Viburnum betulifolium

This viburnum was introduced in 1907 by the famous plant hunter, Ernest Henry Wilson. Dripping in translucent scarlet berries which weigh down the branches, Stern observed it as a magnificent sight in October. Like many of the trees and shrubs at Highdown, Stern



patiently raised this from seed, planting it out when it was young and better able to establish in the tough, chalky soil. The seeds were a gift from his friend, George Johnstone, another avid plant collector who developed the famous gardens of Trewithen in Cornwall. Stern's patience was rewarded when many years later, in 1957, this shrub was awarded a First Class Certificate by the RHS.

Cotoneaster sternianus

This cotoneaster was found near Pianma in 1919 by the plant hunter, Reginald Farrer, on his last and ill-fated expedition to Myanmar. A week into his stay at Pianma, a team of collectors working for his rival,



George Forrest, turned up in the village. Farrer fired off an angry telegram, asking Forrest to move his collectors elsewhere. Forrest replied he could not recall them. Sadly, Farrer died alone in Myanmar only a year later and this cotoneaster was one of the few successful finds from his final expedition. Frederick Stern admired its profusion of scarlet-orange berries in September and the plant is named in his honour.

Cover photo: Paeonia rockii

For more information on the history of Highdown Gardens, Sir Frederick and Lady Sybil Stern and the important conservation work being carried out in the Garden visit the website

highdowngardens.co.uk

Text: Annelise Brilli, Asian geography and translations by Andy West.

Photos: Highdown Gardens: Annelise Brilli/Steve Speller

All historical images courtesy of West Sussex Record Office, and

Reginald Farrer image by kind permission of the Farrer family. (costume)

Sources: A Chalk Garden by Sir Frederick Stern; Stern's plant index cards at West Sussex Record Office; the Stern archive at Royal Botanical Gardens, Kew.









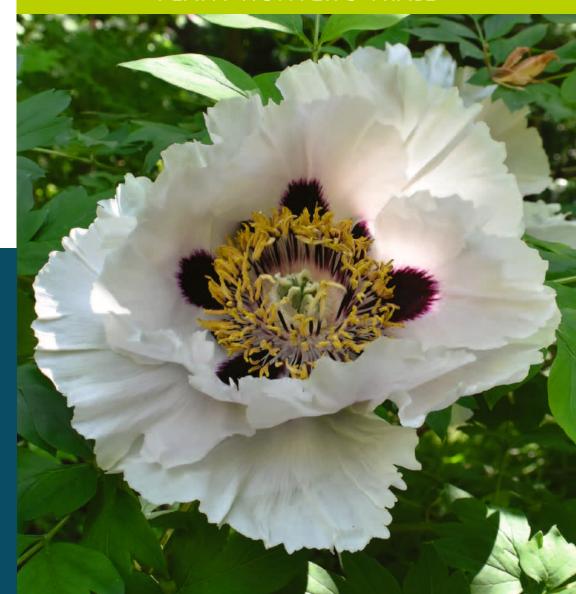








PLANT HUNTER'S TRAIL



HIGHDOWN PLANT HUNTER'S TRAIL

'The garden at Highdown was made as an experiment to see what would grow on the chalk soil of the Downs'.

Sir Frederick Stern (Royal Horticultural Society Journal, March 1967)

THE EXPERIMENT

Sir Frederick and Lady Sybil Stern made a huge investment in their obsession for growing plants from 1909 to 1967. They joined collectors' syndicates to hire plant hunters to go on dangerous collecting expeditions around the world. They became part of a global network of wealthy collectors, plant nurseries, botanical gardens, missionaries, diplomats, shipping agents, plant hunters and hill peoples. The Sterns also purchased and swapped thousands of seeds and cuttings. Sir Frederick Stern even created a laboratory in the wine cellar of Highdown Tower to count plant chromosomes. He shared his experiences in public lectures and his book A Chalk Garden.

THE PLANT HUNTERS

In this trail many of the plants you will discover were collected in the mountains of West China by plant hunter Ernest Wilson and horticultural writer Reginald Farrer. By modern standards, plant hunters of the past could be regarded as eco-pirates, stealing from local people and their environment. However.



Postcard from Stern to J. Stevenson, 1930

it was a risky job for the plant hunters and their local teams; walking in hobnailed boots up to 4.500 metres (15.000 feet) and facing extreme weather, deadly insects, blood thirsty leeches and civil unrest. The other risk was that many seeds collected did not survive the



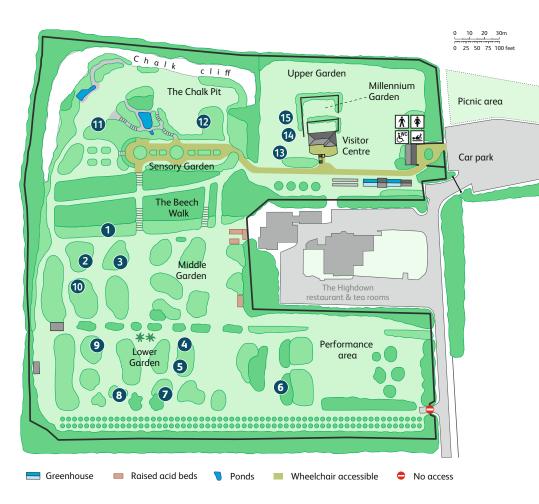
Reginald Farrer in bizarre costume,

c.1910

ship journey back to Britain. Today, as climate change increases, the living library of Highdown Gardens contains rare 'mother' plants whose seeds are being preserved for future generations at the Millennium Seed Bank.

Enjoy the trail and give yourself 45 minutes to wander around.

Ernest Wilson at the Arnold Arbortem 1929 taken by Stern



MIDDLE GARDEN

Buddleja farreri

When Reginald Farrer found this Buddleja in Gansu in 1914, he observed it as the pride of the blazing rocks and cliffs about the sun-baked villages. Its soft-felted, white leaves are an adaptation to these conditions, reflecting sunlight and trapping moisture in its fine hairs. It flourishes in this south facing, sun-baked border, bearing lightly scented lilac flowers in late spring.

These fast-growing, opportunistic shrubs colonise poor, thinly soiled, terrain, growing naturally in forest clearings, stream banks and on



scree slopes. Their tiny seeds, like ground pepper, are wind-blown to great distances, popping up in the most unlikely and seemingly inhospitable places.

These characteristics make buddlejas ideal shrubs for chalk and Stern obtained seed from many Chinese species. Unlike the familiar Buddleja davidii or 'Butterfly bush' grown commonly in gardens, these buddlejas flower on older wood, and so any pruning must be carried out directly after flowering.



Abelia triflora

Although little is known about its provenance, this Abelia is one of Highdown's most striking veteran shrubs and must have been an early acquisition by Frederick Stern dating from the first half of the 20th century. A native of North West Himalayas, it is likely to be an original, wild seed collection.

Its high canopy exposes a mass of muscular limbs with striking ridged bark. In summer it bears a profusion of white flowers flushed with pink which are delicately scented. Not often seen in gardens this old Abelia is still thriving in Highdown's tough chalk and it deserves to be more widely grown.

Paeonia delavayi

In front of you is a group of red *Paeonia delavayi*. These are part of a 1950s seed



swap Stern had with collectors Dorothy and John Renton of Branklyn Garden in Perth, Scotland.

Peonies are deeply embedded in Chinese culture and have been cultivated in Eastern Gardens for at least 2000 years, long before they were 'discovered' by the Western explorers who gave them their names. They were originally used by the Emperors of China as symbols of their wealth and power. This species was named after Père Jean-Marie Delavay, one of many 19th century French missionaries who combined religion with plant-hunting. It is threatened in its native habitat due to overcollection for medicinal use.

LOWER GARDEN

Syringa x persica var.

Stern's plant collection included many lilac species and cultivars. In the wild these tough shrubs grow on hillsides and mountains, enjoying freely drained conditions and thriving



on Highdown's chalk. This exceptional lilac is a hybrid of obscure parentage. Grown in the gardens of ancient Persia (modern Iran) it was introduced to Europe in the 17th century. With its delicate foliage and profuse airy panicles of scented pale lilac flowers in May it deserves a place in every chalk aarden.

Paeonia suffruticosa



This dazzling flower emerges as large ball shaped petals in May with a spectrum of pink to crimson at the petal base. They can be found in the Lower Garden amongst the herbaceous borders. Stern grew several *paeonia* using seeds donated to him and then developed as hybrids. Some of the first Highdown *peaonia* seeds came from Canadian plant collector F. Cleveland

Morgan who grew them from seeds found by plant hunter Joseph Rock in Gansu, China in 1925. 'Constantia' seeds came from Japan thanks to diplomat and leading amateur jockey Hugh Lloyd Thomas. During the 1950s Stern won the Award of Merit for his 'Mrs George Warre' and 'Cassandra' peonies at the Chelsea Flower Show. Stern enjoyed growing them but had to be patient as they took at least five years to grow them from seed

6 Pittosporum tenuifolium

Although Pittosporums are now ubiquitous in suburban front gardens, when Stern planted his first specimen in the Chalk Pit in 1912, they were relatively unknown plants with unproven hardiness. Stern was delighted to discover that these elegant, evergreen shrubs from New Zealand were cold tolerant. even pulling through the terrible winter of 1952/53. He propagated numerous seedlings from the original tree and used these to create the long hedge which divides the middle and lower garden.





7 Clerodendrum trichotomum var. fargesii

A native of China and Japan, the exotic flowers and fruit of this beautiful shrub belie its tough nature. Blooming in late summer when most other shrubs have finished, it bears airy clusters of sweetly scented flowers emerging from pink buds folded like origami. These are followed by impressive starry fruits, composed of outer crimson lobes with contrasting centres of a stunning turquoise blue. The chemical composition of this startling plant pigment is totally unique to Clerodendrum trichotomum and it was once used to dye clothes.

In Japan its name translates as 'Stinking Tree', due to the pungent smell of the crushed leaves. Although we do not know where Stern obtained these plants, collections were made in the 1890s by Père Paul Farges, a French missionary in China after whom the plant was named. It was these French missionaries, sent to China in the aftermath of the Opium Wars,* who first explored the Chinese interior and whose discoveries caused a sensation amongst Western plant collectors.

*Chinese attempts to resist the British introducing and enforcing sale of opium in China.

8 Cornus kousa var.



Introduced by Wilson from China in 1907, Cornus kousa var. *chinensis* is one of the best Cornus to grow and an excellent tree for small gardens, providing year-round interest. This specimen is a re-introduction by Worthing Council staff. In early summer, its elegant, lateral branches are covered in showy white bracts which fade to pink. The central 'button' which contains the true flowers. develop into an attractive strawberry-like fruit and are accompanied by beautiful autumn foliage.

Rosa 'Wedding Day'

On 26th June 1919 Frederick Stern married Sybil Lucas at the West London Synagogue. Sybil was well-educated



and independently minded, enjoying her husband's passion for gardening and pursuing her own interests in art and politics. She joined the Union of Jewish Women and was involved with Liberal party suffragists in the 1928 campaign to raise awareness of women's suffrage. During the Second World War she became a senior officer in Worthing Women's Voluntary Services. She also worked as a Worthing magistrate for thirty years.

As a testament to their happy marriage, Stern named several of his plant hybrids after her, including: *Galanthus elwesii* 'Sybil Stern' and *Paeonia* 'Sybil'. In 1950 Stern bred a hybrid cross of *Rosa sino-*

Frederick and Lady Sybil Stern outside Highdown Tower, 1954



wilsonii and Rosa moyesii which fortuitously flowered on the day of their wedding anniversary and he immediately named it 'Wedding Day'. This rose is a vigorous and floriferous rambler which is covered with scented white flowers emerging from apricot coloured buds and turning pinkish with age. It has self-seeded prolifically about the garden.

CHALK PIT

Carpinus turczaninowii

When Stern sowed a packet of unknown tree seeds from Farrer's 1915–15 expedition only one of the seeds germinated. That precious seedling is this tree, making it around 105 years old. With a girth of 2.10m it is now registered as a Champion Tree.

Many of the seeds which Stern received arrived only with a collector's number and he had to wait until 1930 when this tree was identified by the curator of Kew Gardens, William Bean. A few years later Stern managed to propagate this tree and a young sapling was planted by Queen Mary on her visit to Highdown in 1937, see photo above. You can find this younger tree still growing on the other side of the Middle Garden.

Stern described this as the finest at Highdown. Its elegant,



Queen Mary in 1937, Highdown Visitors Book

weeping branches hold delicate foliage which turns shades of orange in the autumn.



Hydrangea aspera 'Villosa Group'

Ernest Wilson was one of the foremost collectors of Chinese flora. He began his plant collecting career working for the famous Veitch nurseries who provided Stern with some of his first plant acquisitions and inspired his passion for the new plant introductions coming from western China.

From 1906 Wilson worked for the Arnold Arboretum in Boston who instructed him to increase the knowledge of the woody plants of China. On one of these trips Wilson narrowly escaped a huge rock fall on a narrow pass and broke his leg in two places. Lying across the path, his mules had to be walked over him as the path was too narrow for the animals to be turned around. This accident left him hobbling around on a shortened right leg for the rest of his life.



In 1908 Wilson brought back seed of this *Hydrangea aspera*. Stern discovered that this was one of the few Hydrangeas to flourish on the dry, alkaline chalk and self-seeded plants have proliferated around the Chalk Pit. These large shrubs are particularly valued for their late summer flowers bearing large flat heads of lilac florets.

Rosa brunonii: The Himalayan Musk Rose

In 1914 the plant hunter, Reginald Farrer, and his colleague, William Purdom, set off from Beijing on the trip of a lifetime to North West China. Farrer's trip was the first plant hunting expedition which Stern sponsored and inspired his lifelong association with the most important plant hunters of the 20th century.

The eccentric Farrer was a Buddhist convert and Jane Austen fanatic who frequently dressed up in Chinese robes. A frustrated novelist, he poured his literary ambitions into his lively botanical prose, transforming the genre of garden writing forever.

Pause for a moment to imagine Farrer traversing the hills of North West China on his pony 'Spotted Fat'. His view may not have been that far removed from Highdown's Chalk Pit; he even described the uplands of Gansu province as 'like glorified Lewes Downs'. Farrer would have seen *Rosa*



brunonii scrambling over the tops of trees and scrub, smothering steep-sided valleys with a spectacular show of scented white flowers, just as it does here in June and July over one hundred years later.

UPPER GARDEN

Euonymus grandiflorus



These grand trees started life as two tiny cuttings which Stern obtained in 1934 following the death of Vicary Gibbs, a wealthy financier, MP and owner of a celebrated arboretum which has now been lost. Stern was justly proud to receive an Award of Merit for them in 1953. In autumn they are covered in beautiful, pink, four-lobed fruit which open to reveal black seeds resting on a scarlet base.