



SOUTHERN TABLELANDS ECOSYSTEMS PARK – A REGIONAL

BOTANIC GARDEN, EDUCATION AND ECOSYSTEMS RECOVERY FOR THE SOUTHERN TABLELANDS

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Max Bourke steps down as editor

Max has relinquished the duties of editor after many years due to the need to rationalise his extensive commitments. His erudite comments, depth of knowledge, and ever-present dry humour will be sorely missed. Max will, of course, continue to contribute. This newsletter includes a delightful article of his telling the story of the ‘naming’ of *Eucalyptus oblique*. Though not a native to the southern tablelands region, this tree is more than important among the eucalypts, because it is the species that was described in giving the name of the genus, ‘*eucalyptus*’.

My apologies for the delay in publication of this edition. Editor in Training, Sue Genner.

Installation of our first seat

On Thursday 4 February we had the installation of our first seat at STEP. This was donated by Sanya Richie, OAM, a Friend of the NAC and a volunteer guide, to celebrate members of her family. The installation was attended by Scott Saddler, Operations Manager NAC and Collette Mackay, Donations and Sponsorship Manager. Judy Smith presented Sanya with a bouquet before group photos were taken and we adjourned for morning tea. Stephen Alegria (Executive Manager, NAC) and Adam Stankevicius (Director responsible for NAC – also Events ACT and ArtsACT – in the newly formed Events and Tourism Portfolio) later attended to see the seat.



Plaque on the new seat and group photo: Collette Mackay, Sanya Richie and Judy Smith seated.

Photos: Jennie Widdowson

The STEP crew had a busy morning as they had to finish mulching the mound behind the seat before the official proceedings began.

The following week, plantings were done on the mound: Calotis just behind the seat, Hardenbergia on top of the mound, and Pomaderris on the back side. In addition, four “Ginninderra Falls” Croweas were planted along the side of the path in front of the seat. It will be a very attractive site once these plants take off, and we are very grateful to Sanya for this generous donation. (Judy Smith)



Planting the mound : Richard Jones, Ross Dalton, Mardi Naulty and Lainie Shorthouse.



Lainie Shorthouse and Margie Bourke try out our first seat.

Photos: Judy Smith

Summer Work Days

In the hotter months, David suggested that we start early (about 8am) and have morning tea around 9.45 before finishing up for the day. This has been very successful with many volunteers availing themselves of the opportunity to work in the cooler hours of the day. There are often so many cars parked on the slope that it looks like a rent-a-crowd event. Jens has taken to parking by the dam and

Ross said he thought there weren't any car spaces left. Thanks David for this very sane suggestion and thanks to all who have been able to join in. (Judy Smith)



Morning tea in the shade.
Photo: Judy Smith

New signs

New signs were installed by the Arboretum in February at the entrance to STEP as you approach through the Mesa oak forest on the relatively new paths from the northern end of the terrace at the Village Centre.



Entrance at the southern corner of STEP near the tanks – showing the new bridge over the drainage channel that runs from the carpark along the first setion of the boundary with the Mesa oaks.

Photo: Judy Smith



Lainie Shorthouse appreciating the new signage – near the border with the Mesa oak forest.
Photo: Judy Smith

A blue visitor – 18 February

This intriguing very blue insect was found in the eucalyptus just below the new seat during a Thursday morning working bee. Susan Parsons, also visiting STEP on the day, has since kindly identified the insect as *Scolia soror*. Well spotted and captured (on camera) by Ross.



Scolia soror. perched on eucalypt blossom. Photo: Ross Dalto

New table setting

The table provided for us by Scott Saddler (Operations Manager at the National Arboretum) has undergone a wonderful transformation. Willi Singleton and Ray Knight took on the task of restoring and painting this (Thank you!). They even retained the old screws and bolts, mounting these on a board to show the deterioration the table had undergone. It now looks wonderful, and is a great addition to our meeting place down near the shed.



Table restorers Willi Singleton (middle left) and Ray Knight (middle right).
Photoss: Judy Smith.

National Eucalyptus Day

Visit by Anna Howe (Friends of the NAC)

On Thursday 21 January, Anna Howe joined us for morning tea and discussed plans for celebrating National Eucalyptus Day – 18 March. Anna informed us that there will be an exhibition at the Terrace and Village Centre. In addition, it is proposed that guides from the FNAC and STEP join forces to offer tours up to the Camden White Gums, down to STEP, then across to the Eucalypt plantings by significant persons on the zigzag path. She has much enthusiasm for this venture and it is wonderful to see the collaborative approach which has been proposed.



Anna Howe – visiting 21 January Thursday Morning Tea to discuss the Eucalyptus Day celebrations
Photo: Judy Smith

Guided walks in STEP

On 17-19 March STEP collaborated with the Friends of the Arboretum in celebrating National Eucalyptus Day. We organised a leaflet that presented information about the 30 eucalypt species growing at the Arboretum, STEP's 16 species, 7 forests with rare or threatened species, the ANU research plots, and the several ceremonial tree plantings in the Central Valley.

National Eucalyptus Day was initiated a couple of years ago by the Bjarne K Dahl Trust which promotes the cause of eucalypts through conservation, protection and scientific research. Bjarne Dahl worked for the Victorian Forests Commission and Australian Paper Manufacturers establishing extensive eucalypt forests. He died aged 95 and left his substantial estate to advance the cause of eucalypts. the STEP colour brochure featuring our eucalypt plantings was funded from a grant from the Dahl Trust.

Nine STEPpers volunteered to guide visitors to Forest 20, but the weather completely washed out the Friday arrangements. Nevertheless, some 25 visitors came to Forest 20 on the other days, either as part of the Friends monthly guided walk, or in smaller groups directed down from the Village Centre.

Most visitors expressed surprise at the display of native plants and appreciation at the information supplied by our guides. Hopefully, this effort will stimulate return visits with friends and family, and next year we may build on this modest start.

Visit by CEO of the Dahl Trust

Report by David Shorthouse:

On 21 March Judy, Jens and I had the pleasure of showing Bram Mason (CEO of the Bjarne K Dahl Trust) around Forest 20. The Trust was established in 2010 by a bequest from Bjarne K Dahl (1898 to 1993) to advance the cause of eucalypts by promoting awareness, knowledge and appreciation of Australia's iconic eucalypts. The Trust was the source of funds for our colour leaflet and first signs. The Trust is a member of the Australian Environmental Grant Makers Network (AEGN) and Philanthropy Australia.

This was the first time Bram had seen what we are doing, and he was impressed with the plantings, educational potential and achievements of our volunteers. We discussed our recent participation in National Eucalypt Day (started by the Trust), and agreed to liaise regarding next year's National Eucalypt Day and future ones.

As we walked around Forest 20, Jens showed Bram some of the data we have collected on eucalypt growth and outlined some of the trials and tribulations of growing them. Bram was also to visit ANBG about the trail between ANBG and the Arboretum.

The Trust's annual grants program opens for applications in October, and Bram encouraged us to apply for projects such as a re-print of our leaflet, signage and other projects including those that involve indigenous people, (such as our indigenous food and fibre section). The STEP Committee will be taking this up during 2016.

The walk around Forest 20 with a representative of the Dahl Trust and his family was a fitting end to our marking of National Eucalypt Day.



Bree Mason, Cheryl Mason, Bram Mason (CEO Bjarne K Dahl Trust), Jens Stevenson and David Shorthouse.
Photo: Judy Smith

A tale of eucalypts, revolution and murder: Charles Louis L'Héritier de Brutell

Article by Max Bourke, AM – previously printed in 'Fronds', ANBG.

Late last year I was leading one of the monthly walks put on by Friends of the ACT Arboreta, around the Westbourne Woods. Standing under a beautiful *Eucalyptus obliqua*, I remarked that the man who had described it botanically was the Frenchman L'Héritier. This caused such interest that I thought the life, and death, of this remarkable man was worth spelling out.



The two *E. obliqua* in Westbourne Woods, showing Royal Canberra Golf Club bunker and mower.

Photo: Anne Rawson

Eucalyptus obliqua L'Hér., *Sert. Angl.* 18 (1788), [t.](#) 20 (1792), to give it its full botanical name/description, is commonly known as Messmate, Messmate Stringybark or Tasmanian Oak. Sadly, there are no longer any specimens in the Australian National Botanic Gardens. It is a tall (up to 90 m) widespread tree that occurs in wet coastal areas from Kangaroo Island around Victoria, Tasmania and up to south-eastern Queensland. Its timber is prized. The species name is because of the odd, strictly eccentric, shape of the leaves (see the beautiful illustration by Redouté; more on him later). But this tree is more than important among the eucalypts, because it is the species that was described in giving the name of the genus, '*eucalyptus*' (Greek for 'well covered'). The type specimen of this tree had been collected by David Nelson on 26 January 1777 at Adventure Bay on Bruny Island during Cook's third voyage. It was passed to Joseph Banks on return to London.

Charles Louis L'Héritier de Brutelle was born of a wealthy Parisian family. Not much is known of his 'formation', as the French say, but at the age of 26 he was given a senior appointment as superintendent of the waters and forests of the Paris region. He enthusiastically threw himself into the study of not only French botany but also exotic species. He adopted, probably under the influence of the botanist Pierre Broussonet, the Linnean system although this was unfashionable in French botanical circles at the time. In 1775 he was given a judicial post which suggests he may have had some legal training, as a Counsellor in the *Cour des Aides*. During this period L'Héritier, while working as a judge, employed various plant collectors and began working towards his first major publication, *Stirpes novae aut minus cognitae*. But political events were accelerating in France and this was not published by the time of the Revolution in 1789. Many of the plants described in this work were new to science from the field work of his paid collectors.

Perhaps the most important part of this work was that he also engaged the young Belgian artist Pierre-Joseph Redouté (1759–1840) later to become most famous for his superb works on roses. He was also renowned for teaching painting to Marie Antoinette and the Empress Josephine as well as Empress Marie-Louise of Austria. Redouté was nicknamed ‘The Raphael of Flowers’. But it was L’Héritier who taught him to dissect flowers to better understand them and then acted as his patron for many years.



The illustration of *Eucalyptus obliqua* by the artist, Joseph Redouté, that accompanies its description by L’Héritier in his work *Sertum Anglicum*.

In 1785 both L’Héritier and Redouté were caught up in the scientific scandal known as the ‘Dombey affair’. This involved a complex argument over the ownership of a plant collection from South America made jointly under the auspices of France and Spain, and the rights to publish the results. L’Héritier offered to describe, delineate and pay for publication of the collection himself, which enraged the Spanish partners. When France and Spain decided that L’Héritier should hand over the collection to the Royal Museum he packed the collection up and fled to England with Redouté and Broussonet.

Through ‘the old boy network’, he gained access to Sir Joseph Banks and his wonderful herbarium. In 1786–87 he worked in Kew and among the descriptions of species he did in Banks’ collection was that of *Eucalyptus obliqua*, thereby describing both genus and species. Having managed to also annoy Banks he returned to France just before the Revolution and worked further on his *Sertum Anglicum* which contained the eucalypt descriptions.

He was in favour of the renewal of France in the early stages of the Revolution, even becoming a commander of a battalion in the National Guard, but lost faith with the revolution as it changed into the Reign of Terror. He then worked at the Jardin du Roi and while he lost his government posts and much of his wealth he kept his head. When the Reign of Terror ended in 1794 he was appointed by the new government to the Commission d'Agriculture et des Arts (*I wish we had such a government agency in my time- author*).

In 1795 he beat his friend, and another Australian connection Jacques-Julien Houtou de Labillardière, for election as a Member of the Academie des Sciences. He wrote Memoirs on various aspects of agricultural science and botany and occasional articles on plants. But his major works were never published in his lifetime. By the middle of 1800 Napoleon had ensconced himself as First Consul and defeated the Austrians at the Battle of Marengo. But Paris was a very dangerous place especially at night. L'Héritier walked outside his house on the night of 18 August and was struck down and murdered. The murderer was never discovered though one of L'Héritier's sons was suspected. L'Héritier's herbarium collection of over 8,000 species was sold to the Swiss botanist A.-P de Candolle and is now to be found in the great collections of the Conservatoire et Jardin Botanique in Geneva. Today L'Héritier's name is even erased botanically as the genus *Heritiera* has been renamed *Argyrodendron*. However in the Royal Botanic Gardens in Sydney there is a handsome specimen of Black Booyong, a tulip oak from Queensland, still labelled *Heritiera actinophylla*.

Tree measuring – an overview of findings todate

Jens Stevenson has measured the heights of all the Eucalypts at STEP on an annual basis since 2011.

Some snippets from the extensive data that Jens has collected includes:

- The tallest species on average in 2015 was the *E. viminalis* (6.6 m). Followed by the *E. nortonii* (5.7 m), *E. rubida* (4.9 m) and *E. dalrympleana* (4.8 m).
- The shortest species on average in 2015 was the *E. rossii* (2.2 m). Also relatively short are the *E. melliodora* (2.5 m), and the *E. polyanthemos* (3.1 m).
- Noticeably less increase in height 2012-2013 than the previous year. And a far greater increase in height 2014-2015 than any of the previous 3 years.

The following table gives a summary of the findings to date.

Please note:

- The height listed (in metres) for each species is the average for that species for that year. Yes, Jens measures every tree!
- The term 'growth' is used to mean the increase in height from the previous year.
- The final column on the right gives the increase in height (growth) for that species over the period 2011-2015 as a percentage of the 2011 height.

Species – height and growth (m)		2011	2012	2013	2014	2015	% growth 2011-15
E. albens	height	0.91	1.44	1.79	2.33	3.50	
	growth		0.54	0.34	0.54	1.18	285%
E. blakelyi	height	1.87	2.40	2.82	3.64	4.30	
	growth		0.53	0.42	0.82	0.66	130%
E. bridgesiana	height	1.89	2.62	3.17	3.63	4.50	
	growth		0.73	0.56	0.45	0.87	138%
E. dalrympleana	height	1.29	1.98	2.70	3.75	4.98	
	growth		0.69	0.72	1.05	1.22	286%
E. delegatensis	height	1.05	1.86	2.08	3.00	All dead	
	growth		0.80	0.23	0.92		-
E. dives	height	1.03	1.77	2.03	2.70	3.89	
	growth		0.74	0.26	0.67	1.19	278%
E. macrorhyncha	height	1.39	1.88	2.06	2.55	3.26	
	growth		0.49	0.18	0.49	0.71	135%
E. mannifera	height	1.29	1.96	2.38	2.92	3.82	
	growth		0.67	0.42	0.54	0.90	198%
E. melliodora	height	1.04	1.29	1.56	1.97	2.48	
	growth		0.26	0.26	0.41	0.51	138%
E. nortonii	height	2.61	3.64	4.37	4.95	5.71	
	growth		1.03	0.73	0.58	0.76	119%
E. pauciflora	height	1.60	2.31	2.63	2.88	3.61	
	growth		0.71	0.32	0.24	0.73	126%
E. polyanthemus	height	0.98	1.36	1.68	2.30	3.06	
	growth		0.38	0.32	0.62	0.77	212%
E. rossii	height	0.89	1.19	1.34	1.72	2.24	
	growth		0.30	0.16	0.38	0.52	152%
E. rubida	height	1.05	1.58	2.28	3.38	4.99	
	growth		0.53	0.70	1.10	1.61	375%
E. stellulata	height	0.75	1.52	1.90	3.15	4.00	
	growth		0.77	0.38	1.25	0.85	433%
E. viminalis	height	2.24	2.85	3.29	5.00	6.63	
	growth		0.61	0.45	1.71	1.63	196%
Wildings	height	3.15	3.73	3.86	4.09	4.43	
	growth		0.58	0.12	0.23	0.34	41%

Summary of average tree heights 2011-2015, by species

Tax deductible donations to STEP

Members and friends are encouraged to donate to STEP for which they can also receive a tax deduction. This can be done through the Friends of the Arboretum website.

<https://www.arboretumcanberra.org.au/support-us/donate>

If you wish to make a donation, select “Donate” from the menu at the top of the page and look down the list of purposes and choose the STEP option.

Donations through this facility have assisted in our major expenditures for construction of the gravel paths and the Clearing. A likely future project is construction of a permanent shelter near the Clearing. We are hoping that donations received through the Friends of the Arboretum Deductible Gift Recipient can help us toward this purpose.



Yet another wonderful photo by Jennie Widdowson:
Sulphur-crested cockatoos on a dead tree of the GG Block.