

## STEP Newsletter May-June 2017



### From the President

Greetings to all. We have had a very successful Autumn season with many new plantings now well established. Andy Russell and Terry Murphy had a shopping spree at the ANPS sale, and Damien DeMarco has once again supplied us with a range of plants. Luckily, rain seems to have come at the right time. The work around the entry points had added interest and colour for visitors.

We have had Arboretum staff remove some of our dead (and apparently dead) trees but some are now sending out epicormic shoots. We will have to wait and see how these develop. Thanks to the Arboretum we now have water connected to our tanks so a ready supply is ensured (see David's article on page 2).

Thanks to Max Bourke and Ross Dalton who have written submissions for grants from Friends of Grasslands and Molonglo Catchment Group respectively. This is a vital way to increase our funds, so if you are aware of any other organisations which are requesting submissions for grants, please contact us.

Last year we planted a square on the GG Block in conjunction with Greening Australia. These trees and shrubs are now well established and above the top of the guards. Whipper snipping to reduce weed growth will occur soon, so guards have been removed and weeding around each plant has commenced. This is a clear signal to ensure plants are not inadvertently snipped or damaged.

Our activity slows as Winter approaches and some people begin travels. If you can attend the working bees and assist with Winter maintenance, we would be happy to see you.

*Judy Smith*

**Please consider supporting STEP with a (tax deductible) donation at:**

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

Please specify STEP as a particular project.

## Vale Adam Dion Burgess

Hi my name is Scott Saddler I am the Manager of the National Arboretum Canberra, and I had the pleasure of working closely with Adam for the last 2 years.

Adam was a much loved and valued member of the team here, and is sorely missed by many especially our Arboretum staff, Friends and volunteers, Janet Jeffs and the Ginger staff, Mel and all her team at the Curatoreum, current contractors and contractors through the last 11 years, team members of the ACT Government and those thousands of people who he touched with his walks and talks and time spent promoting the National Arboretum with his passionate twist

As you could see when you drove up here today or sitting and looking through the windows here in the Village centre at the magnificent trees that are growing here at the Arboretum..... Adam had a hand in planting all 44,000 of them which will be his legacy from today and for decades into the future.

Our thoughts are with his family at this very sad time, and I would like to thank them for the opportunity for me to speak on behalf of the team here at the Arboretum

Adam was one of a kind, one of those people who made life more vibrant, more colourful, funnier and more interesting.

He had a wonderful personality, a roguish nature and would do anything for anyone at anytime.

About 13 weeks ago, just before the first operation on his shoulder, Adam said to me:

“Scott, if anything goes wrong, would you write a poem?”

At the time, I said don't be stupid everything will be OK and we started to talk about other things, but he came back to his point, looked me square in the eye and said jokingly “So does that mean you won't write a poem for me?”

So today, even though I'm no poet, I have to follow through on his request.

So Adam here is your poem!

ADAM

As I strolled up to my office on my very first day.

There stood a burly lad that was standing in my way

You asked my quite directly are you the brand new guy

You stated your name was Adam as you looked me in the eye

Our friendship started slowly as we paced each other out

We drove through many forests and you discussed what NAC's about

Your ability to know the health and well-being issues of the land

The trees meant everything to you and at times you took a stand

We talked about some personal issues that you had fought along the way  
You said that you've fought cancer and now live for every day  
You talked about your wife and daughters that you loved with all his soul  
And being the curator of the collection rounded your life and made you whole

The years you worked with the trees on this terrible infertile land  
And the forest that you planted you did so passionately with your hand  
You were here for the tough times nurturing trees that struggled to grow  
But your stubbornness did prevail and you stood there toe to toe

I have never met a more passionate person that worked to reach his goal  
You were part of a team that turned this place from a burnout ugly dust bowl  
You called it as he saw it and you spoke out strongly for your dream  
Your energy and drive was amazing and loved you whole NAC team

You were always giving of your time to help anyone you could  
To talk about the trees, soil and the plants and you were very good  
You were respected in the industry from everywhere across the states  
And they will be saddened to hear the loss of the ones you called your mates

There will never be another that will cross my path as good  
You have etched your footprints deeply across my heart as well they should  
You were brave, honest and willing and that's the traits that are endearing  
And when the wind blows through the forests it's your voice that I'll be hearing

Why the lord has called you back I will never understand  
Maybe he has some problems with the forests and needs a little hand  
You can work on all the trees and have the forests looking great  
I will be inspecting when I get there when I see you at the gate

You have left us on this planet to look after all your trees  
No doubt you'll still be here from time to time to hug and rake the leaves  
When the trees are struggling through problems in the forest here at NAC  
I know you'll help us out ol mate and you'll always have our back

*As spoken by Scott Saddler at the Memorial service for Adam Burgess held at the National Arboretum Canberra on 11 May 2017, provided by Scott Saddler, Manager NAC*

## **News from Forest 20**

STEP working bees have made great progress over the summer and autumn in repairing damage from the very wet 2016 winter and spring. This has involved a massive amount of weeding and removing dead shrubs and trees. We are grateful to the Arboretum for supplying a modest trailer for us to fill, and for this to be taken away each week and emptied as our contribution to the Arboretum's newly established composting facility.

Removing dead plant material has also allowed us to assess which squares need supplementary or complete replacement plantings, which species need a different environment when planted, and which species should not be replaced pending further examination of the conditions needed.

Our 'entrances' have been enhanced with a mix of plantings that generally will include species with reasonably prominent flowers. We have also begun to spread out beyond the central garden to take advantage of spaces that are difficult to mow (due to their proximity to corners and paths) or which present different conditions to those found in the central area and which may better suit some species.

New plantings have been sourced from the March sale organised by the Australian Native Plants Society and from Damian DeMarco (ACT & Southern Tablelands Native Tubestock Nursery). Also, we have planted the last young plants (STEPLings) grown by STEPpers under the careful supervision from Terry Murphy. Terry is hoping to lead us into more propagation this winter. As an organisation, STEP is very grateful to be able to access these supplies of native plants, in the knowledge that they come from locally obtained material.

### **Connection to the main water supply**

The Arboretum has included Forest 20 in its up-grading of the water supply around the Arboretum. In April, work started near our tanks by digging a trench up the steep slope to the car-park and from there into the main distribution system, which includes several reservoirs constructed at high points. The Forest 20 connection, which is directly into our tanks, will allow the tanks to be filled without a separate and more costly delivery from a water tanker.

See photos on the next page.



*Text and photos by David Shorthouse*

## Coming to grips with scientific names of plants: plenty of gender (but no sex)

1. Plant names generally comprise two elements: a generic name (the genus) and a specific epithet (which identifies the species).

2. *The generic name* will be a Latin or a Greek form (or a hybrid), which will almost always be completed by a characteristic Latin ending.

The generic name *eucalyptus* is made up of two Greek elements (*eu*=well; *kaluptw*=I cover, hide: so 'well covered'); but its ending, *-us*, is a Latin ending. Other common Latin endings are *-a* and *-um*.

3. In many languages, but not English, nouns are grouped into what ancient grammarians called genders. The grammarians distinguished three genders (masculine, feminine, and neuter). The distinctions they made were based on the shape of each noun (e.g., its final syllable). This notion of gender is crucial to the scientific naming of plants.

(Almost) all Latin nouns ending in *-us* fall into the so-called masculine gender; (almost) all nouns ending in *-a* are feminine; and all nouns ending in *-um* are said to be neuter. So, *rubus* is masculine gender, *lomandra* is feminine, and *hypericum* is neuter. But note an important *exception* to the *-us* rule: all names of trees that end in *-us* are feminine in gender.

4. *The specific epithet* will serve one or two functions: (i) it may refer to a person who is somehow connected to the species; or (ii) it may describe some attribute of the plant or refer to its habitat or the country where the species occurs.

5. Let's look at the first function: that is, where a plant is named for an individual. To construct a Latinised form of any individual name, you (generally) add *-ius* to the name itself for a man (Ross becomes *Rossius*); for a woman the ending would be *-ia*. For the purposes of creating a specific epithet, this new Latinised form will, by convention, be expressed as a possessive form (i.e., 'of X').

The eucalypt *of Ross*, for example, becomes *eucalyptus rossii* (where the second *i* expresses the idea of 'of'). For a woman, the ending would be *-iae* (the feminine possessive ending).

For another way of dealing with proper names, see (8) on the next page.

6. And now for the second function, where the epithet describes an attribute or refers in some way to a plant's habitat. In this case we will use an adjective. This adjective may be an ancient term or a modern compound formation of Latin and/or Greek.

7. This is where gender becomes really important. If a generic name is masculine, the specific epithet that describes it must take a masculine ending. And so on through feminine and neuter. This is an immutable rule in languages that use gender: adjectives 'agree' with the noun they describe. Latin and Greek adjectives (mostly) have three possible endings.

Thus we have the Latin forms *parvifoli-us*, *parvifoli-a*, *parvifoli-um* (with a small leaf).

Note the consistency of gender in the elements of some familiar species: *rubus parvifolius* (in EE), *lomandra longifolia* (in C), *hypericum gramineum* (in G).

8. Finally, although we saw in (5) above that it is possible to turn people's names into Latin nouns (Ross>*Rossius*), it is also possible to turn them into adjectives.

'Dalrymple' becomes a Latin adjective *dalrympleanus*, *dalrympleana*, *dalrympleanum*.

Thus, if we recall that all tree names ending in *-us* are feminine, the species name is *eucalyptus dalrympleana* (the 'Dalrymplean' eucalypt). The adjective agrees with its noun. Gender reigns supreme.

Elizabeth Minchin

## Growing a native lawn

Success with using native plants for a lawn depends greatly on the position of the proposed lawn, i.e. whether it is in shade or sun, well-watered or otherwise, on good soil or on rock.

A shady, moist place that is not going to be walked on a lot can be covered by *Dichondra repens*, which is not a grass at all but a low-growing creeper. It can be seen at the top of section E in the STEP garden.



Another good cover for a shady place is *Microlaena stipoides*, weeping grass. This will spread to form a thick carpet and is surprisingly green for a native grass. It will brown off if not watered, but it won't die unless it is badly treated. There is a good patch in section D, admittedly looking a bit unkempt at present.

For a more cushiony cover, a useful species is *Carex inversa*, which is a sedge, not a grass, and can withstand dryness well once established. A small patch of this can be seen in section D.

The humble windmill grass (*Chloris truncata*) is another possibility. It has a low, greenish rosette and sends up a tall stalk with the characteristic "windmill" seed head, which would need to be mowed off to make the patch look like a lawn. It grows wild all over the STEP site but there is also a patch of it in section H.





Red-leg grass, *Bothriochloa macra*, forms a tight mat and can be used as a lawn if the tall red-flowering stems are mowed off in summer. Section E has a good example of this.



Other native groundcovers, such as *Myoporum parvifolium*, are not endemic to the Southern Tablelands.

I thank Terry Murphy for his suggestions for this article.

*Text by Jenny Andrews, photos by Andy Russell*

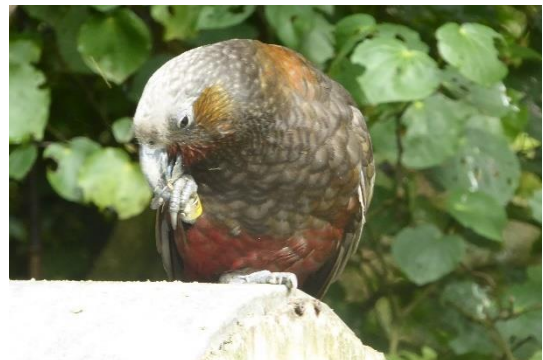
## Travellers' Tales

### Wellington, New Zealand

**Zealandia** is a fully-fenced native wildlife sanctuary within Wellington's city precincts. It has a 500 year aim to restore the ecosystem of a valley's forest and freshwater as close as possible to a pre-human state. The 225ha site was originally a water supply with two dams. When it was determined that the dams could pose a danger from earthquake activity, the dams were decommissioned. Subsequent bushfires degraded the site until a plan was proposed for a wildlife sanctuary. An 8.6 km fence (possum, pig, stoat, weasel and rabbit proof) was constructed, the water level in the dams was reduced and a restoration program began. Revegetation with native species and the re-introduction of 18 species of native wildlife makes this a wonderful place to visit. Many species were extinct on mainland NZ and are thriving in this sanctuary. Birds, reptiles and insects are easy to spot. The educational display is superb and the walks are well-signposted. A postcard at the visitor desk has an image of a bettong and states "If you enjoyed Zealandia, check out our sister sanctuary Mulligan's Flat in Canberra."



Wellington from top dam of Zealandia



Kaka, nationally vulnerable but thriving here



Wellington Green Geckos



Tuatara – can live for 60-100 years.

**Otari Wilton's Native Bush Reserve** is also within the Wellington city precinct, not far from Wellington Botanic Gardens. These gardens are devoted to native plants of New Zealand and comprise 100 ha of native forest and 5ha of plant collections. It is classified as a Garden of National Significance by the New Zealand Gardens Trust and was of interest to me as it promotes ecological recovery and education about native species.

These places are well worth the time to visit. We thoroughly enjoyed the experience,

*Article and photos by Judy Smith.* You are invited to contribute items about places you have visited which might be of interest to STEP members.

### **STEP acknowledges the support of the following Corporate Members**



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### **STEP Welcomes these new members**

L Post and S & W Daniels



## “STEP into plein air”

May 5 was our event for Tree Week which we dubbed “STEP into plein air”. Some 30 people attended, bringing paints, pencils, canvases etc. for a day out at STEP. Morning tea was provided and participants were asked if they would like to return in two weeks’ time to display their finished works. Those who attended indicated they had a most enjoyable day and we hope to run similar events in the future. Thanks must go to Heather Green, Sue Archer, Margie and Max Bourke, Jennie Widdowson, Andy Russell and Ross Dalton for their assistance with the organisation of the day.



Morning tea was enjoyed by all.



*This article is continued on page 10*

## Insect pellet at STEP

The March STEP Newsletter included a photograph (taken on February 16<sup>th</sup>) of a pellet of insect remains found in STEP. The suggestion was that it was a faecal pellet of a fox or other mammal. I should like to suggest it was the regurgitated feeding pellet of a southern boobook, *Ninox novaeseelandiae*. These owls feed on night-flying beetles and moths as well as small vertebrates. The Christmas beetles so prevalent at STEP at the time would have been an attractive food source.



*Article by Jack Simpson, photo on left by Jennie Widdowson and photo on right by Geoffrey Dab*





Max Bourke talking to the artists about STEP



The artists at work.

*Text by Judy Smith, photos by Andy Russell & Ross Dalton*

Contributions for the next newsletter should be made by August 20<sup>th</sup>

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This newsletter was edited by Andy Russell