



**Southern Tablelands  
Ecosystems Park** - a  
regional botanic garden,  
education and  
ecosystem recovery  
centre for the Southern  
Tablelands located at  
Forest 20



**NEWSLETTER: October 2016.**

PO Box 440, Jamison Centre, 2614.

[www.step.asn.au](http://www.step.asn.au)

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## **MESSAGE FROM THE PRESIDENT – OCTOBER 2016**

**Dear STEPpers**

Since our last newsletter, STEP has received an enormous honour by being named the 2016 ACT winner of the Keep Australia Beautiful Awards for *Environmental Education* and being Highly Commended for *Environmental Sustainability*. Moreover, one of our key people, Vice President David Shorthouse, was awarded the prestigious *ACT Individual ACTION Award*.

With good rain over Spring and Winter (at times a bit too much) STEPpers will have a busy time over the next few months. There will be lots of planting, mulching and weeding. It is also hoped that new squares can be marked out to expand the area with understory species.

We had a very successful planning day on 28 July which was well attended. Thanks must go to David Shorthouse for his vision and guidance for the successful operation of STEP.

Since then there have been Wattle Day walks and a flurry of activity as we planted out over 3000 seedlings into tubes. Thanks to Terry Murphy for the successful raising of these from seed collected from the STEP block, and for his expert guidance and advice about the potting-on procedure and post-potting care.

David invited some local experts to be part of a Reference Group to give us advice about maintenance and advancement of STEP. The group met early in September.

A date for your diaries is the Annual General Meeting to be held Sunday 27 November at 11am. The venue will be either the Green Room or the Terrace Room but a reminder email confirming this will be sent closer to the time.

Please come to visit us any Thursday if you are free. Morning tea is at 10 and there is always plenty to share.

**Judy Smith**

## **Keep Australia Beautiful ACT Awards**

Celebrations all round for our achievement: Awards to be proud of!



In a significant moment for STEP, the group won the ACT 2016 Keep Australia Beautiful Award (KAB) for *Environmental Education*, and was Highly Commended in the category of *Environmental Sustainability*, and David Shorthouse won the ACT *Individual ACTION Award*. This is an enormous achievement – and due recognition - for David and for all of us involved in STEP: it has helped lift the profile of STEP as a place to visit within the Arboretum. Moreover, it has helped focus attention by the Arboretum management onto STEP as a significant asset within the Arboretum. The judges were really impressed by how much work we have done in such a short time.

David’s award was for his enormous contribution to environmental matters in the ACT throughout his adult life. As we all know, David is the “go-to” man in regards to our weekly activities and our strategic planning: his role in STEP has been vital to us achieving the KAB Awards.

Below are excerpts from each of the successful submissions. And as Bill Handke – who prepared the nominations for us – has commented, “I am sure that you will see from the nomination how fitting it is that David was awarded the inaugural ACT Individual ACTION Award”.

### **Individual ACTION Award – David Shorthouse**

“Dr. David Shorthouse has had a profound influence on nature conservation and environmental sustainability in the ACT. Over 45 years, Dr. Shorthouse has been a driving force in establishing sound ACT government environmental policy and the pivotal force achieving sustainable landscape change.



His impact on the shape of ACT nature conservation and environmentalism has been considerable. As an environmental educator (University lecturer), author on ACT ecological resources, ecological researcher, environmental planner, government advisor and manager, project developer and supervisor, and environmental consultant on urban land development, David has fashioned environmental and conservation thinking and outcomes in the ACT.

This has been through such things as his book on the Ecological Resources of the ACT (1982) which included the first vegetation map of the ACT; his work in developing and supervising the nature reserves system to protect the grasslands habitat of the Earless Dragon, Legless Lizard, Golden Sun Moth, and various plants; the development of the iconic Mulligans Flat Nature Reserve as a feral-proof fenced wildlife Sanctuary; the development, within the National Arboretum Canberra, of the Southern Tablelands Ecosystem Park as a Regional Botanic Garden and Landscape Recovery Centre; and as the lead environmental consultant on a new urban land development in Canberra.

In each of these endeavours, and more, David Shorthouse has brought a deep knowledge; sound judgement; an engaging, collaborative and respectful approach; vigour and persistence. It is these qualities that have guided the many projects and policy directions to success.”

## **Environmental Education and the Environmental Sustainability Awards**

“The Southern Tablelands Ecosystem Park (STEP) is being established by community volunteers as a Regional Botanic and Educational Garden with plants of the Southern Tablelands of the ACT and NSW. The STEP Regional Botanic and Educational Garden, on 2.5 hectares, is one of the 100 Forests of the National Arboretum Canberra (NAC): it is a regional botanic garden, and an education and environment recovery centre. It has been under development since 2008.

With current plantings of 16 eucalyptus species in swales reflecting their place in the natural landscape and 170 understory plantings in blocks that are related to the ecosystems pertinent to those eucalypt species, STEP serves multiple functions: it educates the public on the plants and their associations in the threatened ecosystems of the Southern Tablelands; it provides information on regional plant species suitable for domestic gardens; it advises on landscape restoration; it demonstrates the food and fibre plants traditionally used by regional indigenous peoples; it provides well-constructed spaces that suit contemplation (‘the She-oak Nook’) and learning (‘the Clearing’); and provides an uplifting refuge for young and old.

STEP's success is at many levels: it has become a major draw-card for visitors to the NAC, and "the Clearing" is now a focal point for education groups and "get-togethers", while its serenity adds to social well-being of its many visitors.”



## **STEP Planning Day**

It was pleasing to see a good roll-up for STEP's annual Planning Day on 28 July, held in the new Terrace Room venue.

David Shorthouse gave a summary of the progress made in the previous 12 months and some new directions. He stressed the continuing scientific foundation underpinning all that we have done and will continue to do. Jens' tree measurement report provides valuable statistical information tracking tree growth since 2011. The inventories of each of the understorey blocks allow for accurate mapping and are useful in planning and budgeting for future plantings.

David thanked Sue Genner for her work with the Newsletters and also thanked those who contributed for sharing their interest and expertise with STEP members.

Future developments include expanding the signage to include "lean over" signs giving more specific information about STEP. A box for leaflets will be provided, disseminating information about STEP, its aims and successes. A laminated information sheet about species will be available which can be returned to the leaflet box.

A Bush Tucker Trail has been proposed and discussions are in train to determine where this is to be located and what form it will take with accompanying plantings.

Stephen Alegria addressed the group. He reported that the recent Strategic Plan was a very positive exercise with all interest groups and the community expressing strong support for the aims of the NAC. Some work was needed to persuade political leaders of the value of this resource. He supported the "branding" of STEP as a Regional Botanic Garden, and thought that with indigenous initiatives and the provision of a shelter close to the Clearing that STEP could be as big a drawcard for visitors as Dairy Farmers Hill. A Foundation has been set up to raise philanthropic funds for the NAC. Stephen also acknowledged the work of the volunteers and noted that the sustainability of these groups depended on strong membership, positive leadership and philanthropic support.

After morning tea, two groups were formed to discuss what STEP might be like in five years and in ten years. Both groups identified the need to ensure membership was vibrant, bringing in new members with a strong scientific focus as well as "willing hands". The ever-present problem of how best to promote STEP and encourage more visitors to our site was raised. Any STEP member with a particular interest or desire to take on a particular role was encouraged to speak to a member of the Committee. David explained that he had invited some specialists to become a Reference Group to advise us on matters such as planting, pruning, effects of shade on understorey plantings as trees mature etc. The wetland was discussed - should we keep it as an ephemeral site? Jennie Widdowson's work here was acknowledged. It was suggested that systematic observation of plantings could occur if a framework / template for observations could be produced.

## **A Reference Group for STEP**

The first meeting of a Reference Group for STEP was held 13 September. The advisers present were Nicki Taws of Greening Australia, Geoff Butler from the Australian National Botanic Garden, Rosemary Purdie, Honorary Associate at the Australian National Herbarium, and Ben Walcott, past President of the Australian Society for Growing Native Plants. Rainer Rehwinkel was unable to attend.

David presented a comprehensive background to STEP, its history, aims and objectives. This was followed by a walk through to STEP to illustrate what has been achieved and what is planned.

The perennial problem of water seepage was quite evident and it was acknowledged that this could be a limiting factor in the future. Geoff Butler made the point that our planning needs to be based on the premise of how large the trees will grow – much easier to remove small trees than large ones. The group made many helpful comments about species names, signage and plantings and Rosemary Purdie suggested that a meeting with the wider STEP group could be very beneficial in ensuring all members are working towards the same goals and all sharing the same knowledge.



David Shorthouse, Ben Walcott, Terry Murphy, Nicki Taws, Rosemary Purdie.

**Welcome to new members.**

A Searle & J Owen

C Kounnas

E Wynen

**STEP acknowledges the support of the following corporate members**



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Heavy Equipment Repairers of Mudgee NSW, Leinster and Karratha WA

The final editing of this newsletter has been done by Andy Russell, with assistance from Judy Smith, Bill Handke and Sue Genner.



### School Visit – a “Bush School” program

On 13 November, STEP was visited by 3 and 4 year-old students from The Narrabundah Early Childhood School. They have been making a series of trips to the Nation Arboretum of Canberra, experiencing a range of natural environments as part of a “Bush Schools” program. They were accompanied by teachers, teachers’ aides and parents and from what could be observed, they were all having a wonderful time. One of the teachers’ aides commented that she had been to The Arboretum many times before but had no idea about the existence of STEP. She, and others, were very impressed.



### Flowering Acacias at STEP September 2016

In the lead up to Wattle Day (Thursday, 1 September) two walks were held at Forest 20 on the prior Saturday and Sunday. These were led by Dr Suzette Searle (on left of picture to the right) from the Wattle Day Association and Anna Howe, a guide with the National Arboretum, Canberra (NAC), assisted by STEP members. There were at least 30 people present each day.



On Wednesday evening 31 August, Suzette Searle gave a talk to the NAC guides on Acacias in general and Jenny Widdowson talked specifically about the Forest 20 Acacias.

It was amazing the difference the passage of three weeks made as to what species are flowering. For the Wattle Day walks at STEP, we had quite a limited number of species in flower. *Acacia dealbata*, the Silver Wattle (right) was the stand out and it continued to flower

For this article I shall group them in the section in which they are planted in the understory area at STEP, starting at Section A nearest to the water tanks. Here there have been ten Acacia species planted, five of which were then flowering.



These are all shrubs and consist of the following:

- Acacia cultriformis* the Knife-leaf Wattle (bottom on previous page),
- Acacia pravissima* the Wedge-leaved Wattle (below left),
- Acacia dawsonii* the Poverty Wattle (below centre),
- Acacia buxifolia* the Box-leaf Wattle (below right, flowered locally in places like Bruce Ridge)
- Acacia ulicifolia* the Juniper Wattle. (not shown)

They are all growing close to each other.



Further down the slope at STEP in Section C is *Acacia dealbata*, the Silver Wattle, a good-sized tree now flowering (2<sup>nd</sup> picture from bottom previous page). Nearby is *Acacia siculiformis* the Dagger Wattle (right), an upright dense shrub currently about 2 m. high. Also, here is *Acacia rubida* (no photo) the red-stemmed Wattle, a dense tall shrub with rod shaped flowers.



In Section F *Acacia melanoxylon* the Blackwood was flowering for the first time. It was early for this species to be flowering as November would be its normal time to flower. There are several of these trees but only one was in flower when this article was written.



Downslope again in Section G is *Acacia gunnii* the Ploughshare Wattle (right) which is a small prostrate species and *Acacia boormanii* the Snowy River Wattle (below left) which at present is a small tree. Another in this section is *Acacia acinacea* the Gold Dust Wattle (below right) which is a most attractive shrub. Here in this section are more of *Acacia dealbata* the Silver Wattle mentioned earlier in this article.



Forest 20 features 24 species of acacia that are found growing in the Southern Tablelands. The earliest to flower has been *Acacia genistifolia* the Early Wattle which can start to flower in late Autumn and at the time of writing had finished its flowering season.

Photos and text by Andy Russell.

## STEPpers Perform Major Transplant Operation

..... From a small seed a mighty trunk may grow. *Aeschylus (some time ago)*

During the spring and summer of 2015, an abundance of flowers emerged from a variety of the (approx.) 184 plant species at Forest 20. The daisies and lilies were the most colourful and conspicuous while the grasses and sedges were less so. As flowering progressed to the next stage of reproductive development - the formation of seeds, it seemed to me that we had in our plantings the potential to quickly expand the numbers of wonderful understory plants in our collection.

Seed collecting is a pleasant activity (Bursaria is an exception) that can be achieved with a pen, paper bag and a keen eye. For seed collections of native flora a licence that is issued under the Nature Conservation ACT 2014 is required. I have found that collecting seed from certain species is best done over a number of weeks to capture seed that is at its best. In other cases timing is critical. The peas that include *Hardenbergia*, *Pultenaea*, *Dillwynia* and *Daviesia* will expel seed from their fruits when ripe and exposed to a succession of several hot days. During the last seed season, over 20 species were recruited to our new STEP Seedbank.

The germination of seed from some species is easy and rewarding while germination from other species is difficult and puzzling. Some species such as the daisies germinate well from fresh seed during the cooler months. For our first STEP propagation run, I selected species that would germinate over winter so we could plant these out before the heat of summer. These included many daisies such as *L. albicans*, *C. glandulosa*, *M. lanceolata*, *V. muelleri*, *H. rutidolepis*, *C. quinquefaria* and *R. leptorhynchoides*+ as well as the native flax *L. marginale* and the chocolate lily *D. fimbriatus*. Some additional species that have germinated and are still too small to pot on include *Goodenia pinnatifida*, *Wahlenbergia communis* and *Leptospermum obovatum*.

On three very sunny and pleasant Thursday mornings in August at Forest 20, between trips to distant lands for holidays and family duties, STEPpers potted on over 3200 STEPlings. The seedlings were potted on from the cell stage to the tube stage. Due to their small size we amended our potting mix to include the following components: 'Martins' planting mix, 'Osmocote' seed raising mix, sand, perlite, vermiculite and some additional slow release fertiliser for native plants. The proportions of these components were adjusted to obtain good moisture holding capacity, aeration, drainage and nutrition.

Many STEPpers have volunteered to care for our precious transplants, thereby sharing responsibility for this tricky phase in seedling establishment. With appropriate conditions for growth, the fastest growing STEPlings such as the *H. rutidolepis* should be ready for planting out in October. Almost all of the remaining species should be ready for planting out before late December.



We now have large numbers of some species that we can use to fill in gaps in our 3m x 3m plots, replace short-lived species or casualties, and even duplicate plots across Forest 20 to optimise growing conditions.

Thanks to all STEPpers who participated in this productive, rewarding and successful activity. Thanks also to people who donated pots and who volunteered to become STEPling carers. To date, reports from carers on survival and growth have very been encouraging.

Terry Murphy

### List of species and number of plants ‘potted’

The table below lists the species ‘raised’ by Terry, and the number of seedlings (and trays of) transplanted by the myriad of STEPpers. All seedlings have been/are being ‘minded’, prior to being planted out at STEP... planting started in October. This was delayed for some trays, that were ready to ‘go’, due to the very wet (sodden) conditions at STEP during September and early October.

SPECIES	Trays	Plants	Species	Trays	Plants
<i>Calotis glandulosa</i>	5	160	<i>Leucochrysum albicans</i>	8	220
<i>Cassinia quinquefaria</i>	2	38	<i>Linum marginale</i>	10	334
<i>Dichopogon fimbriatus</i>	15	965	<i>Microseris lanceolata</i>	12	472
<i>Eryngium ovinum</i>	6	261	<i>Rutidosis leptorrhynchoides</i>	1	9
<i>Helichrysum rutidolepis</i>	10	448	<i>Vittidinia muelleri</i>	6	336
			<b>TOTAL</b>	<b>75</b>	<b>3243</b>

### NOTE FOR YOUR DIARY

STEP’s Annual General Meeting is on **Sunday 27 November at 11am**. The venue will be either the Green Room or the Terrace Room at the Village Centre at the Arboretum. Details will be confirmed by email to members.

Below, one of the entrances to Forest 20



### **The Bunya Pine Beacon**

Vast wilds  
Thousands and thousands  
Of acres of sky.  
Almost immobilized  
Too scared to move from the line of sight  
Beyond and below the earth's great curve  
Fear of the unknown  
Like great sea voyagers  
Or ancient people setting out  
Explorers, and seekers of what lies beyond  
Lodged in the deepest memory

\* \* \* \*

The farthest paddock quivers  
Terrified in the noonday glare  
And the settler  
Lost in the savage expanse  
Of unfamiliar space and sky  
Spots the Bunya  
Aligns his compass  
And retreats to the familiar and the known  
Home.

J E Smith

