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Newsletter of the Toodyay Friends of the River

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BILYA WALK TRACK TENTH ANNIVERSARY

We gratefully acknowledge the Ballardong, Yued and Whadjuk Peoples as the traditional custodians of this land and duly respect a deep and unbroken connection to their cultural, physical and spiritual existence. We pay respect to their Elders, both past and present, and emerging.

President's message by Jennifer White

An unexpected invitation from the Shire to have a presence at the recent International Food Festival on the Avon Descent weekend saw Toodyay Friends of the River (TFOR) sharing a mini-arcade of marquees, which included Julimar Conservation And Forest Alliance (JCAFA), and Toodyay Historical Society (THS). TFOR and JCAFA combined in a shared space to encourage passers-by to sign the petition for Julimar Forest to become a National Park. Our cause was reflected, literally, on the river surface, when, on the opposite side of the river, a large banner magically appeared proclaiming 'Julimar Forest For National Park'. Actually, it was our TFOR Project Officer, Greg Warburton, who had created and installed the banner which was readily visible to the many hundreds of people at the event.

In the TFOR / JCAFA marquee, passers-by were attracted to a beautiful display of the flora and (representations of) fauna to be found in the Julimar Forest. An extra attraction to our space was a wandering giant 'chuditch' animated by JCAFA's Max Howard. The theme of the TFOR display was 'Moods of the River' – a series of photos. There was also a map highlighting the enormity of the Avon River catchment area. We successfully gathered around 100 signatures to the petition, and some folk took cards away to share with friends about how to sign online.

Are you aware that the petition is now available online on the Government Website?

It was an altogether busy weekend for TFOR members: some members attended the Rally For Native Forests at Parliament House. The Sunday working group planted sedges along the Boyagerring Brook. The sedges were purchased from Boola Boonup (place of many trees) - formerly WA Farm Trees – and now operated by Noongar Land Enterprise Group. The Monday group surveyed any impact on the Toodyay river environs.

The recent cooler months have also been busy and productive ones. Since May, TFOR volunteers have been sorting and culling resources from the Department of Water; maps, historical records, posters and other 'treasures' from the Department's library of resources.

Have you seen displayed at the front of Drummond House the map showing the hundred-year flood-plain for Toodyay?

Seedlings raised by the Seed Orchard have been planted around the Pelham Brook Outlet and the area weeded and generally maintained.

Ten interpretive signs have been designed and made for installation along the sealed section of the Bilya Walk-track near Millard's Pool. These will provide information of the flora and fauna, revegetation work, and the significance of the area. The project has been supported by a grant from the Wheatbelt NRM and the Shire of Toodyay.

We raised over \$700 at our June raffle from a wonderful set of 'frog-themed' prizes donated by artist, Mary Woodward. A second great outcome of the raffle was that we welcomed some new members to TFOR.

In another encouraging development this year, TFOR's application to join the Conservation Council has been successful!

The most recent of several submissions TFOR has made this year is to the Environment Protection Authority (EPA) lobbying for a full public Environment Review of Alcoa's latest Mining and Management Plan.

Cover Avon Descent power boat competitor passes the 'Campaign Banner' in Toodyay. Photo: Greg Warburton

President's message... cont.

What's coming up?

Activities for the September working bee will be announced by email and on the Drummond House notice board.

In October, TFOR will once again have a presence at the Toodyay Show.

And we encourage all TFOR members to attend our celebration breakfast and AGM/Planning Day on the morning of Saturday November 18th. Details by email and Drummond House notice board.

As always, a huge thanks to all TFOR members for the various ways in which you contribute to the care of the precious river and environs.



Above: Parliament House Rally on the steps of Parliament House on 12th August 2021

Photo courtesy Donna Chapman, Wafa



Left: The On-line petition - scan this QR Code for access direct to the Petition.

JCAFA at Parliament House Rally (gathering signatures)



Above and below: Posing with the brush-tailed possum are from left - Lynn Phillips, Liz Kingston & Vicki Warburton (with Liz showing the colours (below)). Photos courtesy Donna Chapman, Wafa



Tenth Anniversary of the Bilya Walk Track and the John Masters Bird Hide

by Desrae Clarke

THE *Bilya Walk Track*, (a project of the Toodyay Friends of the River) together with the Toodyay Naturalists' Club TNC *John Masters Bird Hide* were officially opened ten years ago this month

The track, funded by Lotterywest through the Department of Sport and Recreation, is 5.6km in length, and connects Duidgee Park in the west and Nardie Cemetery in the east. It follows the river closely all the way from behind the township through Lloyd Reserve, going under both Newcastle and Connor bridges; the Bird Hide was funded through a Wheatbelt Natural Resource Management Grant.

The Shire of Toodyay President, Cr Kevin Hogg, officially opened the walk track and the bird hide on 10th August 2013.



Above, from left: Toodyay Friends of the River President Greg Warburton, Toodyay Naturalists Club President Desraé Clarke and Shire of Toodyay President Kevin Hogg at the opening ceremony.

Photo: Wayne Clarke

On the day, guests arriving for the launch were greeted by a light shower of rain, followed by some lovely sunshine. In the corner of the bird hide, Toodyay Friends of the River Patron Viv Read, accompanied by member Rebecca Megan-Lowe, sang a bracket of appropriate songs, including a beautiful rendition of 'Old Man River'.

A bus ferried guests from town to Lloyd Reserve where they gathered for the opening.

Others present at the opening were the Hon Paul Brown MLC, Shire of Toodyay CEO Stan Scott, the Toodyay Naturalists' Club Patron Neville Marchant, staff from the Department of Sport and Recreation and the Department of Water, WWF, Wheatbelt NRM, and the Toodyay & Districts Community Bank.

Julimar Conservation And Forest Alliance (JCAFA) Promotion, Avon Descent/International Food Festival



Above: The wonderful display of Julimar Forest's flora and fauna constructed by Elaine Hall and Max Howard made a great feature in the marquee generously provided by the Shire of Toodyay.

Left: Some of the fauna resting...

Max Chuditch (alias Max Howard), right, with his 'Minder' Elaine Hall.

Max was sweltering under the costume and finding it difficult to breath and almost impossible to see.

Congratulations to both for such dedication in promoting the Alliance.

Photos: Bridget Leggett

Julimar Conservation And Forest Alliance (JCAFA) Promotion, Avon Descent/International Food Festival



Above: Some children were happy to pose with Max Chuditch. Max's minder Elaine (second left) looks on

Photo: Greg Warburton

Below: Desraé Clarke (in white) on the signature hunt, using Max Chuditch as a drawcard.

Photo: Wayne Clarke



Avon River Pools

Introduction by Wayne Clarke

OVER the years an enormous amount of data has been gathered on the Avon River.

The Avon River Management Authority was formed in 1993 and I was nominated by the Toodyay Land Conservation District Committee ((LCDC) in April 1993 and was appointed by the Minister for the Environment (Kevin Minson MLA) in November 1993 and re-appointed a number of times until all Management Authorities were dissolved in 2002 - our Patron Viv Read was the Regional Manager in 1993

I have retained some of the papers and reports presented to the Authority (some may call me a hoarder) and find these of tremendous interest to TFOR today.

Pools that were in the Avon River (Extracts Factory to Moondyne)

By Colin Liddle, per favour S. Sinclair [Sydney 'Spec' Sinclair, TFOR Inaugural Patron].

MILLARDS (Toodyay Swimming Pool); LLOYDS (In the old days); RED BANK;
WOODS; LITTLE KIRK; BIG KIRK; GEARIES; GREEDIES; SALT ; DEMASSONS (At
Keysham); BULLS (At Avondale); HASSONS; McKNIGHTS; MATHEWS;
OLD BARRACK (Below West Toodyay Oval gathering place for locals):
SCHOOL (Where West Toodyay school kids swam); WEATHERALL: DEEPDALE (Below
Deepdale Homestead); DAVIES (Opposite Folewood – River Road junction); ROCK
POOL; CROOKED POOL; JUMPERDINE (Jimperding Brook flows into the river);
STRAHANS; MARKEYS; LONG POOL (At Leatherhead); DUCK; COBBLER
(Overnight camp Avon Descent); GRANDFATHER; ROCKY (Near where Morangup
Brook flows into the river); CUT THROAT (Near Western Quarries); TRAP (Julimar Brook
flows into the river); WHIRL; DELANEY MARE; MIDDLE STATION; BALD HILL;
EMU SPRING BROOK; RED GUM SPRING (HORSE) MOONDYNE (Red Swamp
Brook runs into the river)

Colin Liddle, Sunday 5 March 1995

[Colin Liddle came from Bassendean, and started his working career as a cadet in Buka Patrol Post, Territory of Papua New Guinea; he served his Cadetship there until 1951. He then went to the Australian School Of Pacific Administration (ASOPA) at Middle Head (on the Mosman Peninsular, Sydney) on a two year Course which he passed without repeating exams. He married Eileen Nestor and they were stationed in Finschafen (east of Lae) until October 1953 when Colin was transferred to Rabaul to begin his career in the Local Government Training Centre at Vunadadir, about 28 kilometres from Rabaul. He had been a District Commissioner in Buka Passage, eventually being posted to Port Moresby where in November 1974 he became Town Clerk. After Independence in 1975, he resigned and returned to Australia.

In 1976 Colin became the inaugural CEO of the WA Waterways Commission and Swan River Management Authority, retiring to Toodyay in the 1990s.

[Colin was a member of the Steering Group formed to develop the Toodyay section of the River Recovery Plans (Section 3 Report No. RRP 1 February 1999). He was a member of TFOR before Incorporation, and like Wayne Clarke, Colin was an inaugural member of the Avon River Management Authority.]

Information provided by Colin, and from the Papua New Guinea Post Courier (Port Moresby: 1969 - 1981)/Trove.

Avon River Pool Survey 1996

Some history from the Avon River Management Authority Avon River Survey 1996 Volume 5 Avon River Pool Survey January 1997

Summary

1. The Avon River pools are believed to have formed where a geological control narrows the river channel such that in extreme floods the flow velocity is greater through the pool than in the channel leading to pool deepening. Between extreme floods (i.e. for most of the time) the pool water velocity is less than the channel velocity and hence sedimentation occurs in the pools.
2. The clearing of the Avon catchment for agriculture will have resulted in higher flows in the river, perhaps by a factor of 2 or 4, compared with the pre clearing conditions. This will have increased erosion rates within the river channel and probably deposition rates within the pools.
3. The Avon River training scheme (RTS) involved de-snagging and cleaning away of vegetation in the channel but not the pools, as water depth precludes vegetation establishment. The natural river pools are filling with sediment largely due to the RTS rather than agricultural land erosion although increased flow from agricultural catchment clearing may be a factor. The rate of fill along the river channel is fairly proportional to distance suggesting a fairly constant erosion rate from the channel bed. The large volumes of pool which still occur at Robins, Gwambygine, Wilberforce, Glen Avon, Millards and Long Pools probably result from a large prior pool volume rather than reduced erosion rates.
4. Whereas the effects of the RTS in terms of mobility of sediment were fairly immediate there is a considerable time lag between the clearing of the catchment and increased flow rates in the Avon River, particularly as water tables rise throughout the catchment hence the prognosis for the rate of future pool filling is difficult to assess and best estimate is probably to assume that it will continue at the previous rate so that all pools will probably be filled by the middle of next century (i.e. 2050).
5. Stabilisation of the river channel between pools is difficult to achieve as the bed is so mobile and saline (see Avon River Channel Survey Report in preparation) so that establishment of vegetation is difficult.
6. Bed sediment total phosphorus (TP) exceeds by a factor of over 100 the water column TP which is typical for wetlands on the Swan Coastal Plain also.
7. Phosphorus in bed sediments is probably readily immobilised during winter flows and possibly during seiching (a seiche is a standing wave in an enclosed or partially enclosed body of water) of the pools during summer hence any attempt to improve the water quality of the pools must take into account the huge store of TP in the bed sediments.
8. Eutrophication is a real threat to the Avon River Pools. Glen Avon and Gwambygine Pools in particular show very high levels of TP, which may be considered hypertrophic. Others pools such as Robins, Tipperary, Millard and Cobblers Pools also show high levels of TP, and would be classified as eutrophic. Mears 5 Mile, Mackie, Northam and Katrine Pools also have TP levels which put them in the eutrophic category.
9. A number of pools on the Avon appear to have already filled with sediment. These include Mt Hardy / Cold Harbour Pools, 3 Mile Pool, Muresk Pool, Burlong Pool, Egoline Pool and Deepdale Pool. There are also a number of pools which appear to be almost filled. These include Beverley Pool, Speldhurst Pool, Brouns Pool, Fleays Pool, Tipperary Pool, Katrine Pool and Diving Pool. Robins Pool, Gwambygine Pool, York Pool, Mears 5 Mile Pool, Mackie Pool, Northam Pool and Millard Pool show signs that there is sedimentation taking place within the pool..

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EDITOR'S NOTE: How true is the prediction at the end of point 5 - within 27 years that prophesy will materialise unless the river has a major flood event that will move the sediment into the Swan Coastal Plain and Swan River Estuary.

From the past...



Above: *The 2006 AGM in the Pelham Reserve Picnic Area.*

Back (left to right): Beth and Bob Frayne, Richards Brouwer, Frank Turnbull, Frank Carr

From far left John Pyle (seated), Brian Shepherd (standing), Richard and Robyn Taylor, Gaven Donegan (facing), Greg Warburton, Christeen Donegan, Val and Neville Tanner. (Missing from photo is Desraé Clarke)

Photo: Wayne Clarke

JCAFA Report

by Bridget Leggett

Forty years of promises and still no protection: that's the headline message that the Julimar Conservation and Forest Alliance (JCAFA) is using in its campaign to have the Julimar Forest reclassified as a National Park. Sadly it's true: unfulfilled commitments by successive governments date back to 1983. In 2000, both Houses of the WA Parliament recognised its value and recommended a Julimar Conservation Park be created, and around that time CALM (the Department of Conservation and Land Management) erected roadside signs proclaiming the Julimar Conservation Park – but that is a misnomer. The protection was never formalised and the status was never granted. Julimar State Forest is the official classification.

The campaign for reclassification to National Park status is gaining momentum, and our petition to Government is now open for signature on the Government's website – the shortcut to this is www.bit.ly/julimar-petition Or there is a link on the JCAFA website: <https://julimarcafa.org.au/about-the-alliance/>

August has been a particularly busy month. Three of our members attended the Rally for Native Forests, organised by the WA Forest Alliance to coincide with rallies nationwide. JCAFA members made fellow protestors aware of the vulnerability of Julimar Forest and collected signatures for the petition while they were there.

On the same day, JCAFA had a presence at the Avon Descent / Toodyay International Food Festival, sharing marquee space with the Toodyay Friends of the River Inc. A human-sized Chuditch drew attention to the plight of endangered and critically endangered species in the forest and there was a display featuring a range of the animals and plants found in the forest.

Across the Avon river from the marquee, the message 'Julimar Forest for National Park' was clear for all to see, emblazoned on a banner strung between trees in 'Frayne Park'. There has been a bit of speculation as to how it got there, and whither it went – I wonder whether we will see it again?

Also in August, JCAFA members and friends and enthusiasts from the West Australian Fungi Facebook page held a Julimar Fungi Foray in a different part of the park. They were able to photograph and document at least 30 species of fungi.

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JCAFA Report ... cont.

A few days later, a group from the Perth Bush Walkers Club spent the day in Julimar Forest near Flat Rocks Gully. As well as enjoying the walking, they kept a look out for fungi, and photographed around 20 species. It will be interesting to see how much overlap there is.

It is one thing to read and write about the biodiversity of the area, but quite another to experience it first-hand. I have been on two walks with the Perth 'Bushies' in Julimar Forest this year, one on the western edge and the other in the north-eastern part. On each occasion we have been thrilled to come across a clutch of emu eggs – nine eggs each time. I found it amazing how exposed the nests are – I guess 'Hemu' must do a good job protecting the eggs from potential predators. But I can't think that he is a match for the feral pigs which abound.

This is the sort of experience that makes all the campaign work feel worthwhile!



Above: Emu eggs obvious in the Julimar Forest. Below: Two Fungi from Julimar Forest Photos: Bridget Leggett



**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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**Visit our website at
www.toodyayfor.org.au**

The Back Page

River-talk: Understanding the terminology HALOTOLERANCE¹

With the increased salinity in the Avon River over past decades many species of flora and fauna that inhabit the river have needed to adapt to huge changes in salinity levels. They have become 'Halotolerant'.

Halotolerance is the adaptation of living organisms to conditions of high salinity (for instance halophytes are salt tolerant plants). Two of the endemic fresh water fish species that inhabit the Northam Town Pool have been able to adapt - they are the 'Nightfish' (*Bostokia porosa*) and the 'Western Minnow' (*Galaxias occidentalis*) (along with two species of Estuarine fish and two introduced species).

There is a good chance that these fish species will also be found in the pools in Toodyay (e.g. Red Banks, Millards Pool).

BENTHIC²

Relating to the bottom of a body of water or to the animals and plants that live there (this is the region in which the Swan River Cobbler (*of Cobbler's Pool fame*) lived out much of its life, feeding and breeding there).

Source: ¹Wikipedia ²DPIRD - Department of Fisheries

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