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Biddip

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Newsletter of the Toodyay Friends of the River

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



wheatbelt
natural resource
management

Presidents message

by Sarah Dudley

“WHAT CAN WE DO BETTER?” is a mantra at the heart of any volunteer organisation. At Toodyay Friends of the River (TFOR) we are beginning to reflect on possibilities as to what the future of the organisation might be like. Our forward planning needs to be driven by imagination and foresight.

What will characterise TFOR in say 2038, twenty years from now?

The River Avon will hopefully still be here, albeit impacted by ever increasing lower rainfall volumes as well as the impact of cyclonic remnants. Consequently altered water courses due to sedimentation and erosion, fluctuating chemical composition of the water and changing plant and animal biodiversity can all be anticipated.

It will be a riparian future that is different to the here and now. Unseen and largely unimaginable.

So too the TFOR membership. Technology/automation most likely the norm. The need for social contact a priority need.

Whilst the aims of TFOR remain as a constant anchor, the means of achieving these could be a mix of yet-to-be-invented technology coupled with good old fashioned hard yakka! Membership may evolve into a more flexible form of community service with less focus on the group approach and greater emphasis on the individual's choice of contribution.

The leadership style will inevitably change - possibly a more supporting role to the individual rather than an upfront model? Co-ordinated by means of technology rather than face to face? A greater networking with other conservation groups with parallel aims? An interstate/global approach rather than a parochial one? Who knows? All hard to foretell.....

The data collected from our Monitoring Points will hopefully still be of historical use....

What will remain is the memberships' ability to answer the question of “What can we do better”? To be unafraid of change and demonstrate the need for courage to adapt to evolving circumstances. I believe TFOR will be resilient and lasting over all these decades - just like the River Avon - flowing ever onwards despite all the challenges!



Left: Drummond House - Toodyay's Environment & History Centre, at dusk.

Photo: Wayne Clarke

Frayne Park Restoration

by Bob Frayne

I BOUGHT my block bordering the Avon River in 1987. Previous owners had dumped anything and everything on the river bank. In 1992 I joined the Toodyay Naturalists' Club and about that time I began a cleanup. Very many trailer loads of rubbish went to the tip. Notable were iron bedsteads, Metters stoves, linoleum, masonry, glass, wire, kitchen utensils and broken crockery.

When all that was done, I built a back fence and developed my garden. It was some years before I did any more outside the fence. The weeds annoyed me when green and were a fire hazard when dry. I resorted to spraying and using a whipper snipper. The amount of work involved increased as I gradually extended the area covered. After a number of years, I was halfway along the boundaries of my neighbours on either side.

As I was clearing weeds, I was at the same time planting natives, viz. eucalypts, acacias, hakeas, eremophilas, melaleucas, calothamnus and casuarinas.

One Sunday morning in 2010, when the Friends held a busy bee to help me, Desraé christened the area 'Frayne Park' and the name has stuck.

In February 2017, we had a very big flood and my burden was drastically increased. Heavy flood debris built up on the tree trunks and branches. Those trees closest to the main flow were bowled over by the pressure. Many were swept away. Only two, a little higher up, have re-sprouted.

During the last year I have removed many trailer loads of flood debris and restored the health of the area, whilst reducing combustible material. Currently, I have an effective firebreak extending beyond my neighbour's far Western boundary. Future whipper snipper work will be unimpeded by large surface objects. Three or four machines would get the work done.

I believe the further extension of the restored area westwards to the Newcastle Bridge would be a legitimate exercise for the Friends. I estimate I now have to carry detritus 100 metres to my trailer and there is still a lot to be cleared. The remaining flood debris is very dense and heavy. It is a fire hazard, is unsightly and, in the event of another big flood, would partially dam the flow until it bursts.

Access from my block is easy at the moment (before the rain and new season's weeds). There are no obstacles underfoot. I invite members to come and have a look at any time. I should value the opinions of members concerning my work and its possible extension.



Left: Frayne Park, east of the Newcastle Bridge on the north bank of the Avon River. The river is to the right of the photograph.

Photo: Beth Frayne

FROG SHELTERS

by Rebecca Meegan-Lowe

IN EARLY March, I found a motorbike frog (*Litoria moorei*) resting in a tree on the rim of our dam. Although its mottled coloured provided camouflage, this sizeable frog was not fully hidden in the foliage of a young jam (*Acacia acuminata*). If I could spot the frog, birds and cats could surely find it, too.

This has inspired me to start identifying some suitable plants that can be grown in the dam to shelter frogs and tadpoles, anchor frog eggs and aid water quality. It will be interesting to discover which plants can survive both the intense heat in the dam in summer and submergence in winter.

In the interim, I decided to try out a temporary way to offer refuge for our population of frogs. I threaded a few corrugated cardboard boxes together, one inside the other, and hung this assembly in the sapling next to the one where I had seen the frog. Cardboard seemed to provide better insulation against the sun than plastic or ceramic. When I next visited the dam, I was delighted to find a large motorbike frog had taken up residence in the shelter.

We now have 7 cardboard 'apartments' hanging in the trees circling the dam. They are typically a metre off the ground, with each offering a range of interior resting surfaces and plenty of ventilation.

At the most recent evening check, almost all shelters were found to house frogs. The photos show some of the boxes and frogs, including a pair of frogs which emerged through the top of one box undaunted by the torch light. Another frog was seen surveying the dam through a window in the side of its shelter.

The only thing that would delight us more than interacting with the frogs in the dam, creek and soak on our property would be to see and hear frogs thriving in the adjacent Avon River. One can only imagine the richness of animal life in the Avon when the water was fresh, the course of the river was natural and only native vegetation fringed the banks. It is great to be part of a community organization that is dedicated to helping restore the river to health.



Photos: Rebecca Meegan-Lowe

A GUIDE TO TFOR MEMBERS PARTICIPATING IN THE MONITORING PROJECT ALONG THE TOODYAY PORTION OF THE AVON RIVER

THE FOLLOWING information is for members who are interested to become 'an adoptee' and join one of the teams responsible for providing data, over time, for one of the eight **Monitoring Points**.

Each of these teams is led by a member of the Management Committee who will guide you.

You may do 20 minutes worth of bird surveys, and/or feral animal sightings, and/or native animal sightings and/or erosion reports, etc (see 'key topics' sheet) at any of the Monitoring Points at any time that suits you. Please send this data to member and coordinator, Dr Guy Boggs, after each survey.

All data (with the exception of photos) is **to be sent directly to Guy** (guy.boggs@wabsi.org.au)

All photos (no other data) are to be sent to **Dr Dimity Boggs** (boggstodyay@gmail.com).

Once each year, in spring, there will be a dedicated and united working-bee for all participants to collect data from the Monitoring Points at the same time. This is scheduled in 2018 for **Oct 14th and 15th**.

PHOTOS:

You are asked to take these four times each year - one for each season - and to send them to Dimity (0438 097 022/ 9574 2749 or email: boggstodyay@gmail.com)

The four photos are to be taken as per instructions, using the cross on each cap at the monitoring point as a guide. Face the river for the first picture, then rotate as per the instruction sheet and - depending upon whether you are on the north (rotate anticlockwise) or south (rotate clockwise) bank - until all four directions have been completed.

When forwarding the photos to Dimity kindly remember to state:

- at which Monitoring Point these photos were taken;
- identify the photo direction (i.e. 'River'/'Upstream'/'Floodplain', or 'Downstream')
- the date and season you took them; and
- who you are as the talented photographer!

Your first (autumn) photos for your Monitoring Points need to be taken before the end of May;

Your second (winter) photos before the end of August;

Your third (spring) photos before the end of November; and

Your fourth (summer) photos before the end of February.

CONDITION SCORE SHEET (= 'Rapid Condition Monitoring')

Your plot area:

- has a **width** of approximately 10 metres from the Monitoring Point to the River, plus approximately 40 metres into the flood plain (total width = 50 metres); and
- has a **length** of 50 metres either side of the Monitoring Point. (total length = 100 metres).

Use the 'condition monitoring sheet' to complete the data for your plot and ask your leader to email the results to guy.boggs@wabsi.org.au

This needs to be done **twice a year** as a minimum - more frequently if desired! Guy appreciates as much of this data as is feasible for your team to provide.

Toodyay Friends of the River is not the only group using the Monitoring Points as University groups are interested and planning to use the plots as well as utilising the data collected. Hopefully the data will be collected and recorded for posterity way into the future... exciting!

The above is based on information given by Dr Guy Boggs and President, Sarah Dudley.

ADDING SALT TO THE AVON'S WOUNDS

Northam News, 13 September 1950

THIS PLAN WON'T PLEASE FARMERS

IN THE COURSE of a speech in the Legislative Assembly, concerning salt encroachment on land in the Roe Division, Mr. C. C. Perkins, M.L.A. for the Division, proposed a survey of the salt lakes with a view to cutting channels between the lakes and draining them into the Avon River.

He maintained that such action would prevent the flooding of the lakes, with the resultant loss of vegetation from salt contamination

No doubt the proposal has merits, but farmers along the course of the Avon would like to know them.

River Problem

The river as it is is [sic.] a big enough problem and is heavily enough salted during the winter floods when they happen without adding the contents of the salt lakes to it.

Action

Had Mr Perkins added to his suggestion another that the entire river problem be surveyed, with the idea of immediate remedial action from headwaters to the mouth, he would have had the whole-hearted support of all people in the area it sometimes flows.

The mere idea of adding more salt to the river, however, fills farmers with suspicion, and savours of adding salt into an open wound.



Above: Salt crystals form around old trees, Dowerin Lakes

Photo: Lyn Phillips, Toodyay Naturalists Club member

The Castor Oil Plant Eradication

by Robyn Taylor & Beth Frayne

ON SUNDAY, 8 May, one of the Friends' jobs was to remove Castor Oil plants on the north side of the river near the Newcastle Bridge. We were pleased to see that this year the number of plants had diminished in number but there was still a lot to remove.

Bob Frayne had sprayed the plants on 11 March and cut off the green seed heads. By 8 May, most plants showed signs of yellowing, but a number of larger ones were proving resilient, and many smaller plants had begun to grow between the blocks of masonry that remained from the old bridge.

While these plants could be pulled up by hand, serious work was needed to remove the larger ones, using mattocks. A well-entrenched Castor Oil plant is a stubborn thing to get rid of! This job was largely left to Grahame and Bill, while the rest of us rummaged through the nearby bush finding more young plants.

Not surprisingly this soon led to collecting litter, especially drink bottles, and cans that had been thrown from vehicles while they crossed the bridge going out of town. Rebecca, later joined by Robyn, collected a full KAB bag from the steep embankment on the downstream side of the bridge.

Bob recommends the Castor Oil plants should be removed no later than March, before flowering has started.

Photos - see Page 9

The Castor Oil Plant

by Desraé Clarke

THIS FERAL PLANT, with the scientific name of *Ricinus communis*, is found from Port Hedland to the Fraser Range. The latter is situated 100km east of Norseman and running from south west to north east towards South Australia. With such a significant range, terrain, weather and soil types, this hardy and resilient plant is found on roadsides, creeks and rivers, wetlands and rubbish tips.

The generic name 'Ricino' is derived from Latin 'a tick' in reference to 'tick-like' seeds that are extremely poisonous with the plant recorded as being the world's most poisonous common plant.

Castor Oil is native to tropical Africa and Asia. It can grow to a height of 4m with leaves on stalks of 20 to 60cm in length. The leaves are described as 'palmate' which is derived from Latin 'palm' relating to the palm of the hand, with 7 to 9 lobes that can be from 10 to 40cm in length.

The male flowers of the plant are yellow in colour whilst the female flowers are red.

In the past, and with the reputed insecticide properties of the plant, poultry runs always contained several Castor Oil plants to prevent infestations of 'stick-fast fleas' on the birds.

A HISTORY OF REMOVAL - Wayne Clarke

REMOVAL OF castor oil plants has been a constant task for the TFOR - right from its inception.

A major working-bee in 1998 had many of the plants removed; a Prisoner Work Team in 2001 removed many more; notes from the February 2002 Herald stated the *task for February was removing some castor oil plants that have begun to re-sprout behind the town; and the list goes on.*

Castor Oil has been the Herald's Weed of the Month at least four times.

In October 2007 a *Community Conservation Grant* funded a *Weed Survey and Management Plan*, undertaken by 'Native Environmental Systems. This identified the *Highest Priority Weeds*. Top of the list was the Castor Oil Tree. In 2018, nothing has changed. **Perhaps it is time for a more radical approach.**

GOGULJAR BILYA (AVON RIVER)

CATCHMENT NAMES *by Beth Frayne*

WHILE RECENTLY READING, in Drummond House, a 1996 publication by T.F.W. Harris called *The Avon: an introduction*, I started pondering on the derivation of the names of the tributaries that flow across the very old Avon River Catchment, culminating sometimes in the Avon River [Goguljar Bilya] flow past the bottom of our garden in Drummond Street, Toodyay.

When seeking a map or list of these names I found, on the Wheatbelt NRM site, the following work: *Priority tributaries of the Avon River basin: a process to prioritise tributaries for condition assessment. Volume 1: Avon and Mortlock catchments.* November 2008. Department of Water (DOW). (https://www.wheatbeltnrm.org.au/sites/default/files/knowledge_hub/documents/WRM51-Priority-Tributaries-web.pdf)

This DOW [now DWER] publication informed me that there were at least 152 tributaries in the Avon River and the Mortlock River system, so I chose a couple to investigate within the Shire of Toodyay.

'*Joe's Brook*' flows southwards into the Avon River, in the Toodyay section of the Avon Valley National Park. A W.A. Geographical Names Committee source states that John Forrest recorded the name of this waterway on page 67 of his Field Book 17, dated January 1878. As Forrest was well acquainted with Toodyay, we might assume that this brook was named in honour of our 'Moondyne Joe (former convict Joseph Bolitho Jones).

'*Nazareth Brook*' is a short creek running southeast into the Toodyay Brook. Telegraph Road crosses this creek, just beyond the Old Plains Road intersection. The name was proposed by the Shire of Toodyay, because Nazareth was an unofficial locality name given to the area following the use of this spring-fed stream by camel-drivers. The brook name was officially adopted in 1992.

'*Koondinee Creek*' is crossed when you drive from Toodyay to Northam. It runs into the Avon just after you cross the Toodyay-Northam Shire boundary. Also adopted in 1992, Koondinee is the Nyungar name for the valley in which this waterway rises.

'*Mortlock River*' flows into the Avon just west of Northam. Wikipedia told me: "The river was named after the surveyor Henry **Mortlock** Ommanney in the 1830s. Ommanney was the first European to discover the river during an expedition through the area in 1835." Rising north-west of Quairading, this river is 91kms long.

MORTLOCK RIVER EAST & NORTH BRANCHES

by Wayne Clarke

THE MORTLOCK RIVER has a number of minor tributaries, with the river in Beth's article commonly referred to as the Mortlock River South Branch; it commences in the locality of Belmunging (247m elevation).

The tributaries are the Mortlock River East and North Branches, and Meenaar South Creek.

The Mortlock River East Branch starts below Livesay Crossing (225m), near Wyola east of Cunderdin.

The Mortlock River North Branch starts near Byberding Hill (at an elevation of 237m), not far from Wongan Hills; a number of brooks and creeks (including Gabbyquoiquoi Creek and Southern Brook) flow into the North Branch.

Meenaar South Creek, a small tributary of 6km, commences below Meenaar and the Great Eastern Highway (at an elevation of 215m).

They all converge in East Northam, becoming the one river as it enters the Goguljar Bilya - the Avon River - on the edge of the Northam townsite.

CASTOR OIL TREE IN PICTURES



Above: Young castor oil trees growing next to the Newcastle Bridge



Right: Albert Van De Lee attacking a castor oil tree near Newcastle Bridge, Toodyay

Photos: Beth Frayne

GOGULJAR BILYA EROSION IN PICTURES

by Greg Warburton



Top and bottom: Erosion near the John Masters Bird Hide

Photos: Greg Warburton



GOGULJAR BILYA EROSION IN PICTURES ... continued



Top and bottom: Views along the Bilya track of erosion

Photos: Greg Warburton



**Newsletter of the
Toodyay Fiends of the River (Inc.)**

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AVON RIVER**

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Toodyay & Districts
Community Bank Branch



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OUR SPONSORS

TOODYAY FRIENDS OF THE RIVER

FUNDING - 1999 to 2017

The TFOR have received grant funding of over \$177,000 from 1999 to 2017.

From 1999 to 2003, TFOR were the sponsor of the Avon *Ribbons of Blue* project. Funded by the Natural Heritage Trust it provided \$125,000 over the period for a regional coordinator.

The Seed Orchard Group attracted over \$9,000 in funding for projects, with the Community Depot composting facility being the major beneficiary.

The balance of the funding (over \$43,000) was for TFOR projects, including the Bilya Walk Track, Harper Brook revegetation, Avon River foreshore restoration, the picnic shelter at Millards Pool and our Works Trailer.

The TFOR, through these successful funding applications, has supported Toodyay businesses - and the region - since incorporation.

The members of the Toodyay Friends of the River would like to acknowledge the continuous support of our sponsors:

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