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# ***Biddip***

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Newsletter of the Toodyay Friends of the River

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*Inside this issue:*

<i>President's Report</i>	2
<i>UWA Student Field Work visit</i>	2 & 3
<i>TFOR at the Avon Descent</i>	4
<i>Revegetation, Nardie Ceme-</i>	5
<i>Monitoring update</i>	6 & 7
<i>President's Annual Report</i>	8 - 10
<i>The Seed Orchard</i>	10
<i>Member's Gallery</i>	11
<i>The Back Page</i>	12

*The Toodyay Friends of the River are grateful to Wheatbelt NRM for their support in producing the Biddip newsletter*



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## *Presidents reflections by Sarah Dudley*

Each year around this time the Avon River adopts an adventurous mode. With increasing water volumes it explores new inlets and possible routes. Its geography is never quite the same two years in a row, much to the chagrin of Avon Descent participants! The Avon's chemical contamination is diluted and carried downstream as is the mobile sediment so visible as deposits once the river is dry. The water passing through Toodyay is still relatively plastic free.

As communities become increasingly aware of the detrimental effects of balloons, plastic straw, plastic bottles and plastic bags of any description on our wildlife, I invite you to pause a moment and picture the same water as it spills from our Swan estuary into the surrounding Indian Ocean. Plastic refuse will by now have been added to the water volume and may have been broken down into floating nanoparticles. These are inevitably consumed by oceanic filter feeders such as plankton and krill which is exactly what our whale sharks and whales feed off. With inevitable on-going health problems as a result.

Apparently 70% of turtles brought into Taronga Zoo have mistaken floating plastic bags for jellyfish, and their guts have become blocked. 20% of these turtles die post-surgery. How many dying turtles are never rescued in time? How many are in the Indian Ocean?

Whilst the Recycled Regatta in mid-September is fun and uses TFOR's creative minds to conjure up a floating raft and our September Community Walk along the Bilya Track shares the beauty of our river environs, the sobering 'plastic-free' message is ever present.

Hopefully all of us as households can become as adventurous as the mighty Avon River in finding alternatives to plastic use – and encourage retail outlets to become more aware of the downstream effects of our still too frequently encountered use of plastic.

## *Visit by UWA Students by Desrae Clarke*

On Tuesday 3rd July 21 students from the University of Western Australia (UWA) under the leadership of UWA lecturer, Nic Callow, met beneath the Newcastle Bridge to learn of the formation of groups of community members for its care.

Students, including a number from overseas, are studying hydrology, environmental science, agriculture and allied pathways, and were to spend five days travelling through the catchment.

A brief overview was given of early days of settlement along the river to present day. Throughout the world towns and villages have been built on waterways and Toodyay did likewise with the original town downstream from its present site.

There was animated discussion as to the reasons for the relocation of the town, the change of the name to Newcastle and the subsequent return in 1910 to the original name of 'Toodyay'.

Questions asked and discussed by the students included: Where does the name 'Toodyay' come from?; What are the main weeds found along the river?; How are weeds dealt with?; What failures have been experienced by the group with revegetation along the river?; Where does funding come from for plants, equipment, etc?; Does the volunteer group have a strategic plan?

Cover Photo: Yellow-billed Spoonbills

by Jennifer Donegan

# University of WA Student Fieldwork

by Micheline Campbell

IN EARLY July, 21 Masters and Honours students from UWA spent a week conducting fieldwork in the Avon River catchment.

Students spent Monday visiting the eastern part of the catchment, where we talked about the ancient landscape, the river training scheme, and the impact of thousands of years of salt raining down into the catchment.

On Tuesday, students spent more time in the 'rejuvenated' landscape of the western part of the catchment, where we visited Cobbler and Millards pools. Students also had the opportunity to meet with Wheatbelt NRM CEO Natarsha Woods and long-time Friends of the River members, Wayne and Desraé Clarke, to discuss the current management of the catchment and the important work of community groups both past and present.

Wednesday and Thursday were devoted to student-led fieldwork at Gwambygine, with the aim of assessing the current condition of the river upstream of Gwambygine pool (thanks to Lavendale Farm for permission to work on their property). Students used a range of field methods including surveying of topography, water quality monitoring, and surveying of the riparian zone vegetation, and planted about 120 tubestock of Casuarina, Eucalyptus, Melaleuca, Acacia, Callistemon, Ficinia, and Enchylaena into the riparian zone.

Although work was somewhat hindered by the river height increasing overnight, the students accomplished a lot over the two days, and learned a range of new skills which we hope they will be able to put to use in their future careers.



UWA Students in Toodyay

Photo by Micheline Campbell

# *TFOR at Avon Descent: Duidgee Park*

*by John White*

At 0630 Saturday of Avon Descent, it was cold and foggy – and wet. Five of us met at Duidgee Park to do our car-marshalling stint. Greg and Vicky Warburton, Andrew Carr, Maurie Jackson and me donned high-viz vests. I was wearing three more layers than usual, a woollen scarf and leather hat, a long, brown, drizabone oilskin and Greg thought I was at risk of being run over and needed some high-viz clothing. I was more interested in staying dry and warm than being hit by a car, but thankyou Greg for your concern! I complied of course.

Maurie stationed himself at the river-side car park, and the rest of us at the junction of Railway Road and Harper. We stood around in the rain for 2 hours getting progressively colder and wetter as water found its way inside the outer coverings. Then the rain stopped and we stood around in the watery sunshine for two hours getting gradually warmer and drier!

The work went smoothly, welcoming visitors with cheerfulness to sunny Toodyay, and the time passed quite pleasantly and without any drama. The crew changeovers went smoothly. Apparently they had been well versed on where to go for that. We left visitors to park themselves after all the support crews had arrived by about 1100 hours.

Some of the parking signage needs review and change. There are too many unnecessary ‘no-parking’ stakes along some roads, creating frustration for visitors.

The ‘support crew’ parking area on the south side of Railway Road needs to be signed ‘support crew only’. Apart from that all was well.



**Above:** Andrew (left) and John, Parking Marshalls, Duidgee Park (Photo: Greg Warburton)

# Autumn revegetation in the Historic Nardie Cemetery

by Greg Warburton

At the June working-bee members worked over two days planting screening plants at the eastern end of the Bilya Walk Track and at Nardie Cemetery (c1857). This important Toodyay heritage location on the river bank, holds graves of a significant number of pioneers of the district including Toodyay's first Anglican Minister and farmer, Charles Harper, and his infant daughter. The area was gazetted as a cemetery in 1857 and relatives of the pioneers still visit the cemetery.

Unfortunately, the cemetery is somewhat dominated by the surrounding industrial sites and the Friends are attempting to develop greater amenity for visitors *by a screen of endemic native plants*.

The tree-planting continues apace with further infill work planned at Millard's Pool on both north and south bank sites. Participants in the School Holiday Program on Monday July 9th will be assisting and Friends will be working on busy-bees Sunday July 15th and Monday July 16th and at a later date by Conservation Volunteer Australia enthusiasts.

The petrol-powered, hand-held auger for drilling planting holes came into its own for planting in difficult-to-access, unprepared sites making life so much easier than digging holes by hand or by using Pottiputkis.

The superb, healthy native seedlings are grown by the volunteers of the Seed Orchard, a sub-committee of the Friends, with each plant grown in a long pot and having a well-developed root system giving it every chance of survival.



Above: Toodyay Friends of the River working-bee and tree planting at the historic *Nardie Cemetery*.

Photo: Desraé Clarke

# *MONITORING UPDATE* by Dr. Guy Boggs

It's been a full year since the 8 monitoring points were installed at key locations along the stretch of Avon River between Dumbarton and Weatherall Reserve. Several TFOR members have assigned themselves to the assessment of river condition at each of the points. The aim is to capture long-term, seasonal changes in riparian vegetation, bank erosion, weeds and fauna and identify areas of potential work that the group can focus on into the future. Most sites have had an initial rapid assessment undertaken this year as well as the first of a set of photo monitoring images captured. These photos are loaded to the TFOR Monitoring map located in the Monitoring tab of the TFOR website; you need to open the map, click on a monitoring point on the map and open the list of photos.

The initial rapid assessments are allowing us to make some broad comments about the dominant over-storey species, with some sites dominated by Casuarina while other have a more diverse mixture of Casuarina, flooded gums and paperbarks. Weeds are obviously prevalent at all sites but of particular concern is the presence of bridal creeper recorded at Dumbarton and Weatherall Reserves. Evidence of bank and channel erosion following the summer floods of 2017 also featured strongly. So far no one has undertaken an extensive bird survey but common birds were noted as well as a fox sighting at Weatherall Reserve and rabbit activity.

The revegetation at Millards Pool is wonderful example of how the photo monitoring points can tell a story about change through time. This work is looking really fantastic (Plates 1 and 2).



***Left:*** Plate 1. Photo monitoring point facing the river at Millard's Pool 27/08/2017

***Below:*** Plate 2. Photo monitoring point facing the river at Millard's Pool 13/05/2018.



# Monitoring Update (cont)



**Above:** Figure 1. TFoR monitoring sites map - click on points to see photos taken at each site (accessible from the monitoring overview tab on the TFoR webpage or type the address below into your browser)

[http://www.toodyayfor.org.au/TFOR\\_overview.php](http://www.toodyayfor.org.au/TFOR_overview.php)

- Join the Toodyay Friends of the River for a guided walk along the Bilya (River) Walk Track.
- Learn about the environment and history of our iconic river.
- Choose a short (1 km) or long (4.5 km) walk.
- Meet at the Millard's Pool (Glen Coe Estate) car park at 10:00 am Sunday 9<sup>th</sup> of September.
- Bring drinking water, appropriate clothing and foot wear.
- Enquiries Greg 0448284260



# President's Annual Report 2017-2018

by Sarah Dudley

We acknowledge and pay respect to the traditional custodians and elders past and present of this land, the Ballardong people of the Noongar nation

Thank you for coming today to celebrate the Toodyay Friends of the River achievements over the last 12 months. Let us for a moment put our hard work into the context of a historical timeline:

Our long (approximately 280km) river has seen many groups come and go in its lifetime, each leaving its mark for better or for worse. The river's catchment (120,000 sq km) is the size of Tasmania. Prior to the major flood in 1943 there were 27 original pools in the river, protected by the debris in the river bed which slowed the water flow and allowed any flood waters to access the river's flood plain, where most of the silt was deposited. Fast forward to the mid-50s onwards when as a result of both the River Training Scheme and the increasing development of agricultural land, the cleared pools became receptacles for the silt load and were largely obliterated, together with much of their flora and fauna. Erosion, salinity and rabbits became the new norm.

Why mention this history?

**Firstly** because four of our dedicated TFOR members have had a long standing involvement with the enormous task of trying to improve the river's well-being and environment by serving on many Committees and providing factual data to them.

Measures implemented over the years include (to quote from Frank Bremner's "Bulldozing the Avon")

- Programmes to control feral animals and invasive weeds

- Developing bird breeding habits

- Dredging of river pools

- Fencing the rivers and tributaries

- The establishment of salt-tolerant pasture species in the catchment.

Our patron Viv Read, our Facebook manager Dr Liz Kington, our Treasurer Wayne Clarke and our Project Officer Greg Warburton have all contributed in various ways to the post-Training Scheme era - for which we thank them. To precis history, the Avon Working Group became the Avon Catchment Council, which then became the Wheatbelt Natural Resource Management - the NRM of today - where one of our TFOR members works to this day.

**Secondly** because this history provides a context for our current TFOR efforts, be they revegetation, nurturing seedlings, being part of a monitoring points team, pool improvements, or the creation and maintenance of the Bilya walk track. Our current efforts are but part of what has been over many decades and hopefully what will be, way into the distant future.

So who is this TFOR in August 2018? We currently have (if everyone has paid their subs!) about 46 members. Two families joined us this year. One relocated away from Toodyay.

Of the 46 over 40 have been active in some capacity in the last 12 months. You will recall that one of my aims as President has been to try and provide flexible niches that each member is comfortable to adopt in his/her busy day. So, instead of being solely recognised for our working bee turnouts, we now have members who are respected for their choice of volunteering 'comfort zone', as long as it is in harmony with our TFOR values and priorities. Some folks might devote a whole day of the year to achieving one task; others may do monthly working bees on a Monday and never get to meet the Sunday working bee enthusiasts - until today!; others are happy to respond to a current need and achieve this goal in their own time.

...Cont Page 9



## *President's Annual Report ... (from page 8)*

Being a scientist I examined the data in the Attendance book for the 2017/2018 year and came up with the staggering approximate total of 900 hours contributed by you, thus continuing the efforts since the Training Scheme to improve the river's environment. At times you may think you are a mere drop in the ocean – but add all the drops together and we do make a difference!

And what is this difference? Earlier this year we altered the working bee dates to the second Sunday and following Monday so as to maximise attendance and avoid clashes with other significant dates; established 8/10 Monitoring Points from Wetherall Reserve to Dumbarton Bridge, each team blessed with the use of a valuable weed identification book, a number of which have been kindly donated to us; Drummond House has become a functional hub and a meeting place for small groups; our website has been updated; we entered a craft into the Recycling Regatta – and won! Congratulations to both Greg and Grahame! Good luck to John and Peggy who have put their hands up as TFOR entries in this year's race in mid-September. This is only a fraction of the 900 hours.

You might be interested in my analysis of the 900 hours which you have in front of you.:

You will note that the Sunday working bees, the Seed Orchard activities and the Miscellaneous "other" are our most generous time sharers, closely followed by the Monday working bees and the dedication and commitment of the Management Committee.

This latter group needs a special commendation for their fortitude and lateral thinking. We meet roughly every alternative month on a Monday night at Drummond House. Each member leads one of the Monitoring Points and each member has specific areas of responsibility they report on at the meeting.

A special heartfelt thanks goes to the hard-working Treasurer and Web Manager, Wayne, who keeps us both in the black and in cyberspace; to our magnificent secretary Robyn, who despite all the other pressures in her life, manages to keep her head above water thanks largely perhaps to Jess's calming influence. And, with Desrae being the new President of the Naturalists Club we look forward to ever closer ties with this group and thank her not only for warm soup and endless cakes, but for the relentless pressure it takes to get an edition of Biddip published each time!

Other thanks go to Grahame our Vice-President and Works Manager, who spends many quiet hours organising the tools, trailer and depot and preparing for the working bees. He is consistently thoughtful, generous, reliable and much appreciated.

Our Seed Orchard team are Wednesday wonders, ably led by Bethan. They magically produce endless trees and other natives for revegetation projects here at the Junction. Each planted tree is an effort to reduce the water table. This then halts the spread of saline infected land. Last year saw the expansion of the compost factory which is appreciated by the Shire and all compost lovers.

If you study the Miscellaneous items in the volunteer hours analysis, you will see other contributions we might either take for granted, skim over or forget: such as the writing of the monthly Herald article, staffing Drummond House opening times, the chemical testing of the river water team, the meetings with other conservation groups, the displays at the Ag Show, the contributions to the draft Toodyay Strategic Plan submission and the fund-raising activities. If I have failed to acknowledge any other activities my apologies, but I don't want to keep you here for too long! My sincere thanks to Greg, Desrae, Bridget, Ric and Rebecca and everyone else who has contributed.

### **Such is the past. Such is the present. What of the future?**

This has been my second year as President so the coming 12 months will be my last. It has been a privilege to network with so many dedicated and passionate TFOR volunteers and to appreciate the support each one receives from home from family members who may not be TFOR volunteers.

*...Cont Page 10*

# THE SEED ORCHARD

by Bethan Lloyd

ALTHOUGH there was a bit of a late start to opening rains for the 2018 season it has been an exceptional year for revegetation and planting of native vegetation with most areas getting well over 400mls of rainfall by the middle of August. Any landholders who did not take advantage of the great conditions this year can think about ordering plants for next year and are advised to get orders in by the end of October. By ordering now you are more likely to get the number and type of plants you require as otherwise you are limited to what we have left over. If anyone would like a form to order plants for next year then email: [bethanlloyd\\_8@msn.com.au](mailto:bethanlloyd_8@msn.com.au)

This year our group produced approximately 2000 plants grown mostly in tubes from seed; some Eremophilas were grown in larger pots from cuttings. This work is done at our excellent shade house facility at the Toodyay Junction on Railway Road.

Over half of the plants raised were provided free to various projects such as the School Holiday Planting, Friends of the River projects and the plantings at Morangup. A couple of larger private projects were given extra plants as we thought they had wider community benefit. We want to encourage all landholders to do these larger scale projects around the Shire. We would like to assist with any projects that reinforce existing areas of bushland, connect them to remnants, provide habitat for wildlife and address any land degradation issues such as waterlogging, salinity or areas affected by fire

The Composting facility has been going gang busters for a while but has slowed down a bit during the wet weather which has allowed us to get ahead so we will have plenty available for those getting their gardens organised this spring. We make the compost from grass clippings, stubble straw and blood and bone; the Shire staff turns the compost regularly to keep it activated. The colder weather means the compost takes longer to mature, also there are less grass clippings being produced as grass grows more slowly during winter; however, things will take off as soon as spring is just around the corner. Anyone wanting compost can email me for information on availability and fill in an order form for next year by email [bethanlloyd\\_8@msn.com.au](mailto:bethanlloyd_8@msn.com.au)

We reuse all pots and trays and landholders can drop them off at Makit hardware when planting is complete.

## *President's Annual Report ... (from page 9)*

I hope next year will be one focussed on increased collaboration and communication between members. We have issued 3 editions of "TFOR News" to date – so that members can be up to date with developments regardless of whether they are able to attend working bees or not. Your feedback in response to these is always welcomed.

Planning for the future is foremost in my mind: not only developing strategies to manage climate change as it affects this part of the globe, but being proactive in developing a clear direction for TFOR into the future. We aim to be a democratic organisation with members' suggestions re the 2019 calendar being part of the end of year breakfast scheduled in early November at Cobblers Pool. Each of us contributes what we can, when we can - according to our individual strengths, priorities and energy reserves of the moment.

As Fred Bremner in his 'Bulldozing the Avon' concludes:

"It is the hope of many, that with continuing improvement in land use practices and management of saline land resulting in less salt and silt, the Avon river will, over time,... with the help of a dedicated community, heal some of the harm dealt to it by man's thirst for agriculture since 1829".

# Members Gallery



Photos clockwise from top left:  
Seed orchard (Photo Bethan Lloyd);  
Nardie Cemetery clean-up (Photo Desraé Clarke); Pelicans with some unhappy cormorants (Photo Rebecca Meegan-Lowe) and more seedlings at the Seed Orchard nearly ready for sale (Photo Bethan Lloyd)



Newsletter of the  
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WORKING FOR THE HEALTH OF THE  
AVON RIVER



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## The Back Page

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**Above:** Tree planting during July in Wallaby Reserve, Morangup with *Conservation Volunteers Australia*. Since 1982 *Conservation Volunteers Australia* has partnered individuals, businesses and governments with hundreds of thousands of volunteers from around Australia and across the world by supporting their participation in a diversity of important projects to protect and enhance our environment.

Photo Greg Warburton