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The Toodyay Friends of the River are grateful to the Wheatbelt NRM for their support in producing the April 2017 newsletter.
Presidents message by Sarah Dudley

President’s report for Biddip already – and the River Avon is still flowing albeit less vigorously than when flooded in February. The volumes of new sediment washed downstream have been deposited in new locations resulting in new islands, altered water courses, a widened floodplain in some places - as well as uprooted trees and other deposited vegetation forming new habitats for the riparian fauna and flora.

Such a major flood inevitably had onerous consequences for the TFOR volunteers, especially as parts of the Bilya walk track were completely washed away by the strong currents and needed to be rebuilt. Thanks to the teams of willing souls prepared to work in their own time - and the welcome assistance of a friendly bobcat – the trail has been safely re-routed in the eroded sections, mulch has been used to emphasise the direction of the track in Lloyds Reserve and Bilya is now fully functional once again.

Last month saw the final arrangements made so that Drummond House (next to the Bendigo Bank) could begin to operate as a base for the shared use of three Toodyay volunteer groups: Toodyay Friends of the River, Toodyay Naturalists Club and the Toodyay Historical Society. Each group can use the premises to share their aims and activities with the public, be a base for meetings and as a valuable storage venue. We have been able to furnish the premises thanks to kind donations and the rear garden will soon be improved thanks to plant donations from the Green Emu (who has a stall at the Farmers’ Market).

Our autumn has been marked in a very special way by 25 members of the Nats Club and TFOR sharing a memorable Easter trip to the Helena Aurora Ranges, north of Southern Cross. The biodiversity of this last remaining (unmined) iron-band ecosystem, surrounded by the Salmon Gums in the plains below, is breathtakingly beautiful and worthy of classification as a National Park. Being able to socialise as volunteers is an important aspect of our volunteering life.

Toodyay is truly blessed to be home to its volunteer groups, each of which is a powerhouse of creativity, comprising individuals who are passionate about their values and determined to preserve what was in the hope it still will be for generations to come.

Above: The Avon River isolates the Picnic Shelter at Millards Pool  
Photo: Rebecca Meegan-Lowe

Cover Photo: The Bilya Walk Track’s ‘Harper Brook Bridge’ survives the flood  
Photo: Greg Warburton
New seed group facility at the Community Depot
THE SEED ORCHARD GROUP is sub-group of Toodyay Friends of the River (TFOR). We grow native species every year for landholders to undertake planting on their properties at a reasonable cost and for community projects we provide the plants at no cost. We also work with the Shire in providing plants for projects around the town. Most plants are grown from seed collected locally but we also take cuttings from mainly Eremophilas as they are very hard to grow from seed. Plants are usually available at the beginning of June each year. We like orders to be in well before Christmas of the previous year.
We used to work from the shade house at the old parks and gardens depot but knew we would have to move out from there several years ago, but it seemed to take forever for us to finally get established at the new site at the community depot on Railway Road. Fortunately, the new community depot is the perfect spot and secure for many years into the future. After many years of selling plants, we had enough money to build the new shade houses, do the necessary ground work and install an irrigation system and shaded area to work under.

We managed to recycle all the benches from the old shade house and someone re-used it. With a grant from Lotterywest the Shire of Toodyay built our shed along with others for various community groups. The new shed is larger than our old one with room for TFOR to store their trailer and other bits and pieces. It also has a covered but open area which is very useful and we managed to get an old cast iron bath from the transfer station which we use for pot washing.
Next door to our facility is the composting facility where grass clippings and straw is used to make a useful resource to the Shire and the community.
This winter we will be putting in some raised beds and planting some trees to try to soften the area a little and provide stock plants to collect seed and take cuttings. Seed group meets on the second and fourth Wednesday of the month if anyone wants to come down and visit us.
Anyone wanting plants or compost for this year contact Bethan Lloyd on bethanlloyd_8@msn.com or seedorchard@toodyayfor.org.au

Above: The new Seed Group facility at the Community Depot in Railway Road.
Right and far right: Seed Group members hard at work preparing for the next growing season
Photos: Bethan Lloyd
THE DECISION to name our new shop-front premises *Drummond House* is based on our wish to acknowledge the importance of James Drummond (1787-1863) and his family to Toodyay’s history, and to have a name that has relevance to the three community groups.

James Drummond was a botanist and plant collector who came to the Swan River colony in 1829 initially serving as the government naturalist. In 1836, he exchanged a grant of land he held for one in the recently discovered Toodyay Valley in the Avon River region. He named his new grant Hawthornden. The discovery of the Avon River with its permanent pools of water enabled the first inland settlements to be established in WA.

According to Drummond ‘I learnt from Babbing [his Aboriginal guide] that this place was called Duidgee and that it was a favourite haunt of the natives, no doubt on account of its natural productions.’ (Rica Erickson, *Old Toodyay & Newcastle*, p.20)

From his home Hawthornden, Drummond went on extensive travelling expeditions collecting wildflowers and seeds which he sold to overseas collectors. He and his sons also pioneered the Victoria Plains district where they collected plants. On these excursions, his youngest son Johnston collected birds and animals for the famous English ornithologist and artist John Gould. Another son John Nicol Drummond was renowned for his knowledge of Aboriginal language and customs. Drummond’s second son James Drummond Jnr ran Hawthornden while his father devoted his life to botany. James Jnr was a major contributor to the agricultural development of Toodyay and became one of the state’s leading pastoralists.

The ultimate naming of the centre becomes:

*Drummond House - Toodyay Environment & History Centre.*

*Photo: Wayne Clarke*
THIS IS INDEED A SAD TIME FOR TOODYAY

Pamela Walsh was such a dedicated and loving member of our community. For so many years she was the Aboriginal representative for us and the go to person for indigenous engagement in Toodyay.

We received so much support from Pamela for projects like the Bilya Walk Track and the Toodyay Naturalists’ Club John Masters Bird Hide.

I enjoyed many cups of tea with her and Karl discussing all sorts of exciting ideas and projects they wanted to do.

A great dream of Pamela’s was to connect the Pioneer Cemetery at Nardie with the Aboriginal burial ground in town with a walking track along the river. It was to be a reconciliation project featuring an interpretive installation. She nearly did it and maybe one day it will come to fruition and be named in her honour.

But perhaps I will remember Pamela mostly for her amazing ‘Welcome to Country’s’. She did so many all beautifully tailored to the specific event.

At the National Tidy Towns event last year she had the audience in the palm of her hand with words that combined heartfelt thoughts and a wonderful sense of humour.

She will be greatly missed by so many.

Noonook boorda djinang Pamela

Left: Pamela pauses for breath during the Welcome to Country at the Toodyay Naturalists Club’s 40th Anniversary celebration

Photo: Wayne Clarke
Members of the Toodyay Friends of the River were invited by the Toodyay Historical Society (THS) to a presentation by their Annual General Meeting guest speaker, professional historian, environmentalist and conservationist, Dr Sue Graham-Taylor.

Sue is a Member of the Professional Historians Association (MPHA). Her interests include Western Australian environmental and political history and she is a top guru in the State on anything to do with the Swan River. Sue is currently Chairman and Patron of the Conservation Council.

A varied, interesting and, in many cases, an extremely sad history was given of the Swan-Avon River - a heritage icon!

The river consists of a vast catchment of 128,000 square kilometres. The original settlements in Western Australia were on land taken up on the river banks and flood plains. In 1829 the Colony’s attributes were described to the Home Office in Britain by Governor Stirling as ‘good soils, lovely walks, available water, abundant springs, numerous deep shady pools and plentiful birdlife’.

One of the main problems of the waterways was odour. A government position was established known as the Inspector of Nuisances to check river smells resulting in clearing of lakes around Perth to eradicate odour.

In 1869 a steam dredge was brought from England to Western Australia to dredge the Perth waters to remove the offensive odours; the project was not a success. In 1925 the Swan River Improvement Plan was established to dredge the river and maintain it at a depth of 5 feet. Nineteen acres of Perth waters were re-claimed.

A ‘straight line’ plan was devised from Perth through to Fremantle to do away with the little curves and bays; fortunately, this plan did not eventuate. Seventeen rubbish tips were placed along the river around Perth waters with the well-known Burswood tip leaching into the Swan. In 1934 industry filter beds were established. In the 1950s East Perth Power Station looked at ash disposal in the river.

A deputation from Northam approached John Forrest to dam the Avon river because of smells from it. A weir was constructed in 1907 to ‘odour-de-cologne’ [stated the Northam publication, ‘The Advertiser’], and around 1925 a suction dredge was used. Pools on the river in York had the inhabitants worried about the odours.

Breeding mosquitoes in the river and swamp areas were treated with the spraying of Kerosene over damp areas and the American Gambezi, or mosquito fish, was released in the river between 1930 an 1936 to eat the mosquito larvae [another failed disaster].

Flooding in country areas resulted in, between the 1950s and 1970s, the Avon being bulldozed from Brookton to downstream of Toodyay under the title of ‘The River Training Scheme’. The scheme was hoped to improve ‘Nature’s shortcomings of curves and meanderings’.

Following a survey in 2005 the river was declared as being too sick to save with the changes and loss of environmental, cultural and social values.

An announcement by the Auditor General in 2014 stated the heritage icon was a system that was not adequately protected despite the use, in a number of areas, of oxygenation facilities.

Over the years there had been many actions taken to ‘improve’ the Swan/Avon including the formation of the, Toodyay Friends of the River in 1994, twenty-three years ago.

**THE SWAN-AVON RIVER SYSTEM: - CAN WE LEARN FROM THE PAST?**

*Presentation by Dr Sue Graham-Taylor*
Saturday, 11th February 2017, the Avon River reached a flood peak above the 2000 flood level in Toodyay but below the 1983 flood level. On 26 July 1983, the West Toodyay Bridge was engulfed for the first time in 20 years and a section of the bridge sank about 6 inches. Connor Bridge was also damaged and subsequently replaced in 1987, but the West Toodyay Bridge was only upgraded by widening in 1988.

Thursday 26th January 2017, Australia Day, my husband Bob recorded in his diary a 42 degree maximum temperature and a dry river. The following day it was 44 degrees; Saturday was 43 degrees but we had thunder and lightning. Then, on Sunday, 29 January (my 63rd birthday), it rained ALL DAY! Whoopee! A severe drop in temperature to 20 degrees was welcomed on Monday, but it still rained all day. Another rainy Tuesday followed which all added up to 100.5mm.

Tuesday 31st January Pelham Brook, that is usually dry, was flowing behind the Old Newcastle Gaol and shooting out of its underground outlet behind St. Stephen’s Church. The Boyagerring Brook was a raging torrent about 20 feet across as far as I could see from the block at the school end. Robyn Taylor reported that the approach from the west end of Drummond Street was blocked off due to the footpath being undermined by water.

Wednesday 1st February Bob had marked a new record flood level in ‘Frayne Park’ above his 2006 and 2008 flood markers on the riverbank area below our house in Drummond Street. These markers were both lower than the 2000 flood, we think, but we were not in residence then so we thought the excitement was all over! This rain event caused the undermining of a large Flooded Gum, which came down over the Boyagerring Brook footpath crossing. Toodyay Friends of the River (TFOR) members investigated and recorded flood damage during its work meeting on Sunday morning 5th February. However, this rain event only set the scene for what was to follow a week later.

Wednesday and Thursday 8th and 9th February, the rain came again from the east; 70.5mls over the two days, with a maximum of 17 degrees to boot on Thursday. Bob recorded on the Friday that the river was rising rapidly and kept moving his sticks.

Saturday 11th February at 8.30am we recorded our flood peak at the very base of the high bank just below our property Bob now has a new 2017 flood marker and flood waters had crept into Duidgee Park overnight.

Saturday 11th February at 11am the water level at Newcastle Bridge, Toodyay, was officially recorded as 4.01m and rising. The levels at Beverley Bridge, 1.75m and rising, York, 2.4m and rising and Northam, 0.91m and rising; they were much less than in Toodyay at that point in time. However, residents on the Mortlock River, which runs into the Avon near Northam, had to be evacuated because of the low-lying area but the waters did not rise much more than these reported levels.

Saturday 11th February, ‘Perth Now’ reported, “In Perth, the city recorded its second-wettest day on record and wettest day in 25 years yesterday, with flooding reported across the metropolitan area. Perth yesterday recorded 114.4mm of rain, its second-wettest day, just shy of the 120.6mm recorded on February 9, 1992. It is on track for its wettest start to the year.”

The debris caught in the riverside trees showed the height of the water. The number of uprooted trees, particularly Casuarinas, demonstrated the power of the river that continued running strongly for at least a week after the peak. We now have beaches of polished pebbles and deposited silt. We noted the staining of the river as gravel and mud was washed down the banks from disturbed sections of the riverbank. The weeds have been flattened but green is starting to appear again along the river.

[The following pages illustrate the 2017 February Flood event]
Members Gallery

Left: The Frayne’s fence, below the house.

Photo: Beth Frayne

Right: The 2008 stake under water - below the Frayne’s house

Photo: Beth Frayne

Left: The TFOR sign in Duidgee Park has its feet wet. The water had resided somewhat by this time

Photo: Robyn Taylor
Above: Is this a whale in our river?
Water roaring over rocks in the river provides a spectacular sight

Photo: Rebecca Meegan-Lowe

Left: In Northam the flood caused major damage to the AVES walk-track. This image shows the bridge over the Mortlock River all but gone.

Photo: Joan Ashworth

Below: TFOR members meeting at Millards Pool after the Clean Up Australia Day litter pick-up. The river had dropped substantially by this time, but was still the subject of considerable discussion.

Photo: Wayne Clarke
As you can imagine, I have been monitoring and inspecting certain river locations especially the Bilya Walk Track. Luckily, what I have been able to wade/swim to is intact. My biggest worry was the Harper Brook foot bridge which I could just get near enough to on Saturday to see the railings poking above the raging swirl. Today it is high and dry and solid as a rock.

Extracts Weir on Saturday was barely discernible as the sheer volume of water flowed on ignoring obstacles.

The Millards Pool re-veg site survived unscathed but the Caltrop is bursting with growth. The bench seat there went under but is unmoved, as is the picnic shelter.

As you have seen from member’s photos the Naturalists’ Club’s Bird Hide almost got its feet wet.

I couldn’t get to the bench seat at Lloyd Reserve or inspect any of the new track section as that is all at least two meters under water.

John Pyle Walk Track is well and truly under.

Vicki and I toured down-river sites yesterday and were treated to spectacular views of the torrent 150 metres wide at Super Shoot and Cobbler Pool.

Perhaps Weatherall was the biggest surprise with the water level coming halfway up the access ramp submerging the rubbish bin and signage.

All this water - but still well below the ’83 level let alone the 100 year! Just imagine what a big flood would be like.

It will be some time before the water recedes enough for an accurate assessment.

Unfortunately, Peter Weatherly’s walk track infrastructure in Northam had been badly impacted. The foot bridge across the Mortlock River on Yilgarn Avenue and part of the boardwalk at Enright Park by this time is probably somewhere in the Swan!

I will be spending some time with Pete to inspect and assess the impacts of the particularly violent flow out of the Mortlock.

Right: The Richard Walkey Memorial Seat is high - just. What a superb view of the torrent.

The Toodyay Naturalists’ Club’s John Masters Bird Hide can be seen just above the water-line, and that’s the way it stayed.

Photo: Rebecca Meegan-Lowe
Photographs of the successful revegetation at Millards Pool. They are all healthy looking plants, and would have benefited considerably from the recent rains.
Above: One of the Newcastle Bridge columns after the flood. It would be assumed this is flood damage. However, after contacting Main Roads WA the following explanation was given:

‘The damage at the base of the pier columns is not the result of the recent storm but deterioration due to corroding steel causing spalling of the concrete. It looks bad, but is not structural as this collar provides a dam to contain the lubricant to the bearing at the base of the column. Repairs to these collars are scheduled for 2018/19 subject to funding. An inspection on this bridge was undertaken on 16 March 2017 when scoping the repairs for this bridge for the 2018/19 programme’.

As this is a Shire bridge, the Works and Service Department have since removed the debris.