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GRAY HERBARIUM

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*Front cover*: Black chokeberry (*Aronia melanocarpa*) is valuable as an ornamental landscape shrub and for its antioxidant-rich fruit. Photo by Nancy Rose.

*Inside front cover*: In their new book, *Wilson's China: A Century On*, Mark Flanagan and Tony Kirkham describe following in the footsteps of famed plant explorer E. H. Wilson. They came across these lampshade poppies (*Meconopsis integrifolia* ssp. *integrifolia*) in the same locale where Wilson first found the species a century ago. Photo by Tony Kirkham.

*Inside back cover*: Himalayan pine (*Pinus wallichiana*) is notable for its fine-textured, cascading foliage. Photo by Nancy Rose.

*Back cover*: Fruit color in *Aronia* species ranges from black to purple to bright red. Photo by Mark Brand.



## An Excerpt From *Wilson's China: A Century On*

Mark Flanagan and Tony Kirkham

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Editor's Note: Ernest Henry Wilson was one of the most intrepid and productive plant hunters of his era—the beginning of the twentieth century. His collecting trips to China—first for Veitch Nurseries in England and then on behalf of the Arnold Arboretum—resulted in an extraordinary stream of new plants to the West. Arboretum director Charles Sprague Sargent instructed Wilson to thoroughly document his 1907–1908 and 1910 expeditions with photographs; these striking images still reside in the Arboretum's archives.

Mark Flanagan, Keeper of the Gardens at Windsor Great Park, and Tony Kirkham, Head of the Arboretum at Kew, are modern-day plant hunters, having traveled and collected extensively in eastern Asia. Admirers of Wilson, they plotted a journey to retrace his footsteps in Sichuan, China. Using Wilson's expedition photographs as a guide, they were able to capture views of some of the very same locations and even plants that Wilson saw a century ago. Their book pays homage to Wilson and provides a fascinating "then-and-now" glimpse of China's landscape. The following is an excerpt from Chapter 3, "Mystery Towers of Danba."

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*Tatien-lu is a small and filthy dirty place, it boasts a large mixed population of Chinese and Tibetans. Being on the highway from Peking to Lhasa, officials are constantly passing and re-passing. This makes it a highly important place, both politically and commercially. Although Batang, 18 days journey to the west, is the actual frontier town, Tatien-lu is really the gate of Tibet.<sup>1</sup>*

Wilson's accurate but rather unflattering description of Kangding was penned at the conclusion of his first visit to the town in 1903. Wilson had made the journey to Kangding on the instructions of the Veitch nurseries who wished to add a very special plant, the lampshade poppy (*Meconopsis integrifolia*), to their nursery catalogue. "Messrs. Veitch despatched me on this second, and very costly, journey to the Tibetan border for the sole purpose of discovering and introducing this, the most gorgeous alpine plant extant," recorded Wilson.<sup>2</sup>

Kangding still has a frontier town feel about it and is inalienably a Tibetan place. It also remains a very important staging post on the road that leads westward into Tibet. This road was one of the great highways constructed during imperial times to hold the Celestial Empire together. But Chinese writ did not extend very far. Indeed the country around Kangding remained lawless and untamed until very recent times. Historically the area was known as Kham and its inhabitants, the Khampas, were much feared for their ferocity and war-like demeanor. In truth, Khampa was a collective noun as the area was home to a very diverse group of related, though distinct, peoples. For a thousand years, after the collapse of the vast Tibetan Empire in the ninth century, Kham remained unconquered and unconquerable, its peoples engaged in ceaseless internecine





The authors, Mark Flanagan (left) and Tony Kirkham (right), surrounded by prayer flags at the Ya-jia Pass.

conflict as petty warrior chieftains battled for supremacy. Banditry was an accepted means of acquiring wealth and position.

The various groups of ethnic peoples he encountered fascinated Wilson and he wrote about them extensively. His understanding was gained both first hand and through studying the work of contemporary ethnographers, though this understanding was far from exact. For example, he used the Chinese generic, and derogatory, name "Sifan" (western barbarian) to describe the tribe now identified as the Qiang, one of the 56 official ethnic peoples in China. To the enquiring Edwardian mind the alien culture and manners of the various peoples, particularly their peculiar (and supposedly immoral) sexual liaisons in which both polyandry and polygamy were commonplace, was of abiding interest. Their relative lack of sophistication also appealed to Wilson, suggesting to him a oneness with their environment that he found endearing.

The eventual subjugation of the Kham region in what the Chinese called the "peaceful liberation of Tibet" finally ended the brigandry and general lawlessness in the 1950s. Eastern Kham formally became part of Sichuan Province and Western Kham formed a large part of the Xizang Autonomous Region. Despite this the Khampas retain their individuality by virtue of their strong culture and association with their land. In travelling this country it is impossible not to be impressed by their proud bearing and independent mien and it is easy to





Finding the lampshade poppy (*Meconopsis integrifolia* subspecies *integrifolia*) was the principal objective of Wilson's second trip to China.

understand how they struck fear into the hearts of friend and foe alike. Despite the suppression of banditry, in recent years occasional acts of violence against foreigners still occur when travelers are held-up by groups of armed local men: old habits die hard.<sup>3</sup> Through the 1980s and 1990s the Kew expeditions to this part of China employed the services of an armed Chinese policeman, Lao Liu, as a precaution against unwanted local attention, though he never drew a weapon in anger!

Wilson's quest for the lampshade poppy was, therefore, into territory that he knew little of and amongst people with whom, at that stage, he was largely unfamiliar. Not only was the territory unfamiliar, it was built on a grand scale. The Da Xue Mountains into which Wilson was travelling, together with the neighboring ranges form part of the vast, complex Hengduan Shan, the eastern extension of the Himalaya. They were created at the same time but, due to the shearing effect involved when the landmass of India collided with the Asian continent, they incline north-south. These mountains, eroded by monsoon-swollen rivers—the Jinsha, Yalong, Dadu and Min—form an enormous convoluted mass of peaks, ridges and spurs with deep, sheer-sided valleys. The range climaxes at the summit of the

mighty Gongga Shan, which at 7,556 meters is Sichuan's highest mountain by some way. Joseph Rock brought Gongga Shan to the attention of the West in 1930, when he infamously over-estimated its height, erroneously claiming it to be higher than Mount Everest.<sup>4</sup> Wilson would be travelling at far higher elevations and over much more demanding terrain than he had experienced in his first trip to the more modest hills and valleys of Hubei.

He was not alone, however. It is intriguing that Wilson rarely mentions any western companions in his writings, let alone provides any details of their backgrounds and occupations. This time, as he prepared to find the lampshade poppy, he was accompanied by an experienced traveler. On July 16, 1903, he started out for the mountains: "On this journey I was accompanied by Mr. Edgar of the China Inland Mission, in whom I found a delightful companion ... Leaving by the South Gate we followed the main road to Lhasa—a broad, well-paved road."<sup>5</sup>

[...]

The main road to Lhasa was a well-travelled highway but not one that Wilson would remain on for long. It quickly rises to the Zheduo Pass, which today is still the most commonly taken route into Tibet from western Sichuan. On the flanks just below this pass the lampshade poppy can be easily found and many writers have assumed that this is where Wilson gathered his first plants. But the



Zheduo Pass was not Wilson's destination; he was heading for the Ya-jia Pass, which followed an alternative and much less-used track to the south.

At first the journey was enjoyable and Wilson reveled in his surroundings: *"Our road was through lovely grassy country, with a steady rise. A wealth of many colored herbs enlivened our path,"* and, *"we continued through similar country, with a fine snow-clad peak straight in front of us and another to our left."* Soon, however, the going became much tougher, and heavy rain fell as they reconnoitered the mountainsides close to their overnight stopping point. The altitude had a detrimental effect on his coolies and all endured a miserable night.

Our journey up to the Ya-jia Pass was rather more comfortable. The road was well surfaced right to the top, though the occasional small landslip had to be carefully negotiated by the vehicles. As Wilson suggested, snow-clad peaks were visible all around and we were fortunate to have fine weather in which to appreciate them. Looking back, a stunning range of mountains could be seen to the north-east beyond Kangding—the Lian Lua Shan (Lotus Flower Mountains)—no doubt one of the views enjoyed by Wilson during his own ascent 103 years before. Ahead the scene was much less promising with dark clouds scudding across the sky alternately revealing and concealing the mountain tops and providing tantalizing glimpses of the pass.



A view to distant Gongga Shan, showing its distinctive peak.



Wilson's miserable end to the day was compounded during the night:

*Having at length got rid of our soaked garments—a difficult enough task under the circumstances—we eventually got between the blankets. No sooner had I lay down than a drip came a spot of rain into my eye: I turned over and drip came another into my ear. I twisted this way and that way, but there was no escape. Like evil genii these rain-drops pursued me turn which way I would. I could not move my bed, since this was longer than the tent was broad, and my feet already exposed, and we sorely afraid the whole thing might collapse, it being anything but secure ... About 4 a.m. our firewood gave out and things assumed a very dismal aspect. However, all things have an end; day at length dawned and all were devoutly thankful ... With what fire remained we managed to boil some water and make some tea. We breakfasted on ship's biscuits and cheese and felt none the worse for the night's experience.<sup>8</sup>*

Wilson was, above all things, a fatalist.

The rain stopped and Wilson and Edgar prepared for the day's work, during which they hoped to find the lampshade poppy. A farmhouse, one thousand feet below their overnight position, was commandeered and their cook, who was suffering from severe altitude sickness, was taken down to recuperate. The journey to the pass began at 7 a.m. and after some initial rain showers continued on in sunshine. The alpine flowers captivated Wilson; in early summer these Chinese mountains are amongst nature's most exquisite natural gardens. Tony and I arrived at the peak of the display and we left the vehicles three or four hundred meters below the pass and proceeded on foot. By the roadside, a braided mountain stream provided ample moisture and it was in this sodden turf that the greatest diversity could be found. *"I wish I had the ability to describe this floral paradise with all its glories, but this is beyond me,"* wrote Wilson.<sup>9</sup> I certainly won't try where Wilson failed and hope that the images reproduced



The flora of the moist ground below the Ya-jia Pass is replete with a wonderful array of colorful flowers, including *Rheum alexandre* (left) and *Primula secundiflora* (right)



on these pages will give the reader a hint of the individual and collective beauty of these mountain flowers, many of which have become firm garden favorites amongst discerning growers.

We followed Wilson's and Edgar's route to the pass knowing that at any time the lampshade poppy would appear. Our experience was almost exactly as theirs had been:

*At 11,000 feet I came across the first plant of Meconopsis integrifolia! It was growing amongst scrub and was past flowering. I am not going to attempt to record the feelings which possessed me on first beholding the object of my quest to these wild regions ... I had travelled some 13,000 miles in five and a half months and to be successful in attaining this first part of my mission in such a short time was a significant reward for all the difficulties and hardships experienced en route.*<sup>10</sup>

The lampshade poppy is a monocarpic species, dying after flowering, but it produces ample seed and has proved to be relatively amenable in cultivation particularly in the cool summer climate of Scotland.<sup>11</sup> Wilson's plant became an instant success, flowering in its first season in the Veitch nursery and persisting for many years.<sup>12</sup> All the recent trips to this and neighboring parts of China have reinforced its presence in cultivation and it is not unusual to see this plant flowering in northern gardens. In cultivation it has also produced several attractive hybrids with other Asiatic species such as *M. × beamishii* (*M. integrifolia* × *M. grandis*) and *M. × finlayorum* (*M. integrifolia* × *M. quintuplinervia*). In recent years botanical opinion, particularly that of Dr. Chris Grey-Wilson, has suggested that this variable plant is easily divisible into two distinct entities—*M. integrifolia* and *M. pseudointegrifolia*, the latter a plant with nodding and more open flowers, quite distinct from Wilson's plants that have globular and more upright flowers.<sup>13</sup>

After this first plant the mountainsides began to reveal a veritable cornucopia of poppies. Wilson recorded that "*as we continued the ascent, Meconopsis integrifolia became more and more abundant. At 12,000 feet and upwards, miles and miles of the alpine meadows were covered with this plant, but only a few late flowers remained.*"<sup>14</sup> Being a month earlier Tony and I caught every plant in full flower, the sun-disk blooms swaying in the mountain breeze, flaunting their wares for any passing bees. Our climb continued in deteriorating conditions until we reached the pass at nearly 4,000 meters. Wilson tells us of the fear that the Ya-jia Pass engendered amongst his Chinese followers who were not, by nature or inclination, mountain people: "*this Ya-kia pass enjoys an unenviable reputation, and is much dreaded on account of its asphyxiating winds. It is said to be the only pass in the neighborhood which 'stops peoples' breath'.*"<sup>15</sup> On reaching the pass we were forced to concur, for though it was June 17, the temperature hovered around freezing point and a biting wind blew from the bleak Tibetan Plateau to the west, bringing pulses of sleet in its wake. Despite this we were thrilled to take an image at almost exactly the same location as Wilson had when he re-visited the pass on 19 July 1908.

Wilson stayed a second night on the mountain, this time in the more salubrious surroundings of the farmhouse that had been commandeered for the use of





65. Tachien-lu, near, W. Szech'uan. The Ya-chia-k'an snows and alpine regions clothed with dwarf junipers and rhododendrons. 13,000 feet. July 19, 1908.

The caption for this 1908 Wilson photograph reads: *Tachien-lu, near, W. Szechu'an. The Ya-chia-k'an snows and alpine regions clothed with dwarf junipers and rhododendrons. 13,000 feet. July 19, 1908.*

his party. This proved to be a clean, dry, cozy dwelling, and to add further to their good fortune his cook was quite recovered and prepared a hot meal for the team.

On the next day of our trip a most intriguing incident occurred, something that caught me quite by surprise. I have already mentioned Gongga Shan, the giant peak that dominates the Da Xue Shan range. It is the highest mountain in Asia outside of the main Himalayan chain and it exerts a baleful influence. Numerous glaciers grind their way down its flanks and such is its size that it generates its own climatic conditions over a sizeable swathe of the surrounding country. This mountain has always fascinated me. Despite dominating the area it is frequently covered in cloud: I have journeyed to five key vantage points—east, northeast, west, and south of the peak—and been disappointed to find a shroud-covered summit every time. In all his writing Wilson never mentions this mountain either as Gongga Shan or Minya Konka, its Tibetan name. How can this be? During his visits to China he spent many months in the Da Xue





A current view of the barren and desolate Ya-jia Pass, unchanged since Wilson and Edgar first came here.

Shan, surely he must have heard some local reference to the peak or glimpsed some distant view? Given his silence on the matter the obvious conclusion was that he was also unlucky and never had a clear view of the summit nor did he hear mention of it amongst the local people.

As Tony and I wandered the lonely slopes around the Ya-jia Pass I pondered this matter, knowing that the giant mountain lay to the southwest of our position. All around us were shattered and snow-clad peaks. It would have taken a strenuous hike into the higher reaches to breast these in order to provide an unencumbered view to the southwest, and time didn't allow this opportunity. In the warmth and comfort of our 4x4 as we took the road back to Kangding, I re-read Wilson's account of his first journey to the Ya-jia Pass, particularly the second day of his visit. One paragraph leapt from the page. Although I had pored over all Wilson's writings for the best part of the previous 18 months, the significance of the words had, until now, escaped me:

*The moraine in front of us terminated in tremendous fields of ice, glaciers of a virgin peak, 21,000 feet high. The sun shone brilliantly and we got a magnificent view of the surrounding mountains. South, south-west of us lay a gigantic peak, several thousand feet higher than the one mentioned; its summit crowned with snowfields of enormous size.<sup>16</sup>*



Gongga Shan? Surely.

The following day it was time to move on to the next phase of our journey. Wilson's first trip in the employ of the Arnold Arboretum, his third visit to China, took place between 1907 and 1909. Released from the economic shackles imposed by the Veitch Nursery he could take a much more expansive view of his activities. The patrician director of the Arnold Arboretum, Charles Sprague Sargent, encouraged Wilson not only to "science-up" his work—more emphasis on herbarium specimens and greater attention to field notes—he also insisted that a comprehensive photographic record of the journeys be produced. In a letter to Wilson dated 6 November 1906, a copy of which can be found in the Wilson archive at the Arnold Arboretum, Sargent explains:

*I write to remind you of the very great importance of the photographic business in your new journey. A good set of photographs are really about as important as anything you can bring back with you. I hope therefore you will not fail to provide yourself with the very best possible instrument irrespective of cost.*



The hardy and ubiquitous *Rhododendron przewalskii* covers huge areas of the high mountains above Kangding.



Sargent's prescience not only provided us with an excellent series of images of plants and landscapes, which were later published by the Arnold Arboretum, but also a snapshot of Imperial China right at the end of its long history; within a year of Wilson's departure China was effectively a republic.

Thus equipped and instructed Wilson arrived at Yichang, his old base on the Yangtze River, in February 1907 for what was to be his most successful trip, a trip that cemented



The local flora is occasionally put to a novel use; this Tibetan girl is using an *Incarvillea* flower as a kazoo.

his reputation as the foremost collector of his generation. I have long felt that the second year of this expedition, 1908, was also his most interesting and productive and in following in Wilson's footsteps I was especially keen to emulate some of his travels during that year. From Kangding we had the opportunity to retrace Wilson's journey of June–August 1908 when he travelled between Dujiangyan (Kuan Hsien) and Kangding, though we would travel it in reverse. Interestingly, Wilson himself was following an earlier traveler—Sir Alexander Hosie—as he tells us:

*During the summer of 1908, when in Chengtu, I determined upon a journey to Tachienlu. Previously, in 1903 and again in 1904, I had visited this town by three different routes. This time I decided upon following the road leading from Kuan Hsien via Monkong Ting and Romi Chango. The only published account of this route that I had knowledge of is a report by Mr. (now Sir) Alexander Hosie, erstwhile HBM's Consul-General at Chengtu, who returned over this road in October 1904.*<sup>17</sup>

The account Wilson refers to, "Journey to the Eastern Frontier of Thibet", was published as a Parliamentary Report and presented to Parliament in 1905. Hosie took the same direction as Tony and I would, east from Kangding, which he left on 10 October 1904. This was by no means a regular or accepted highway and that is what interested Wilson: "what I saw of the forests and mountain scenery, together with the quantity and variety of the plants discovered and collected, abundantly repaid me for the hardships experienced."<sup>18</sup>

My hope was that we could also experience some of this scenery and plant diversity. But could we retrace the route and match some of the many images that Wilson had taken on this journey?

Things began disappointingly. Wilson had travelled on foot on the east side of the Da Xue Shan between Kangding and the village of Hsin-tientsze and even





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