

OPERCULUM JUNE 2014

Come and Support SHBG at the Mittagong Playhouse: Friday 13 June

There is a treat in store for those of you who would like to join us for 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.

The musical is a series of vignettes celebrating the ups and downs of love and relationships in suburbia. From single life to first dates to marriage to road trips with kids to the end of a relationship, this musical explores the joys and frustrations of love with humour, emotion and insight.

Cost: tickets either \$28 for "A" seats or \$25 for "B" seats may be purchased through Chris Webb, (telephone 4861 4899) and may be picked up from the Webbs' office or held for collection on the night. Or you can pay by direct debit via BDCU, BSB 802101 ac no 350489. (Make sure you include your name and also confirm by email to info@shbg.com.au)

Town and Country Open Gardens - 26-27 April 2014

The Open Garden weekend was a huge success and raised over \$65,000—many, many thanks to the garden owners, the hundreds of volunteers and the public for coming to support the Botanic Gardens. The pop-up nursery at 'Quindalup' was a large contributor to the coffers and special thanks are due to Di Grant for all her work co-ordinating the plant growing and stall; to Les Musgrave, Maureen Purtell and Tony Davis, Charlotte and Chris Webb and other plant growers who worked tirelessly for months!



Children enjoying the bridge and lake at 'Greenwood', Kimberley Drive, Bowral (photo Brian Rapsey)

The Visit of the Garden Designers

The Botanic Gardens designers have now been commissioned to take us to the next stage of the development. Perry Lethlean (from Taylor Cullity and Lethlean) and his colleague, Alexandra Lock, revisited the site in May and are now working on the detailed design aspects of the entry to the gardens, the site of the

future Botanic Gardens Centre and coffee shop, the layout of the native planting areas and the boardwalks through the Ponds of Reflection. They also were able to meet with some of the Friends at the Town and Country Thank-you drinks party.



Alexandra Lock and Perry Lethlean (photo Meg Probyn)

Council negotiations

The final stages of the negotiations for a lease of the site are now taking place between Council and the Board. When this process is completed, the lease will be placed on public exhibition before the final adoption by Council.

This is a crucial stage and as soon as the documentation is signed and sealed, the plan is to hold an architecture competition for the Botanicc Gardens Centre and coffee shop.

New Propagation and Growing Area

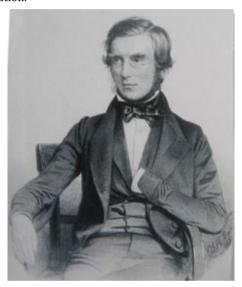


The diggers at work on the site (photo Charlotte Webb)

If you have driven past the site recently you will have seen some exciting activity. Construction of the new propagation and growing area has begun and hopefully will be finished in time for late winter propagating. It will make a change for the volunteers who have spent many hours using the back of Tony Davis's ute as the potting table.

Simon Grant: Part 7 of The Plant Hunters: Joseph Hooker: 1817–1911

For a plant hunter just starting out, one of the least enticing regions to head off to would have to be the cold, inhospitable Antarctic. But the young Joseph Hooker, with his father's encouragement, not only completed a medical degree as required, but sought out James Ross who would command the expedition, to push his case for inclusion. Such was his determination, present from an early age, that would make him the leading botanist of the 19th century, a plant hunter who started a plant craze, director of one of the world's great botanic gardens and friend and confident of a naturalist whose theories have become the foundation of modern evolution.



Sir Joseph Dalton Hooker

Born in Halesworth, Suffolk, he grew up north of the border from 1820 after his father William was appointed to the newly created chair of botany at Glasgow University. A precocious interest in plants was supported by attendance at his father's daily college lecture as well as helping him with his herbarium. Access to the well-stocked library of a grandfather introduced him to some of the great explorers such as James Cook and he was further inspired by David Douglas, a protégé of his father and his tales of America. By the age of 15 he entered medicine at Glasgow University, his single-minded dedication, diligence and stamina in his endeavours, noted by both parents.

His voyage aboard the oak-reinforced HMS Erebus as assistant surgeon and botanist lasted four years from 1839 to 1843. Ross took it and its sister ship the Terror to 78° 11', amongst pack ice, dangerous seas and gales. On one occasion a collision between the two boats trying to avoid an iceberg resulted in the Erebus fighting to regain control. In between exploration and trying to reach the south magnetic pole, Hooker had opportunities to botanise on a number of sub-Antarctic islands and as well as Tasmania, New Zealand, southern South America and the Cape of Good Hope where they rested over winters. Though few plants of garden interest would be discovered, the time spent and the experience gained by Hooker would establish his credentials with over 1500 species collected. Whilst Joseph was away, his father was appointed director of the Royal Botanic Gardens, Kew in 1841. It had always been assumed by the family that the botanical results of the journeys would be published, and so now Sir William, using his position, pushed both the Admiralty and the Treasury for financial support. The result over the next two decades was the completion of *Flora Antarctica* followed by those of New Zealand and Tasmania. William Hooker had also brought with him from Glasgow Walter Fitch, a botanical illustrator, paying him personally and these volumes as well as some later works by Joseph are made all the more beautiful by many of Fitch's exquisite hand-coloured lithographs based on Joseph's sketches.

In the interlude between explorations from 1843 to 1847, apart from Flora Antarctica and the refusal of several job offers, perhaps the most important historical benefit was the establishment of a close dialogue and friendship with Charles Darwin. Darwin suggested that Hooker should look at the former's plant specimen collection from Tierra del Fuego, and the two began a lifelong association, seeking each others' opinions and culminating in Hooker's encouragement and support for the joint presentation of Darwin's work with Alfred Wallace's to the Linnean Society in 1858. Those papers On the Tendency of Species to form Varieties and On the Perpetuation of Varieties and Species by Natural Means of Selection, were formally presented to the society by Hooker in the absence of both authors. The next year Darwin published On the Origin of Species. Following the controversy generated by its publication, Hooker was one of Darwin's supporters at the famous 1860 Oxford Debate and Darwin acknowledged Hooker's assistance on several occasions over the years.

Back in 1847, Hooker still had itchy feet for more exploration, this time for hotter climates, and so he set off to India and the Himalayas. It is this trip that has had the greatest influence on our gardens. On the way to the recommended Sikkim, he familiarised himself with Asiatic plants by sorties to Sri Lanka, Chennai and Kolkata. He reached Darjeeling in April 1848, his headquarters for his mountain trips until May 1850. Just to the north lay the kingdom of Sikkim, at that time ruled by a Rajah who with some justification was deeply suspicious about the intentions of the surrounding territories of Nepal, Tibet, Bhutan and British-ruled India to the south.

To gain entry, Hooker needed permission but that took many months of negotiations. Whilst he waited, he explored the mountain ridges around Darjeeling discovering three new rhododendron species and Magnolia campbellii, named after one of the local officials who helped him whilst he was there. By the time approval was given to enter Sikkim, and then only after pressure from the new Governor General Dalhousie, it was late in the season. He set out in October with a party of 56 (later greatly reduced) to explore the western parts, crossing ridges and clambering up steep walled river valleys in weather changing from sunshine to rain snow and sleet within hours. Eventually he reached the high mountain passes to the north. He suffered from altitude sickness, and the local animals added to his woes. The temperature fell to -10° C —then snow finally stopped his progress. Nevertheless, when he returned to Darjeeling with so many cases of specimens, he took six weeks to arrange and catalogue them before sending them back to his father at Kew.

The following year he explored the central and eastern regions of Sikkim but again the Rajah resented his presence and did all he could to obstruct the party. Their

progress was slowed by attempts to sabotage food supplies, instructions to villagers not to sell them food, and having many of the rope bridges used to cross treacherous rivers cut and paths damaged. Hooker continued on further north high into the mountains reaching the Kongra Lama pass on the Tibet border.

Returning down the mountains for ten days' rest he set off a little to the east this time heading to another pass into Tibet. On this journey he reached 5880m, an altitude record at that time. Then he retraced his path down to meet up with Archibald Campbell, who had come to see how Hooker was faring. Together they covered some of the ground that Hooker had already done, but this time on reaching the border at Kongra Lama, Hooker rode off into Tibet—against the border guard's directions. Campbell calmed the border guards and persuaded them to escort the party through Tibet and back into Sikkim via another pass, allowing them to complete their search.

Next they explored further to the east and it was here that the real drama happened. Hooker had wished to explore tracks up two more passes and indeed it yielded a bounty with seed from 24 rhododendron species collected.



Magnolia campbellii named after the official taken captive in Sikkim. A lithograph by W Fitch from Illustrations of Himalayan Plants 1855

It had been intended to meet the Rajah on the return but instead, the Dewan, the Rajah's prime minister, took Campbell prisoner, beating him up in the process so severely that he thought he was going to die. Though Hooker was free to go he insisted on staying with Campbell throughout the month-long ordeal. The duration of their confinement was extended when the letter to British officials from the Dewan, written in Tibetan, was not understood and so was placed on Campbell's desk for him to deal with when he returned. When Hooker finally got a letter through to the Governor General, the immediate show of force brought the Sikkim leaders to their senses with Britain's punishment, the loss of the fertile southern part of Sikkim to British India. Ultimately Sikkim would become part of India in 1975.

Having returned to Darjeeling, Hooker completed a map of Sikkim and organised for his botanic collection to be sent back to Kew. Before returning home he then spent nine months exploring Assam with an old friend from Glasgow University, Thomas Thomson, collecting amongst other things the blue orchid, *Vanda coerulea*. Hooker's time in Sikkim and Assam was a resounding success. Twenty-five new rhododendron species alone were identified (none of significance has been found since in Sikkim) and several of these such as *R. griffithianum* are parents to many of today's popular hybrids. Rhododendromania infected gardeners for the next twenty years. In addition, 150,000 herbarium specimens representing 7000 species were collected.



Rhododendron thomsonii, a species named after his friend from student days, who accompanied Hooker to Assam. A lithograph by W Fitch in Rhododendrons of Sikkim-Himalaya 1849-51

In 1855 he took up the position of assistant director of Kew Gardens and succeeded his father as full director in 1865, a position that he would hold for 20 years. Under his and his father's directions, Kew was to expand manyfold and Joseph would help to establish Kew as a scientific and historical resource. He also resisted claims by the head of the British Museum to take over its direction, ensuring its continued independence.

Whilst at Kew his urge to travel and botanise remained, as was his apparent oblivion to the risks. In 1860 he visited Syria and Palestine during a civil war between the Druses and the Maronite Christians shortly after thousands of Christians had been massacred. Hooker located the celebrated cedar grove on Mount Lebanon, travelled to Damascus, the valley of Jordan and the Dead Sea, but in autumn the barren landscape vielded only meagre specimens. Then in 1871 he travelled to Morocco, exploring its interior at a time when little was known about dangers from tribesmen. Despite intense cold his party reached over 3500m in the Atlas Mountains. In contrast to today, mail addressed "somewhere in the Atlas Mountains" unfailingly reached them. Finally in 1877 he completed his last major tour to the USA, in particular to investigate the connection of the flora of the eastern states with Far East Asia.

Finally, Hooker 's importance to botany was established by his numerous publications—including those on his explorations as well as his systematic descriptions of the flora. Following on from *Flora Antarctica* were: *The Rhododendrons of Sikkim-Himalaya (1849-51), Flora Indica* co-authored with T Thomson (1854), *Flora of British India*, 7 vols (1872-97) and the three volume *Genera Plantarum* co-authored with George Bentham. The last publication covered all the known members of 200 plant families and remained the basis for the ordered arrangement of species for 130 years only recently being replaced by a DNA-based one. He died in 1911 and is buried beside his father in the churchyard of St Anne's on Kew Green, an offer by the Dean of Westminster to be buried next to Darwin in the Abbey having been refused.

Simon Grant

References and Further Reading:

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

Ray Desmond (preface by Sir Ghillean Prance), Sir Joseph Dalton Hooker: Traveller and Plant Collector (Woodbridge: Antique Collectors' Club with The Royal Botanic Gardens, Kew, 1999)

Community Service Award

Stephen Jones MP, Federal Member for Throsby, presented Charlotte and Chris Webb, Jacqui Page and the Friends Committee with Community Service awards on Wednesday 21 May 2014 during the $25^{\rm th}$ National Volunteers Week. Unfortunately a few of the committee members were missing!



Community Service Awards presentation: Noel and Elizabeth Symonds, Meg Probyn, Chris and Charlotte Webb, Jacqui Page, Stephen Jones, Judy Keast, Shandra Egan and Rosemary Willis.

Frank Nevill: new member of the Board

Frank Nevill joined the Board of the Southern Highlands Botanic Gardens in December 2013 and is enjoying the challenge. He claims that his role in any garden would only be as a labourer, but he brings experience in corporate governance and compliance.

Born in Newcastle, NSW, Frank is married to Alison and they have three adult children who all grew up in the Southern Highlands before moving away to make their way in the world. Their three grandchildren keep them busy.

Frank and Alison moved to Bowral in 1986 when Frank was employed by Illawarra Electricity. Frank was an Electrical Engineer with a number of electricity supply authorities in NSW and worked originally in the development and management of electricity supply networks and then moved on to economic regulation—managing relationships with economic regulatory bodies and the preparation of regulatory and pricing submissions.

Frank was a member of the Moss Vale Rotary Club in the late 1980s and early 1990s and was President of the Club in 1990/91. He also served as a Director of Berrima

District Credit Union from 1993 to 2010 and was Chairman of the Board of Directors for five years.



Frank Nevill

Frank has recently retired from Endeavour Energy after 41 years in the electricity supply industry and he now hopes to have more time to spend on his other interests which include genealogy and local history as well as spending more time with the family and he and Alison hope to do some more travelling.

Frank looks forward to working with the Board and supporters of the Gardens to bringing the Gardens to fruition.

Working Bees

On the first Tuesday of each month a working bee is held at the site. Chris Blaxland (from the Committee of Friends) has volunteered (or was he pushed?) to organise the work. If you would like to help, please bring along your garden tools—wheelbarrows, rakes, shovels, gloves and hats, etc. The kettle will be on and despite the work you'll have a most enjoyable morning.

Renewal of Membership

If you haven't already paid your Friends' membership for June 2014 to June 2015, please complete the enclosed form or complete the form on the website and return it to:

SHBG, PO Box 707, Moss Vale, 2577

Please note that if you joined after 1 April 2014 your membership is paid until June 2015.

(Don't forget to include your email address to help us reduce mailing costs.)

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

The Board of SHBG:

Chairman: Charlotte Webb OAM Members: Barry Barford, Frank Nevill Jacqui Page, Chris Webb

Committee of Friends of SHBG

Chair: Chris Webb (4861 4899 friends@shbg.com.au) Chris Blaxland, Ian & Carolyn Dwyer Shandra Egan, Di Grant, Judy Keast Meg Probyn. Noel & Elizabeth Symonds Rosemary Willis

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