower elevation and with hot summers that make areas open to the sky dry and scorching. However, we're lucky at Harlow Carr, being in the North of the country we have higher rainfall and also a cool shade from the woodland that can act as a protective chaperone over the plants to keep areas cool and damp.

Some of the areas we wish to put them back in are the streamside and possibly areas of the woodland. In addition they have been successful on the old Peat terraces close to the woodland edge and have terraced edges to make viewing smaller species possible plus areas open to the sky for others.

The trip to Yunnan has also encouraged me to grow *Cypripediums* a lot more. Over the last 2 years I have been experimenting growing them outside in the garden with great success. Seeing them also in the wild and also 'missing' from the wild has really driven home the fact these are well sought after plants in their home habitat and here as well and measures against stealing have to be put into effect. Wire mesh dug underground over their rhizomes has been recommended. I have also heard from individuals not to grow them outdoors because of theft, but I guess the always stubborn stand up and don't runway advocate in me doesn't want to simply give up, but rather face the subject of plant theft with the public rather than hide the issue. The public has already enjoyed the *Cypripedium* displays at Harlow Carr and I hate the idea of discontinuing projects like these for the sake of a few bad folks.

The *Cypripediums* we saw predominantly grew on sloping banks, under the shelter of shrubs and in a clay, stony mixture of soil with some organic matter collecting on top of the first few inches. Coolness and some shade seemed to be a key factor in their growth.

Motivation from the trip to Yunnan will really have an effect on my project area at the garden which is continually developing. The area was an old peat terrace garden that eroded away and had been overgrown and now to reveal loads of stones structure and staircases leading to other parts to create a nice journey to the woodland. There are pockets of shade and near continual damp ground where *Meconopsis*, *Arisaemas*, *Mainanthemum*,woodland *Liliums*, *Podophyllums*, hardy orchids and ferns have grown well. Seeing these in habitat have only inspired me more to research more hardy options of these plants. In addition seeing them together or with other companion plants has only opened up ideas for new combinations.

Lastly, seeing the ferns in Yunnan has inspired me to utilize them more often and in different ways in the Garden. Ferns grow quite vigorously at Harlow Carr and currently we are re-storing an old *Dryopteris* collection. In Yunnan they demonstrated how they can create a really wild feel and add a unique structure to an area. It has also encouraged me to utilize wood, stone and organic materials to show off their unique quality which always adds a bit of surprise in the garden, similar to the stumps and logs stumbled upon featuring ferns as we see in the wild.

Plates 174-178: These are all places at Harlow Carr where work takes place to wither clear dense growth, cut back overgrown and poor specimen Rhododendrons and also the sides of the pathways that lack ground flora. Bottom Plate 178 shows how the sides of pathways increase due to the lack of ground flora, increasing foot fall.

Plates 179-182: These few plates are images from Yunnan that show some of the ground flora that are inspiring my work, though there are many, many more.

Plate 179 Top Left: *Primula* drifts under rhododendron growth, especially where damp

Plate 180 Top right: Dense herbaceous mixture of *Podophyllums*, *Thalictrums*, Geranium

Plate 181 Bottom Left: Little touches of *Clematis* vines scrambling through shrubs and small trees

Plate 182 Bottom Right: Colourful *Iris* on damp ground in semi shade with natural wood edging the path

Plate 183 Top Left: *Meconopsis* Trial Garden at Harlow Carr, sometimes this position was too hot and dry for them and additional irrigation was needed

Plate 184 Top Right: *Meconopsis* in the old Peat terrace at the Northern end of the garden where it is cooler and damp

Plate 185 - 186 Middle: Possible positions for more |*Meconopsis* at Harlow Carr where the ground is moist and shade from the woodland nearby

Plates 187 Bottom left: *Meconopsis* in Yunnan at high cool elevation

Plate 188 Bottom Middle: *Meconopsis* growing in running water

Plate 189 Bottom Right: *Meconopsis* growing under Rhododendrons on damp ground

Plate 190 -191 Top: Project area, Peat terrace, Where a Birch tree has come down and has opened up an area with a remaining stump where I could implement some of my Yunnan inspiration

Plate 192 -193 Middle Old stone steps and Terraces in need of renovation and new plant at the Peat terrace

Plate 194 Bottom Left: early days with some success with Cypripediums at the peat terrace

Plate 195 Bottom right: *Arisaemas* and *Dryopteris wallichiana* at the Peat terrace I now think after my trip the *Dryopteris* may be in too hot/ dry of a placement, the *Asisaemas* seem to be loving the damp deep peat organic matter around the stone

Conclusion

So with all I saw and learned and experienced instead of feeling compelled in one direct way either botanically or horticulturally I felt lost in the reality that I don't have great botanical knowledge and there is loads of horticultural skills I still have yet to learn. And yet I don't feel drawn completely too either field. So when I returned I questioned my career and what I most love to do.

Lost in the worries of what I don't know it took me a few weeks to see and eventually accept what brings me the most joy. And that is, making spaces outside for people to enjoy and take solace in.

I am no great botanist or horticulturalist; I am no great one thing. And letting the insecurities of seeing how much others knew on my trip and what I don't nearly stopped me from seeing the other aspects of nature that attract us to the great worlds of botany and gardening. They are those great moments of surprise that nature can only do, the little touches of light, leaf, colour or growth or decomposition, whatever it may be, that man forever has tried to copy this beauty in all our crafts, but cannot come close.

Through this trip watching all our excitements at the plant finds we made in some of the most beautiful parts of the world, I realized man's instinct or need to collect, mans need to understand and explore and to build and copy. That within these maybe basic rooted concepts of man I found why I am driven to garden. Why I wish to collect, show, build and copy and share with others. Nature brings us solace and I am lucky and blessed as a gardener to be able to share and hopefully do this for others.

I am a career changer that just came back from an amazing trip to China to find different plants of the Yunnan region however I found out a lot more.

Bibliography

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Appenix I

Map of Yunnan

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