STEP Newsletter September 2026

From the President

This time of year and the next few months are a very special time in STEP when the dedication and hard work of our Thursday (and other day) workers is on full display. Each year we see how the place changes with new plantings, bigger trees and shrubs, and plants bursting into flower for their very first time. And so it is right now. STEP is looking a treat.

I congratulate and give credit to all the STEPpers who have turned up over the course of the year. Through your combined efforts, STEP is truly a treasure within a treasure.

David, in a following article, mentions the various activities that have been happening on the ground within Forest 20 over the winter period. In addition to this, work/meetings/planning within the Committee and with the Arboretum continues apace to make STEP an even better and more sustainable place in the future.

The irrigation project – our major infrastructure item – inches forwards. We are hopeful that this will be in place for the expected hot and dry summer ahead: we certainly do not want to have a repeat of last year's exhausting watering efforts that were needed to keep our plantings alive. The proposed storage area adjacent to our shed also moves forward. These two works will need to be coordinated so as to ensure we have water to our washbasin for morning tea times.

A visitor-friendly large open space needs to have good directional and informational signage. And so it is that we are wanting to enhance the information signage for and in parts of STEP. A new sign on the main Forest Drive that will direct people to STEP is expected to be in place shortly. The rolling photo display in the Visitor Centre Reception area will again feature STEP in the next update. Furthermore, we are wanting to provide an eye-catching corten-steel sign for the Ephemeral Wetland: akin to what we have for The Clearing, the She-oak Nook and the Bush Tucker Garden. In time the Committee wants to give more information to visitors about the plantings in each of the Sections within the Central Garden. The layback sign currently in place for the Bush Tucker Garden is the sort of thing we have in mind.

Finally, the new electric mower will be in the shed shortly just in time to tackle the expected spring growth in our grassy areas. This will be a boon to the users, Mike, Hugh and Digby, and the quiet will be peace in a very loud way for us all.

Bill Handke
STEP President

News from Forest 20

The first indications of spring are showing at Forest 20, after the usual colder time in June and July. Our volunteer STEPpers have made good use of this time for winter maintenance jobs, removing spent stems and flower heads, de-thatching tussock grasses and thinning overgrown patches of the strappy plants. There have been several good periods of rain which keeps the paths looking fresh and ensures that late summer plantings are watered. We have commenced a program of repair and up-grading of some paths, drainage roll-overs, and other gravelled areas. This will take a few months to complete, but we appreciate the assistance of the Arboretum Horticulture Team.

Georgie dethatching Dianella JS

Liz, Jenny and Jennie pruning a tree JS

Hugh S. dethatching Poa JS

Many of the big range of Acacia species that are spread throughout Forest 20, as well as along the Wattle Walk are now in flower and 'Wattle Walks' are scheduled on the Arboretum's web-site. STEP guides have also hosted extra walks that have been requested (or self-arranged) by community groups: a local Landcare group, some photography enthusiasts and a Men's Shed. As well, we have regularly noticed visits by families or single walkers who appreciate the diversity of Forest 20 plantings. On occasions we find small toys or a child's garment that are impossible to re-unite with their owners, but we expect they enjoyed their time at STEP!

Planning for refreshing the Bush Tucker Garden is underway. We have conducted an inventory of existing beds, the condition of the original plantings and assessment of the need for renewal of some species including replacement of those that did not survive, and hopefully, introduction of new species (but still from the Southern Tablelands, and depending on availability). In early August the patch of *Ajuga australis* was re-organised by transplanting some plants and dividing others so that a new space is available for a new planting. This 'Bush Tucker Refresh' is a longer-term project and will be greatly assisted when the proposed upgrade to our water reticulation system is implemented.

Farewell to Chris and Cathy Ikin who are moving to Hobart

Visit from Cool Country natives

It is lovely to report our STEPpers are full of enthusiasm for their work. We have said 'good-bye' to some who now live elsewhere, but equally we have welcomed enthusiastic newcomers to replace them. Our morning refreshments continue to be a time for chat, exchange of information and general 'team' building.

David Shorthouse

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More news from STEP

Environmental Educators Discovered STEP this winter

On June 13th, a cold and windy day at the National Arboretum, a group of 20 hardy educators gathered to find out what educational opportunities the Southern Tablelands Ecosystems Park (STEP) had to offer. The walk had been organised by the Australian Association for Environmental Education (AAEE). The hour and half walk was ably led by Bianca Jurd (Arboretum facilitator and AAEE member) and Bill Handke (STEP President).

A diverse group of educators was present ranging from Early childhood educators looking to connect their students to nature and local Ngunawal plants to education rangers from ANBG and local college teachers looking to upskill their botanic knowledge about local plants.

Bianca informed the group about the Arboretum and educational opportunities available there. Bill (such a huge source of knowledge) gave an interesting and in-depth dive into plants on show at STEP and the reasons and need to create this type of garden.

I personally was fascinated by the various pea species, others by the bush tucker garden.

We sent our heartfelt thanks to Bill and Bianca for giving up their Sunday afternoon and educating the educators! We all enjoyed a coffee at the Arboretum café and shared what we had learnt during our walk.

Vivienne Pearce OAM
Vice President AAEE

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Walks at STEP

STEP volunteers Jane,Judy and Jennie led 2 special walks on August 30 to celebrate Wattle Day (September 1). They were well attended by a total of 35 people enthusiastically asking questions and admiring our golden blooms along the Wattle Walk. The weather has been so mild that there were more plants in flower than is usual at this time.

Another walk took place on September 4 for the Melba Men's shed. A total of 25 men attended and were conducted around STEP by Bill, Judy and Jennie.

There was much to see and hear as spring flowers are bursting into bloom, frogs were calling in the Wetland and a Tawny frogmouth was sleepily eyeing the visitors from a eucalypt branch.

Wattle walk *JS*

Men's shed walk *JS*

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Another eucalypt for STEP

One of our volunteers, Ben, has been busy propagating native tubestock for his local Landcare group. He had few Eucalyptus ovata to spare and these have recently been planted near the wetland at STEP.
Commonly known as Swamp gum, they naturally grow in grassy woodland in low, temporarily or permanently damp sites. This species joins the 15 other eucalypt species already growing at STEP.

Young plant at STEP *JW*

Mature tree on Ben's property *BB*

These trees are small to medium in size, but can grow to up to 30m. They grow a lignotuber to store food and water allowing them to survive in dryer conditions. The species is widespread in south-eastern Australia, particularly in the southern half of Victoria. It is found in scattered locations on the Southern Tablelands extending inland as far as Manar (between Bungendore and Braidwood) and are quite prevalent near Ben's property at Majors Creek.

The tree has smooth, light coloured bark and glossy green leaves which are somewhat oval-shaped when mature (hence the botanical name 'ovata'). Flowers are white in groups of seven while the fruits are conical and woody. It can flower anytime between March and November, typically every 1 to 4 years.

Ben Bradley and Jennie Widdowson

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Flickweed (Hairy bittercress) *Cardamine hirsuta*

All volunteers should be on the lookout for Flickweed appearing at STEP. It is an invasive weed which grows with great rapidity and can grow as tall as 30cm in ideal conditions, but usually no more than 10cm. It first appears as a low-growing rosette of small, bright green leaves. It rapidly matures to produces small white flowers which ripen into narrow seedpods. If these are touched, dozens of seeds are flicked to the surrounding area. Therefore, it is preferable to remove the weed before it sets seed. If the seed has already set, then surrounding the seedhead with a hand, bag or bucket can limit the number of seeds that fall to the ground. Fortunately, it is very easy to pull up

Flickweed plant in flower

*Flickweed ready to 'flick' its seed***S**

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STEP joins the Climate Change Alliance

STEP was recently contacted by the Association of Botanic gardens of Victoria and invited to join the Climate Change Alliance which the committee decided would be useful. This is a worldwide association of botanic gardens allowing likeminded people to share knowledge about how they are addressing the effects of climate change. There are 42 other botanic gardens across Australia who are already members and over 500 across the world. You can find out more about the Alliance at https://www.rbg.vic.gov.au/initiatives/climate-change-alliance/

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Bird Flu

I expect that everyone is aware that cases of bird flu have been detected in Australia, but so far, none in the ACT. If any birds are observed that appear to be sick or showing uncharacteristic behaviour, the following should be done:

Avoid the area and do not approach or touch the bird

Record the location and take a photo or video if practical

Report the information to the 24 hour Emergency Animal Diseases Hotline on 1800 675 888

In addition, it has been suggested that people should not feed birds in their backyards. Drinking water containers for birds in your garden should be cleaned daily. Also dogs should be kept on leads so that they do not come into contact with any infected birds as it is suspected that a fox may have been infected from eating a dead bird.

More information is available at the Australian Centre for Disease Control https://www.cdc.gov.au/newsroom/news-and-articles/risk-people-australia-h5-bird-flu-remains-lowl

The Department of Climate Change, Energy the Environment and Water has produced a detailed list of Australian birds and mammals with a risk assessment of how likely they would be to catch bird flu. The link to this information is:

https://www.dcceew.gov.au/sites/default/files/documents/national-risk-scores-h5-bird-flu-native-birds-mammals.pdf

Thank you to Max who alerted us to this work on risk assessment produced by the government.

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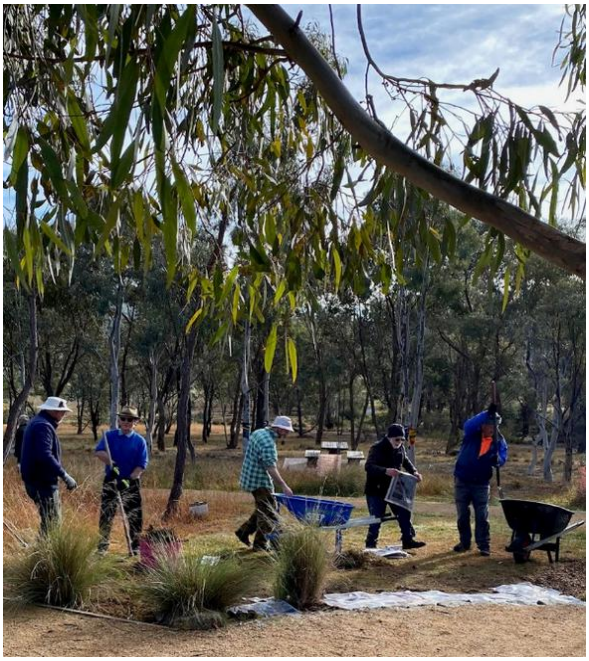
Winter Work

During Winter, the casual observer might assume there would not be much to do at STEP while our plants are at rest. For our volunteers, the reverse is the reality. As the following pictures show, we are very busy during this season de-thatching *Poa* and *Dianella*, pruning back of last season's growth of plants such as *Podolepis, Chrysocephalum* and *Craspedia,* paper and mulching where there is bare ground, creating new garden beds and the perpetual weeding as these pesky plants are always with us. New hands are always welcome to help us maintain our very special regional botanic garden.

Digby, Mike H., Dom, Ray, Mike S. preparing a new bed with paper and mulch *JC*



Mardi, Ruth and Hugh M mulching *JC*

Judy Smith
Assistant editor

Acacia gunnii – the story behind the name

Acacia gunnii (Ploughshare Wattle) is named for Tasmanian botanist Ronald Campbell Gunn (1808-1881). The Australian Dictionary of Biography, entry written by T E Burns and J R Skemp, goes into great detail about his rich and varied career as a botanist, public servant and politician.

He was born at Cape Castle, Cape Town and for some time lived in Réunion and later went to Barbados with his father. In 1830, he sailed for Hobart Town in the *Greenock*. He subsequently served as both a member of the Legislative Council and the Legislative Assembly, retiring from parliament in 1860.

His interest in botany was shown when he became a plant collector for Professor W. J. Hooker of Glasgow University. Botanical excursions took him into rugged, half-explored areas, overland to Macquarie Harbour and to the mountains, lakes and forests of northern Tasmania. He visited the Aboriginal settlement on Flinders Island in 1838 and next year, with the ornithologist John Gould, he joined an expedition to Recherche Bay. He became secretary of the Horticultural Society and of the Tasmanian Society and assisted Captains Ross and Crozier of the HMS *Erebus* and HMS *Terror* Antarctic expedition. In 1850 he sent a living Tasmanian tiger (thylacine) to the Zoological Society of London. He was also elected a fellow of the Linnean Society of London in 1850 and of the Royal Society in 1854.

He presented his private herbarium, including his collection of Tasmanian algae, to the Royal Society of Tasmania, which was later sent to the National Herbarium, Sydney. He died on 13 March 1881.

The authors of this biographical entry state that Gunn was a first-rate botanist whose contribution was commemorated in Sir Joseph Hooker's introduction to his *Flora Tasmaniae*: 'There are few Tasmanian plants that Mr. Gunn has not seen alive, noted their habits in a living state, and collected large suites of specimens with singular tact and judgement. These have all been transmitted to England … accompanied with notes that display a remarkable power of observation, and a facility for seizing important characters in their physiognomy'.

https://adb.anu.edu.au/biography/gunn-ronald-campbell-2134

Acacia gunnii phyllodes (closeup)

Acacia gunnii in flower

Judy Smith
Assistant editor

Lagoon Creek, Caboolture Qld.

While on a recent stay in Queensland, we visited a very interesting site called Lagoon Creek, where a not-for-profit volunteer landcare group is regenerating native bush. Their 6.4ha. site is a small part of the Lagoon Creek reserve, stretching some 5-6 km through north Caboolture. Much of the area is paperbark wetlands (*Melaleuca quinquenervia)* but higher parts have an amazing diversity of vegetation.

Volunteers at the restoration block have been clearing weeds and replanting native trees, shrubs and grasses. The block has its own nursery which provides plants for their work. They also sell to the general public with funds returning to the group for supplies such as weedmat and guards.
The land was given to the volunteer group by the Moreton Bay Council. Friends of Lagoon Creek pay a modest $12 annually which entitles them to a discount on native plants from the on-site nursery. The Friends receive some assistance from the council and also have received money through the Bupa Foundation Community Grants Program which allocates money to community groups who contribute positively to mentally healthy and sustainable societies.
There are some very interesting government initiatives which assist groups such as Lagoon Creek. One is the Gambling Community Benefit Fund which distributes money from taxes on gambling.

Lagoon Creek was the recipient of a cheque for $28,905 from this fund. The state government 'Skilling Queenslanders for Work' program has also assisted the volunteer work. In January this year, 8 students undertaking Certificate 1 in Conservation and Ecosystems Management graduated after completing their free 20 week traineeship at Lagoon Creek. In addition, in March this year, 12 positions were advertised for Certificate 1 free traineeships in construction at the Lagoon Creek site, allowing students to gain a White Card, first aid certificate and on the job experience.

The Lagoon Creek group frequently runs free community activities such as plant identification, cutting and propagating workshops and night-time spotlighting to locate and identify frogs. A National Tree Day event this year saw a huge community roll up to plant 1500 trees.

I have saved the best piece of information till the last. Along one of the walking trails, a bridge crosses one of the many lagoons and this is where platypus are frequently seen. How good is that.

Judy Smith
Assistant editor

ED Find out more about Lagoon Creek at https://www.friendsoflagooncreek.com/

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Nests

Spring is on its way and birds are busy building their nests. I have often wondered how they manage to make such intricate creations with just beak and claws. I tried to find out, but there seems to be a great lack of detail about exactly how they do it. There are descriptions of many different types of nests, but not much detail about how the bird does it. This is what I have found.

Birds find a location that they feel will be suitable, but sometimes their judgement is wrong and the nest falls out of the tree, as happened with a noisy honeyeater (also commonly known as noisy miner or soldier bird) nest found at STEP. Suitable grass or sticks are placed in the location, often in a fork of a branch or against a rough or damaged bit of bark. But how do they stop that first stick or grass stem from falling while they go to collect more? Maybe their partner helps! Somehow, the nest is constructed to the perfect size to fit adult and young, with only two feet and a beak to achieve this. The shape of a bird's beak, the size of the bird and the materials used can influence the size, shape and how the nest is constructed. They often fill up small holes with moss in the case of large nests and spiders web for the smaller nests. To make the interior more comfortable for the baby birds, the nests are lined with whatever can be found that is deemed to be suitable. This can be feathers (their own or those shed by others), pieces of string and wool, bits of newspaper, animal hair and even bits of old doormat.

Climate can influence the type and position of a nest. In higher rainfall areas, nests tend to have thinner walls while deep cupped shapes are favoured in high wind areas. More material is used in colder climates to help with insulation. As climate conditions change in the future, birds may need to adapt their nest building. If the temperature in a nest becomes too high, this may lead to the death of the embryos or young birds and ultimately a decline in their populations. Some nesting materials may become unavailable in the future due to climate change or land clearing and changes to farming practices. Bird species may respond to this by finding different materials for the nest or by moving to a more suitable location,

In general, it seems that small birds create neat intricate nests mainly of grass, while larger birds make nests which look quite untidy as they are, of necessity, made from large sticks. The noisy honeyeater nest was a beautiful bowl shape with cobweb sticking the edges together while the crested pigeon young were surviving in an untidy pile of sticks.

Noisy honeyeater nest

Crested pigeon nest

At STEP we have found a honeyeater nest (as noted above) and a crested pigeon nest located in one of the bulokes beside the Clearing and also a magpie lark nest.

Not all nests are built from vegetation. Some bird species build mud nests. It is difficult to imagine how much time and effort it must take a bird to carry beakfuls of damp mud up into a tree and mould it into a perfect nest. White winged choughs create quite a large circular mud nest as can be seen in a eucalypt near the Clearing. These nests can take several months to build and sometimes other members of the chough's family group are co-opted to help. Magpie larks make similar, but smaller mud nests.

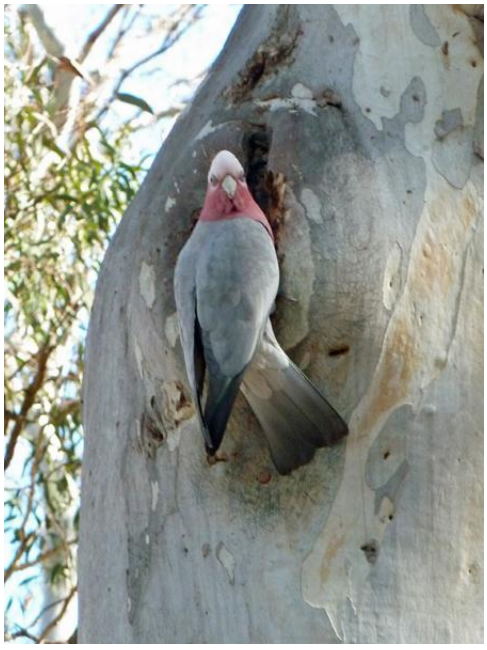
Welcome swallows also make mud nests but these are from pellets of mud often interwoven with grass and lined with soft down and feathers or fur. Both the male and female work on the nest building which can take up to three weeks to complete. Theses nests can often be found under the eaves of buildings.

Magpie lark nest at STEP JW

White winged chough nest at STEP JW

Welcome swallow nest with young swallows JS

Not all birds build nests. Members of the parrot family and also wood ducks make nests in tree hollows when they are available. Some birds will be content with man-made structures if tree holes are scarce. Others, such as birds in the cuckoo family will lay their eggs in other birds' nests while some species balance eggs on bare branches, lay them on the ground or on rock ledges. Emperor and King penguins balance their egg on their warm feet or close to their warm skin.



Galahs can be equally happy with a tree hole or a nesting box

Instinctively, every bird species seems to know how to build a nest or find a suitable egg repository and when to do it!

Examples of other nests (not at STEP!)

Grey shrike thrush JS

Egret, Molonglo river

Osprey, Exmouth, WA

See if you can spot new nests at STEP this spring!

The STEP Newsletter is produced quarterly in March, June, September, and December. Contributions, comments and suggestions are welcomed. ***Email widjennie@gmail.com***

Thank you to Ben Bradey and Vivienne Pearce for their contributions this time. This newsletter has been edited by Jennie Widdowson and Assistant editor Judy Smith.

The postal address for STEP is PO Box 440, Jamison Centre, ACT 2614.

Email membership@step.asn.au Web www.step.asn.au

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