

NEWSLETTER: September 2015.

PO Box 440, Jamison Centre, 2614.

www.step.asn.au

Support us by (tax deductible) donating at:

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

ΩΩΩΩΩ

WINNERS REALLY ARE GRINNERS!



*In this issue: Between winning an Environmental Education Award from the Keep Australia Beautiful Council and the Gift from Ray White Real Estate, see stories and comments below, this has been a great few months! And for something completely different see the article on our own “truffles” by Jack Simpson and Jenny Campbell. Aaaaand one more thing, please see the note about Membership renewals, we **depend on you!***

MESSAGE FROM THE PRESIDENT

After a very cold and wet winter, the first glimpses of spring are just becoming noticeable with a number of wattles, and hardenbergia, now in flower on the STEP site.

During winter, although a number of our stalwarts headed off to warmer climes, those remaining continued to maintain our understorey plantings and worked on extending our gravel paths. We have also had to turn our energy to remediating water damage after a number of heavy rain events.

The new path which will enable visitors to the Arboretum to enjoy a circular walk not too distant from the Visitor’s Centre is now nearing completion. Signage will soon be in place to make it easier for visitors to find our site.

We are delighted that our hard work, over many years, has just been recognised with a Commendation in the Environment Education Section of the ACT Keep Australia Beautiful Awards. Our goal next year is to enter the Awards again, and achieve the first prize in the category.

An early warning that the AGM will be held on Sunday 29th November at 11 am. We plan to hold an Open Afternoon from 12.30pm to 3.00pm that day as many of our understorey plantings hopefully will be in bloom. Please come and join us for a celebration of Spring.

Margie Bourke



Back row the STEP crew , Bill Handke,(Scott Sadler Ops Manager from the NAC) , Max Bourke, 2nd back row Margie Bourke, Sue (One Arm) Genner and Andy Russell, along with the GG, Chief Minister of the ACT and other winners.



The Award from Keep Australia Beautiful (ACT).

RAY WHITE REAL ESTATE GRANT

In the first quarterly newsletter this year, Ray White Real Estate Belconnen advertised an initiative to provide grants to community groups. Amounts of \$500 per quarter were being offered. STEP members came to the party by accessing the Ray White Facebook page and we were fortunate enough to receive one of the \$500 grants. On Saturday 8 August, representatives from Ray White came to present a cheque to David Shorthouse and a band of other happy STEPpers. David outlined to the representatives the various ways we could use this grant such as for plants, paths and/or signage. He also took the opportunity to raise with them the value of STEP for new homeowners in the ACT and the surrounding region. A visit to STEP by those establishing a new garden could inform about plants suitable for a native garden and also give an excellent idea of size, habit and flowering

characteristics of native plants. We are very grateful to Ray White Real Estate for awarding this grant to us.



STEP Stalwarts in the fog with Benjamin Ling, Chloe De Clifford and Michael Clarke from Ray White Realty. And a really big cheque.

FOREST 20 NEWS

Winter can be a quiet time for Forest 20, a time for consolidation, but not so much this year. In late June an Arboretum project to develop a mineral path system that connects key destinations in the general vicinity of the Village Centre was commenced. One of the early destinations has been Forest 20 with several paths developed that traverse the central garden via the Mesa oaks (Forest 21), The Clearing and the lower, unsealed carpark. The paths also deliver part of our Master Plan as their locations approximate the access envisaged amongst our eucalypt trees.

We have also been preparing for completion of the gravel paths that surround the central garden and The Clearing. However this work has been somewhat complicated by excess water draining from the lower carpark. This is being addressed (finally we hope) by Arboretum management staff which are working to divert surface flows along the allee between Forests 20 and 21.

We have been helped in our work by two visits from Greening Australia's Green Army team, funded by the Australian Government. It has been great to have six youthful workers enthusiastically tackling some of the heavier work. Preliminary discussions are being held with indigenous groups about their involvement in developing our bush tucker area and other plantings.

The winter has seen a succession of heavy frosts that have hit some of our plantings quite hard. Hopefully the root stock will have survived and we anticipate signs of the plants bouncing back soon.



Forest 20, new mineral path connecting to central garden via top gravel path. The impact of recent rains is evident.

David Shorthouse

#####

GREEN INVASION

Following a suggestion by Bindi Vanzella of Greening Australia, STEP members were pleased to welcome a team of Green Army volunteers in June. Six young people and their supervisor Brian Butler arrived in a minivan with shovels and rakes and other implements. They worked with enthusiasm, removing the geotextile fabric from the path where crushed granite is next to be laid and wheelbarrowing away the covering soil and mulch to other locations. These are physically demanding tasks so we were very grateful for the assistance of these young people.



On 20 August we were further blessed with more support. The Green Army returned, accompanied by Ken Horsfall and 5 helpers from Conservation Volunteers Australia. On this occasion they planted, removed mulch from the rocky nook in preparation for laying of crushed granite, laid newspaper and mulch, moved soil and evened out the path. Four of the people from CVA were overseas visitors, two from Japan and two from Germany.



Photos: Judy Smith

#####

AN ECTOMYCORRHIZA-FORMING FUNGUS IN FOREST 20

Forest 20, the STEP forest, presently includes 16 species of *Eucalyptus*, ranging in age from less than one year old to more than five years. All these species form ectomycorrhizas, symbiotic relationships between the fine roots of perennial woody plants and various species of fungi in the Basidiomycota and Ascomycota. The fine roots become enveloped in a thin covering of fungal hyphae which increase nutrient uptake from the soil. As yet, few species of ectomycorrhiza-forming fungi have been observed to form sporophores in Forest 20.

In August 2015 numerous sporophores of a species of *Laccaria* were observed growing on soil in the vicinity of *Eucalyptus blakelyi* and *Eucalyptus macrorrhyncha* in Forest 20. *Laccaria* in Australia is genus of about 30 species of mostly soil inhabiting toadstools although they also occur amongst mosses, on stems of tree ferns or on decayed wood. Identification, even with microscopic examination, is difficult with the consequence that most of the Australian taxa have not been described and named. The *Laccaria* found in Forest 20 does not seem to have been described.

The sporophores of species of *Laccaria* provide food for various invertebrates including species of Collembola (springtails), mites and nematodes. Collembola were common on the fungus specimens collected in August. Numerous specimens were examined and all were found to be *Brachystomella platensis* Najt and Massoud, a very common and abundant species in Australia in improved pastures. They feed on hyphae, basidia and basidiospores and may make tunnels in the cap and gills. The guts of these specimens were packed with *Laccaria* basidiospores.



Surface of pileus of *Laccaria* sp. showing Collembola and the damage they have caused.

Jack Simpson & Jenny Campbell

Footnote: The famous French Black Truffles and the Italian White Truffles are also ectomycorrhizal fungi, but very expensive. **Ed.**

STEP membership renewals are due now.

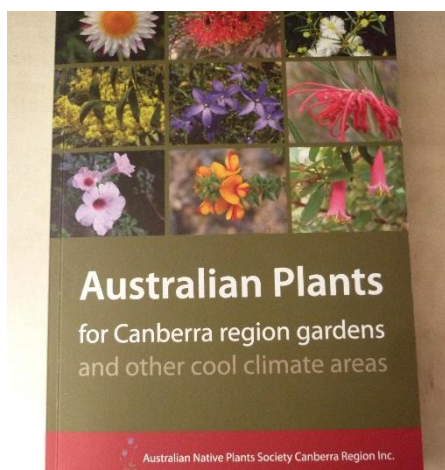
Members of STEP are reminded that renewal of memberships for 2015/16 are due now. Individual and family memberships (\$20) can be paid by cheque or Direct Debit to

Bank Australia BSB 313-140 Account no 1206 7564 (Southern Tablelands Ecosystems Park). Please enter your name as the reference to clearly identify your renewal.

STEP is always pleased to receive additional contributions, perhaps another \$20/\$50/+++ to sponsor planting an understorey species at our Regional Botanic Gardens.

Please also consider making a tax deductible donation. This can be made via the Friends of the Arboretum website <https://www.arboretumcanberra.org.au/support-us/donate> ensure you mark the box for STEP.

BOOK REVIEW



Australian Plants for Canberra region gardens: Fifth (revised) edition 2015, a publication of the Australian Native Plants Society Canberra Region Inc., designed and edited by the ANPS Book Working Group, 366 pages.

This publication is well worth purchasing. This review is from a lay person's perspective; one who does not claim to be a botanical expert but one who has a strong interest in and appreciation of the rich diversity of native plants which grow in our region and their value in suburban gardens.

The book's information is clearly set out, enabling readers to navigate easily. Section layout is logical and gives information, literally and metaphorically, from the ground up. Out of curiosity, I set out and read this cover to cover, discovering on the way many tips, hints and dos and don'ts. I found it interesting that many preconceived ideas I had about growing native plants needed a re-think, particularly in relation to use of fertilizers. Planting methods are illustrated in a clear diagram, and the descriptions of individual plants have easily identifiable symbols.

What entranced me most about this book, however, was the quality of the images of the plants. A novice looking at a plant in the wild would have no trouble identifying this from the photographic illustrations in this text. The photographers are to be heartily congratulated. Their efforts have made this more than a reference book – it is a pictorial treasure.

A friend borrowed my book as she is about to embark on "naturalising" her garden. She was so impressed that she has bought her own copy.

The book is available through the bookshop at the Australian National Botanic Gardens or by contacting APNS through their website.

J E Smith

AND THANK YOU ONCE AGAIN TO OUR SPONSORS:

DFK Everalls, Accountants and Business Advisers of Hughes.
 Double R Heavy Equipment Repairs of Mudgee, Karratha & Leinster
 Toms Superfruits of Belconnen Markets, Belconnen
 Dr Paul Miniter, Calvary Clinic, Bruce

Morgans in alliance with CIMB, Stockbrokers and Financial Advisers of Hughes
Franco of Canberra, Hair Services of Civic
Ray White Real Estate.

NEW MEMBERS THIS YEAR:

We welcome 2 new members, Elizabeth Minchin and Jack Simpson who are already making a great Thursday contribution.

ANNUAL GENERAL MEETING STEP

Sunday 29 November at 1100 in The Clearing on the STEP site, unless it is raining when it will be in the Green Room, Visitor Centre. Stay for lunch after the meeting, open afternoon in the spring flowers. Any members are urged to consider nominating for the STEP Committee, please contact the Secretary Tony Lawson: tlawson@homemail.com.au

~~~~~

**Deadline for next edition STEP News December 1.**

**Don't forget you can make a tax deductible donation any time on  
the Friends of the National Arboretum Web Site:**

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