

OPERCULUM FEBRUARY 2014

Town and Country Open Gardens – 26-27 April

Autumn in the Southern Highlands is considered to be the best time to see our cool-climate gardens. This year the Town and Country Open Gardens weekend will be a special treat for both out-of-town visitors as well as locals. As this is the major fund-raising activity for the Friends of the Southern Highlands Botanic Gardens (SHBG), we are enormously grateful to the garden owners for their support and generosity in sharing their private properties.

Eight gardens will be open for everyone to enjoy—including the 'Oldbury Experience' where the gardens of three historic properties owned by David Newby at Sutton Forest can be viewed. **Oldbury Farm**, with its handsome sandstone homestead, was built in the 1820s and is one of the oldest properties in the area. To get there, drive from the Illawarra Highway to Oldbury Road, Sutton Forest, and park at **Oldbury Vale**. After a stroll round the lovely garden, you will be transported down the narrow country lane by a shuttle bus to visit **Oldbury Cottage** and then on to Oldbury Farm. It will be quite an experience!

The two other large country properties will delight every gardener. **Allways**, owned by Eleanor and John Dartnell, is situated at Loftus Parade, off Werai Road, Exeter. **Benbullen**, owned by Isobel and Tim Scott, is on Meryla Road, Manchester Square, Moss Vale (4.5 kms from Yarrawa Road turnoff). Although these gardens are very different in design, they have both been beautifully planted to provide visual and spatial pleasure.

The three remaining gardens are situated closer to Bowral town centre. **Gowan Brae**, 14 Charlotte Street, Burradoo, owned by Heather and Richard Cant, was built in the 1890s and is a stunning garden set on 1.5 acres. The 5-acre gracious garden at **Greenwood**, owned by Janice and Steve Scott, 15 Kimberley Drive, Bowral, has lovely water features including a lake. **Quindalup**, owned by Deidre Hill, and developed by her since 1973, comprises 10 acres of park and woodlands with rare trees and shrubs.

It is at **Quindalup** where the Plant Stall will be held on Saturday and Sunday (26-27 April). Our team of propagators and growers has been extremely busy over the months and the array of rare and interesting plants for sale will be a drawcard for many. Special thanks to Deidre for letting us hold the plant stall at her property.

Entry tickets will be available only from the gardens, which will be open from 10am to 4pm. School-age children have free entry. To visit all eight gardens the cost is \$30. For the 'Oldbury Experience' (the three gardens and the shuttle bus) the cost is \$15. For individual gardens (excluding the 'Oldbury Experience') each ticket is \$5. For Coach Group tickets, please contact Judy Keast—telephone (02) 4862 5444 or jikeast@hinet.net.au or info@shbg.com.au.

The Official Opening of the SHBG

Another milestone was achieved on Sunday 8 December 2013 when a record crowd of more than 500 Friends and supporters came to witness Her Excellency Professor Marie Bashir AC CVO, Governor of New South Wales, officially open the Southern Highlands Botanic Gardens. The site looked beautiful with the sun shining on the newly planted trees and mown grass. The Southern Highlands band played, and the speeches by the Chairman of the Board, Charlotte Webb OAM, the Mayor Juliette Arkwright, the Federal Member for Throsby, Stephen Jones, and our special local Elder, Aunty Val (accompanied by four young boys and didgeridoos), were much appreciated by the audience.



Her Excellency Professor Marie Bashir AC CVO, Governor of New South Wales

A Date for your Diary

Save Friday 13 June for a date at the Mittagong Playhouse—an evening performance in aid of SHBG—'I Love You, You're Perfect, Now Change'—a musical comedy with book and lyrics by Joe DiPetro and music by Jimmy Roberts. It will commence at 7.30pm. Further information will be available in the next Operculum.

Opening Days



The propagation workshop on 21 January 2014

On Tuesday 21 January over forty people turned up on a surprisingly cool morning, when Charlotte Webb and Les Musgrave gave a detailed demonstration/workshop about dividing and propagating plants. Although many of the participants were Friends, there were several non-members from the Bundanoon Garden Club, who enjoyed the occasion and became Friends of the SHBG.

The Friends now meet regularly at the site on the first Tuesday of each month at 10am for a working bee. The jobs usually include mowing, weeding, watering, checking the staking of the trees and mulching. It's a chance to get together to help to maintain the garden—and there's always time for morning tea.

In February the Plant Growers Group also met at the same time to assist repotting and writing labels. If you would like to be involved with the Plant Growers Group, please contact the Co-ordinator, Di Grant, on 0417494705 or email burrdox@gmail.com.



Repotting from the back of Tony Davis' Ute



Glynn Stiller enjoying the new mower

Federal and State Grants

The mower, the brush-cutter and the new first aid cabinet were paid for through the Federal Government's Community Investment Program Volunteer Grants 2013. The Federal Government awarded a total of \$16m last year to hundreds of volunteer groups—grants allocated were between \$1,000 and \$5,000 each—and we were very grateful to receive nearly \$2000.

Another grant the SHBG has recently received is the NSW State Government Community Building Partnership Scheme for 2013, which awarded \$8000 for the construction of a shade house and a green house in the gardens. These grants make it possible for us to continue to develop the gardens.

Other grant applications are currently under way for workbenches, a chemical storage shed, and propagation area.

The Waterers

All through this dry spring and summer a band of waterers has kept the trees alive. Rosemary Willis coordinates the team and, with the willing assistance of her husband Don, she has steered the group through one of the driest periods since 2009. The members report through the daybook, which provides communication from one shift to another. So if the next waterer sees that 'the dogwood is losing its leaves' or 'east-side turf area needing more watering', or 'can't find the connector', then appropriate action can be taken.

The team includes: Sandy Alsop, Virginia Adlide, Harry Babbage, John and Lyn Barrett, John Biffen, Chris Blaxland, Ray Bradley, Bill and Marelle Dive, Ted Duncan, Brian and Kay Fintan, Mary Hooker, Valda Jenner, Pam McCullagh, Maria Meagher, Ron and Margaret Murray.

The watering system has been much improved with five new taps (two of them being within a group of trees). There are also two new hoses that can be left attached to their taps—it used to be quite a challenge dragging heavy hoses from one area to another. In some ways the watering is gradually becoming easier and the generosity and good will of the volunteers is really outstanding, especially given the appallingly hot, dry weather. The SHBG extends its warmest thanks to the waterers.



Robert Fortune (1812-1880).

Simon Grant: Part 6 of The Explorers: Robert Fortune

With the opening of maritime trade between Europe (initially the Portuguese) and China in the 16th century, the demand for Chinese goods (in particular porcelain, silk and especially tea) had been steadily increasing. But the Chinese rulers (The Ming and, after 1644, the Qing Dynasties) remained suspicious of the western traders and possible corruption of its own officials, so regulations restricting access for foreigners to China and a limited number of trading ports were established. Guangzhou (Canton) was the port of preference but as British interests (through the East India Company (EIC)) increased, these restrictions did not suit, nor did the preferred payment in silver. Instead the EIC wished to trade with the opium that it was producing in Bengal. Though banned by the Chinese emperors, fearful of the addictive effects of opium, imported quantities reached 900 tonnes in 1820, and by 1830 some three million Chinese people were addicted. After the British refused to end the trade and as a last ditch effort to stop it, in 1839 the Chinese confiscated the imports, boarded British ships and destroyed the opium on board. In response, the British India Army was sent in 1840 (the 1st Opium War) and, with its military superiority, wreaked havoc along the coast.

The Qing authorities sued for peace in 1842; the Treaty of Nanking was ratified that year with Hong Kong ceded and opium trade allowed, as well as freer entry into China. It was into that environment that Robert Fortune first went to China and as you can imagine he met with some local resentment.

Robert Fortune was born at Kelloe, Berwickshire and after an apprenticeship in nearby gardens, he moved to the Royal Botanic Gardens of Edinburgh in 1840. There he earned the respect and encouragement of his superior who supported Fortune's move in 1842 to become the Superintendent at the hothouse department of the Horticultural Society's garden at Chiswick, London. The Society had amongst its Fellows a recently retired Inspector of Tea at Canton named John Reeves. Whilst working in China he had sent back seed to the Horticultural Society and is credited with introducing Wisteria sinensis in 1816. He and the Society's secretary quickly recognised the importance of the signing of the Treaty of Nanking and were keen for a collector to be sent to China as soon as possible.

Within a few months of starting in London, Fortune had been interviewed and selected for the expedition. Not that they were going to be generous—they offered to pay the paltry salary of £100 per annum, the same that Masson had received 70 years earlier. For protection he was to take a stout stick. It was only after much discussion that the Society finally accepted Fortune's argument that he needed something more substantial for protection and allowed him to take a shotgun and some pistols, a decision that was to save his life. They required him to sign a contract to stay in China for at least one year, collecting plants and seeds particularly of specimens that were hardy. He was especially to be on the lookout for blue paeonies, yellow camellias, double yellow roses, azaleas, lilies, oranges, peaches and types

A new discovery that Fortune took was to become invaluable with his subsequent endeavours—the Wardian case. Now more commonly called a terrarium, Nathanial Ward accidentally discovered around 1829, that a sealed glass container could protect its contents from London's air pollution. The prospect of safely transporting tender young plants instead of only seeds around the world was recognised and, as a test in 1833, Ward successfully transported British ferns and grasses to Sydney with a number of Australian species returning. He published his results in a book in 1842.

And so it was that Robert Fortune set out for China in 1843 bound for the newly acquired colony of Hong Kong with a range of plants in some Wardian cases. His first experiences in the East, however, were somewhat of a shock. Hong Kong was in a 'lamentable condition' with malaria decimating its European inhabitants and bands of robbers roaming the streets at night. Then on travelling to the Chinese mainland, he found Amoy 'one of the filthiest towns I have ever seen'. Having heard so much of the sophistication of the Chinese, the contrast with what he found made him conclude, 'that the Chinese empire had arrived at its highest state of

perfection many years ago', and had since been declining. He began his collecting with some trips around Amov.

Initially the locals were hostile to the foreigner, shouting threats at him, but by ignoring them he was soon surrounded by hundreds of curious people wondering what was his pursuit. From there he sailed further north to what is now the port of Zhoushan, but on the way successive boats were caught in violent storms, the second storm (a typhoon) causing extensive damage, including the destruction of two of his Wardian cases full of plants from Amov. Over the next three years he experienced a number of hardships and dangers as he travelled up and down the coast between Shanghai in the north and Canton in the south—all detailed in his book, Three Years' Wandering in China. Apart from the cold winters in flimsy houses, his greatest dangers continued to be the interactions with the locals as illustrated by two encounters. On one occasion, in the countryside near Canton, he found himself surrounded by several groups of ill-looking fellows. He sought refuge in a hillside cemetery but found there was no other exit. Only by throwing himself on those below him and quickly rushing to the gates through which he had entered, was he able to crash through just before they were closed. He would have been trapped inside with almost certain death.



Anemone hupehensis is native to central China but naturalised in Japan for centuries. 'Flora Japonica' by Siebold and Zuccarini (1870)

The other episode was even more dramatic. In 1845, he travelled up the Min River to near the Wuyi Shan Mountains. On returning he obtained a berth on a junk going to Ningpo but was struck down with severe fever sending him to his cabin for several days. For protection against pirates, the junks sailed in large convoys up the coast but this time the boats were separated into little groups. Late in the afternoon, the captain called Fortune to inform him that five pirate boats had been seen waiting for them. As pirates invariably killed all westerners, Fortune cajoled the panicking crew to follow his orders or he would shoot them, threatening the helmsmen that 'my gun is closer to you than those of the pirates!' He observed that the pirate ship's guns were fixed in position and that in order to fire, their helmsman would have to swing their boat around. After several volleys from some distance the pirate ship had come within 20 metres. As they again turned to fire, Fortune instructed all his crew to dive to the floor to avoid being hit.

After the pirate ship fired, Fortune jumped up firing both barrels of his shotgun into the pirate crew. Surprised and shocked, the first pirate ship was left behind, but another pirate vessel began to gain on them. This time Fortune used the reverse of a ploy he had previously used to sneak into the forbidden city of Soochow, where he had dressed as a Chinese man. He dressed up the most 'western looking' crewmen in western clothing hoping their presence would warn off the pirates. The pirate ship continued the attack until Fortune again fired his shotgun and pistols killing the pirate helmsman. This escapade, when published in his book, established Fortune not only as an expert on China, but a hero, and the range of plants collected ensured the trip was an allround success.

From the forbidden city of Soochow he obtained the double yellow rose (Rosa "Fortune's Double Yellow), a gardenia (Gardenia jasminoides var. fortuniana) and many other specimens, including the Japanese anemone (Anemone hupehensis var. japonica), Viburnum plicatum 'sterile', the cumquat (at one time Fortunella japonica), Weigela Florida, Abelia chinensis, three Mahonias and the bleeding-heart (Dicentra spectabilis), Camellia reticulata 'Robert Fortune' and several tree paeony and chrysanthemum cultivars. But it is for his next trips to China and the collecting of one species of plant that Fortune is best known.

His reputation established by his exploits in China, he was the obvious choice by the East India Company to help commit what has been described as industrial espionage and the greatest theft of trade secrets in the history of mankind—the stealing of tea from China to establish a tea-growing commercial enterprise in the foothills of the Himalayas centred on Darjeeling. For a more complete description it is worth reading For All the Tea in China by Sarah Rose. Paid five times his previous wage, he had to travel deeper into China and with more risk than ever before—first to the best green tea growing regions in Anhui province and the following year to the best black tea growing regions of the fabled Wuyi Mountains in Jiangxi.

Growing and producing tea was a guarded secret, the Emperor preventing foreigners from visiting any of the tea growing districts. Fortune, needing to travel in disguise, had his scalp shaved, a long braid of coarse hair stitched into his own and donned clothing appropriate for a dignified Chinese merchant. The fact that he was over one foot taller than everyone else was explained by the fact that he came from north of the Great Wall.

He managed to collect a staggering number of young plants and seeds—the first year sending some 13,000 plants in Wardian cases and bags of seed stored as recommended in 'burnt lice'(rice). Through a number of mistakes, however, only 3% of the seedlings survived and none of the seeds germinated. After such a dismal failure a different approach was required. The following year he sent the seed in the Wardian cases instead of seedlings. This time thousands of tea plants sprouted on their way to India and, with the assistance of eight Chinese experts supervising the cultivation and production of tea, success was assured.

At the same time, Fortune showed that green and black tea came from the same plant, *Camellia sinensis ssp sinensis* and collected a few other plants of interest to the west including *Cupressus funebris* and *Pseudolarix amabilis*.



The tea plant, originally thought to be two species: Thea viridis (green tea) and Thea bohea (black tea) is now Camellia sinensis. (Koehler's Medicinal Plants 1887)

Two further trips to China were less successful: one from 1853-56 where he was robbed and prevented from exploring by the Tai-ping Revolution, and another (1858-59) on behalf of the US government who had hoped also to set up a tea industry. The American Civil War stopped that project. His last trip (1860-62) was to Japan, which, like China, was finally opening up. In total during his travels, Fortune discovered over 120 new species but his greatest achievement was clearly the transfer of tea plants from China to India. He settled in Kensington, London in 1863 until his death in 1880, a wealthy man from his plant introductions, his estate valued at over \$5 million in today's money.

PS. It would be over 100 years after Fortune's initial trip before a yellow Camellia was introduced from China (*Camellia nitidissima*). The blue paeony is still to be discovered.

Simon Grant

References and Further Reading:

Toby Musgrave et al, The Plant Hunters (Ward Lock, 1998).

Carolyn Fry, The Plant Hunters: The Adventures of the World's Greatest Botanical Explorers (Andre Deusch Ltd, 2009)

Sarah Rose, For All the Tea in China: Espionage, Empire and the Secret Formula for the World's Favourite Drink (Random House, 2009)

Wikipedia section on The Opium Wars.

Please Note: Name badges for all Friends are available. Apply to the secretary, Jacqui Page: secretary@shbg.com.au.

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