

March 2008



Biddip

Newsletter of the Toodyay Friends of the River



BIDDIP Volume 3, Issue 2

2008 IS A CELEBRATORY YEAR FOR THE TOODYAY FRIENDS OF THE RIVER!!!

It was in February 1998, following four years of preliminary consultation with the Avon River Management Authority (ARMA) and the Water and Rivers Commission, that a group of thirty people, of all ages, came together to begin the conservation of the Toodyay section of the Avon River. In August of that year, the objects were developed and the Group approved a constitution; the Department of Fair Trading accepted the Constitution on September 18th 1998.

As with most early inland settlements, Toodyay town was built along the Avon River; farms were also established along the waterway and her tributaries – the River was the lifeblood of the early settlers.

*Congratulations are extended to those visionary folk whose enthusiasm and dedication believed in the conservation of the River – ten years of **caring!!!*** Editor: Desrae Clarke

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The Friends of the River wish to acknowledge the Department of Water for on-going support in printing our newsletter

(NB: All references to the 'River' will refer to the 'Avon River' unless otherwise stated.)

I was born in Northam, the eldest of seven children, and moved with my Parents to the Cobbler Pool homestead when I was six months of age. The homestead was situated 200 metres from the River and 50 metres from the Cobbler Pool Brook so the waters of the Avon, and its tributaries, were my playgrounds from a very early age.

With my brothers, sisters and neighbouring kids we played, swam, fished for cobbler and enjoyed our homemade canoes on the River and in the beautiful deep pools. We also had great family picnics on the banks of the River. Dad had his favourite fishing spots and he would tell absolutely no one where these were. He would take friends fishing *but not to his best spots!*

For my first year of school Dad took me on the back of his horse to meet the school bus at the junction of Harders Chitty Road and Markey's Road; I would board in Toodyay till the end of the week. The school bus would take me from the school to the corner of River Road and Folewood Road where Mum would collect me to spend the weekend at home.

The River waters regularly rose quite high but the worst flood I can remember was in 1955 when seven inches of rain fell in the February. The waters covered many sections of River Road and cut off the farmers in that area for six weeks. The Families ran out of food so Spec Sinclair, Dad and myself rode our horses through the floodwaters to get stores in Toodyay.

Following this devastating flood, councils of the towns along the River, Brookton, Beverly, York, Northam and Toodyay were urging the Public Works Department (PWD) to 'de-snap' the River to make it deeper and faster to, theoretically, get rid of the floodwaters. Mr Jim Masters, a farmer at 'Glen Avon' (an old farming property on the Northam/Toodyay Road) and situated on the River, spoke strongly against the proposal saying that its balance would be broken; this would cause big problems. However, the proposal became a reality with bulldozers widening the River from one to three chains from the centre, removal of large gums and rocks and deepening of its bed; the debris was left beside the River to be burnt.

In the years following the initial 'training', high waters brought the unburnt timber down the River and in 1958-59 the old West Toodyay Bridge was in danger of being destroyed by the debris as the water rose over the decking. Farmers and Toodyay Shire workers took long poles to try to push the logs and trees beneath the bridge. When that failed they brought power saws to cut through the bridge railing to save the bridge. Fortunately, the floodwaters began to recede and the saws were not needed. As I see it now, we have lost practically all our pools as they fill with sand as far as the Avon Valley National Park. Long Pool, formerly 1.2 kilometres long and very deep, will be gone in approximately two years. The Toodyay Friends of the River have been monitoring the River and have noted fine sand passing into the Swan. Sand has been moving into the Swan River for the past five years!

The wildlife has suffered with the loss of the pools. Birds are moving up and down the River to feed in any water they can find. The cobblers have been lost, as they

Gaven's Story (cont'd)

have no breeding grounds or feeding areas. The turtle was once prolific but they are now observed moving across paddocks to brooks and farm dams. With this migration to feed and breed the foxes have taken their toll.

When I was fifteen my brother and I met several people who had used an aluminium dinghy to travel from Northam to Cobbler's Pool to camp overnight. They told us that they wanted to travel right down the River and asked us what we knew about it. We told them that there were some rough and tough sections further downstream from Cobbler's Pool. We rode our horses with them as far as Middle Station (Emu Falls, as known by the Avon Descent Committee). It was a very tough ride and we had to tell them when they were coming to difficult areas of the River.

This trip downstream fuelled the interest and development, in 1973, of the Avon Descent, an event that is now recognised worldwide. The River waters have been very low since 2000. There were heavy rains in the 40's, 50's and 60's, a drop-off from the 70's but it is my prediction that we are due for big rains!

Bushfires along the River are usually started by lightning strikes in the Avon Valley National Park or by harvesters in the farming areas. It is extremely difficult to fight the fires in the River areas with the difficulties added to by the action of the sea breeze and the easterly winds. Regrowth of the vegetation along the River, following fires, is extremely slow with it taking up to five years to show significant regrowth.

Unfortunately, the original meandering, picturesque River has been destroyed by the River Training Scheme! The Toodyay Friends of the River have been working very hard to alert the government to the plight of the River— the sand has been moving from the Avon into the Swan for the past five years as a result of the 'Training of the River' in the 1950's and the 1970's – *as was predicted by the 'old Man of the River, Mr Jim Masters!'*

The Toodyay Friends of the River are confident that the plight of the Avon is recognised by the various government bodies and that remedial action will be taken in the near future.



Above: Gaven Donegan observing sediment at the commencement of Long Pool.



Left and above: Views of Long Pool sediments.

Patron's Message

The Avon River has altered considerably since the time of European settlement. Stream flow is faster, coarse sediments are filling river pools, water quality is high in nutrients and salinity, weeds dominate understorey vegetation, rising groundwater is changing the over-storey and adjacent vegetation has been significantly fragmented by clearing for agriculture. Local communities along the Avon have witnessed this change and have responded by mobilising action to retain or restore some of the ecological and social values of the natural river system.

The community of Toodyay knows the Avon River well. Active community involvement in river management draws from the 1980's when the magnitude of change was fully recognised.

The *Toodyay Friends of the River* has formulated and evolved effective processes for community river management action. In doing so it has crafted a volunteer group-based model that is relevant to the Avon and really gets things done. Their well-known secrets to success are in being well organised, valuing contributions, and having fun!

The group adopts all the ingredients required to be effective. It raises awareness through displays, encourages participation through field activities, educates and communicates through this newsletter and public extension courses, develops capacity through training and provision of a tools trailer, forms partnership working arrangements especially with the Department of Water in Northam, is activist through the mass media about key management issues, and not least, celebrates success.

The *Toodyay Friends of the River* deserves robust congratulation to have achieved 10 years of effective involvement in river management. Significantly, it is continuing from strength to strength building on the foundations set in the early years. Congratulations to past and current members for ongoing honourable and enjoyable achievements. I am proud to be involved.

Viv Read
Patron

Reinstating a Cyclone Destroyed Riffle

In the last 'Biddup' newsletter, November 2006, Neville and I asked, "What do we do next along the banks of the Toodyay Brook at the confluence of the Avon River"? (Cyclone Clare had destroyed the existing riffle in February 2006).

We decided that, for the time being, we would keep on planting riparian vegetation, as there was not a lot more we could do at that time. In mid 2007 the Department of Water, Northam, asked our permission to hold a 'Rivercare Workshop' at our property on November 24th 2007 with the main items on the agenda being:

Practical riffle building

Hands-on river model demonstration.

Naturally, we said "Of course!"

Saturday November 24th turned out to be a stinking hot day of 41°C!!! However the maximum number of participants allowed turned up in their working clothes, carrying and dumping rocks into place in the Brook. Gradually, our riffle across the Brook began to take shape until it was nearly finished but we ran out of time; it was completed by the Green Corp about one week later. Various 'hands-on' experiments were tried on the river model to find the best solution for 'river bank' stabilisation – *it was great, serious fun!*

Shortly after the riffle was completed by Green Corp, heavy rainfall was experienced which rapidly raised the water level in the Brook. We are pleased to report that the riffle did its job magnificently by directing the water flow through the middle of the Brook thus avoiding erosion of the embankments.

This goes to show that with the community and departments working together, the environment can only improve.

Val and Neville Tanner



Left: Riffle demonstration model at the Tanner's.



Above: Building the riffle on Toodyay Brook at Val and Neville Tanner's November 2007.

Snapshots over 1998



Above: Gaven Donegan giving an outline of the morning's work at the first 'busy-bee' February 22nd 1998.



Above: Michael Ferguson, representing his family company, Vernice, handing TFOR President, Wayne Clarke, a cheque as a major financial sponsor to the Friends.



Above: The feral plant, Bridal Creeper, stifling the native vegetation on the River foreshore.



Above: A dense thicket of 'false bamboo'. This thicket required removal by a backhoe then tidying of the small roots to prevent regeneration - a long tedious and strenuous task.



Above: The hot work continues! Age was no barrier as youngsters joined with their parents and grandparents in helping on the day.

Both Bridal Creeper and Tamarisk are now declared 'Weeds of National Significance'. As such, they are attracting significant research into control methods. Bridal Creeper rust fungus has been released by CSIRO in Toodyay as a biological control mechanism. The Friends have been involved with this project.



Above: The tamarisk was a significant feature on the foreshore of the Avon River as was the yellow-flowered Soursob, especially through the township area.

Continuing snapshots



Above: ARMA Chairperson, Doug Morgan, at the launch of the River Recovery Plan for Section 3 of the Avon River February 21st 1999.



Above: The Avon in flood in mid-January 2000 following a cyclone. This was a one in fifteen year flood event.



Left: Children from the Toodyay District High School (TDHS) participating in the Ribbons of Blue programme. They are photographed just up-river from the school bridge.



Above: Children from TDHS enjoying a learning session with the Ribbons of Blue Co-ordinator at West Toodyay.



Left: TDSH students at Boyagering Brook confluence sampling the water quality as part of a Ribbons of Blue excursion.



Right: TFOR members proudly showing off their work trailer at the Toodyay Agricultural Show, October 14th 2006.

Above: A Water and Rivers Commission contractor undertaking repairs on the Extracts Weir. This work was to stabilise rock movement- this demonstrates the power of water flow.



The Avon: Faunal and other notes on a dying river in South-Western Western Australia

By George W. Kendrick

Part Three of a Series

(b) *The Avon turns salt (cont).*

By 1932, it appears that salinity in the Avon at Northam had increased considerably over the preceding 30 years. An analysis by the Railway Department in August of that year showed 1,278 p.p.m. (90gr/gal.) [2,338uS/cm] of "salt", a concentration more than double the accepted maximum for locomotive water. By contrast, the streams flowing into Burlong Dam at the same time averaged only 71 p.p.m. (5gr/gal.) [130uS/cm] of "salt".

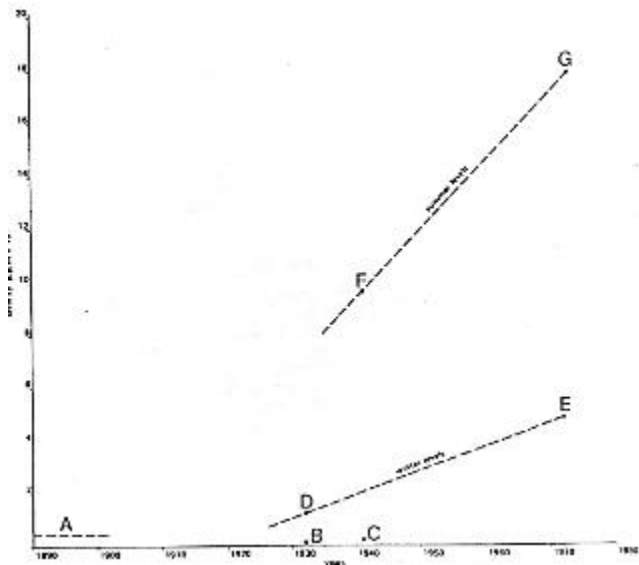


Figure 9. – Salinity levels (sodium chloride) in the Avon River and Burlong Railway Dam, Northam, 1890-1973. **A** maximum acceptable level for locomotive boiler water (Simpson, 1928) **B** Burlong railway dam, August 1932 (winter). Source W.A.G.R. **C** Burlong railway dam, January 1941 (summer). Source W.A.G.R. **D** Burlong Pool, August 1932. Source W.A.G.R. **E** Avon R. above Mortlock confluence, August 1972 (winter). Source P.W.D. **F** Burlong Pool, January 1941. Source W.A.G.R. **G** Avon R. above Mortlock confluence, April 1973 (autumn). Source P.W.D.

Older water drawn from the bottom of the dam carried 162 p.p.m. (11.4gr/gal.) [296uS/cm]. These tests were repeated by the Department in January 1941; Burlong Pool water then contained 9,734 p.p.m. (685.5gr/gal.) [17,805uS/cm] of "alkaline chlorides" and drew the comment from the analyst that "This water is quite unsuitable even for boiler washout purposes". Again, by contrast, Burlong Dam water sampled a few weeks earlier contained only 256 p.p.m. (18.04gr/gal.) [468uS/cm] of "alkaline chlorides" (Mr. H. Groom, personal communication, May 1973).

These data, from Railway Department records, point rapidly diverging salinity levels over the decade 1932-1941 between Burlong Dam and Burlong Pool. The low concentration from the dam on these two occasions lend credence to the subjective impressions of James (ibid.) on the purity of water from the Avon's western tributaries in the 1890's.

Concentrations of sodium chloride in Avon water at Northam

(from a site above the Mortlock confluence and presumably comparable with Burlong Pool water) determined by the Public Works Department for the period November 1971 to May 1973 range from 4,850 p.p.m. (328gr/gal.) [8,519uS/cm] in August 1972 to a maximum of 17,800 p.p.m. (1,254gr/gal.) [32,571uS/cm] in April 1973. A combined graph of the abovementioned salinity data from governmental sources in Fig. 9 suggests the rate and timing of change in the composition of Avon water at Northam since the turn of the century. A substantial transformation had evidently set in by 1941 and a large part of this probably occurred during the preceding decade.

On the timing of these events, some observations of Mr. Masters may provide further evidence. He has noted that from 1935-1944 no major flood from the eastern wheatbelt lake system entered the Avon, the floods of 1939 and 1943 originating in the relatively fresh western watershed. The major floods of 1945 and 1946 were the first occasion for over 10 years, when the wheatbelt lakes overflowed, discharging a large quantity of salt accumulated there in the wake of the post-1920 agricultural development of the region. Hydrologic and other deterioration of the Avon was intensified as a result of these two floods (pers. Comm., Dec. 1975).

Mr Masters has kindly made available some data (Fig. 10) on salinity of river water near his property. He writes: "Water salinities in the major pools between 1930 and 1944, at least between Northam and Toodyay, ranged between about 1420 and 3550 p.p.m. (100 and 250gr/gal.) [6,493uS/cm] total salts during the course of each year. Since about 1950, this pool at "Glen Avon", at least, has a range of salinity of about 2,840 p.p.m. (200gr/gal.) [5,195uS/cm] in flood to as high as 12,780 p.p.m. (900gr/gal.) [23,377uS/cm] at the end of a long dry summer, and the higher figure is usually reached in years when lakes from the inland wheatbelt have overflowed strongly into the spring months. This year (March 1973), without any inflow from the eastern lake system, the salt content at the moment is approximately 6,390 p.p.m. (450gr/gal) [11,688uS/cm] and this is the usual characteristic of this pool in drier years without runoff from the eastern watershed".

The "Glen Avon" data are similar to those from Northam and indicate a direct cause and effect relationship between rising salinities and the observed changes in aquatic life along the Avon over the past half century. There is no evidence that this increasing rate of salt discharge has yet peaked. The continued presence of abundant *Plotiopsis* and *Potamopyrgus* in the lower Avon below Toodyay suggests that fresh water received from tributaries and seepage in the Darling Range provides some protection for these species in that part of the system. A salinity profile similar to that reported for the Blackwood River by Morrissey (1974) evidently exists within the Avon.

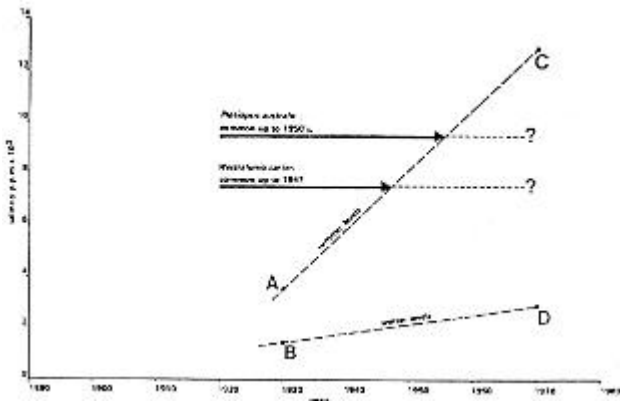


Figure 10. – Approximate range of salinity levels (“total salts”) in Glen Avon Pool, between Northam and Toodyay, 1930-1979. A-C dry season levels, B-D wet season levels. Onset of crises affecting 2 species of molluscs shown by arrows.

(c) Livestock Pollution

Contamination of ground and surface water by animal wastes is an acknowledged pollution hazard in some parts of the world, notably North America, where intensive livestock farming is widespread, but has received little attention in Australia to date (Boughton, 1970). The havoc which it can inflict on aquatic life under certain conditions is shown by some recent experiences along the Avon.

Early in February 1971, a tropical cyclone brought heavy local rain to the Toodyay district, a good deal of which ran quickly off the dry paddocks and into the Avon. Much organic material, including animal waste, was washed into the pools. About a week later, the press reported that an estimated 1,000 fish, mostly Cobblers, and some Jilgies had been found dead in Red-bank Pool. This was attributed to oxygen depletion of the water and presumably eutrophication (*The West Australian*, 9th February, 1971p. 5).

A similar sequence of events, probably in the wake of the same cyclone, was observed by Mr. V. Thorbjornsen of Northam. Here, heavy rain on adjacent dry paddocks washed a large quantity of organic material into Burlong Pool so as to virtually blanket the surface with a floating mass, mainly sheep manure. The water turned dark and smelly and dead fish appeared along the banks (personal communication, April 1973).

At the beginning of April 1973, accompanied by Messers. A. Oliver and C. Bennett of Beverley, I visited a section of the Dale River near Mile and Reserve Pools, SSW of Beverley. No rain had fallen in the district for some time but nevertheless a small flow of clean, slightly brackish but potable water was moving through Reserve Pool. This probably originated in springs located upstream near Spring Pool. Fish and other fauna were evident in the pool, though no molluscs were seen. One week later a thunderstorm brought the first autumn rains to the district, with heavy local showers.

On a return visit one week after the rain and two weeks after my first visit, I found the same stretch of river grossly polluted. The water was dark brown and smelt strongly of animal waste, evidently sheep manure. Between Reserve and Spring Pools the banks were strewn with dead and apparently dying Nightfish

(*Bostockia porosa*) and Pigmy Perch (*Edelia vittata*). A Jilgie, without chelae, presumably as a result of stress, was taken from the water. At Mile Pool, vast numbers of dead and dying shrimps (*Palaemonetes australis*) littered the banks. Others were swimming erratically on the surface at the water's edge, some leaping to join those on the banks. Presumably this behaviour was in response to the fouled condition of the water.

These three episodes, involving catastrophic destruction of fauna, point to a second major threat to the biota of the Avon, or that part of it that has been able to tolerate prevailing salinities. The observations cited relate only to small sections of the river system but the ingredients are ubiquitous and it is reasonable to believe that such events now occur regularly along much of the Avon and tributaries during the summer-autumn months. This is the time of the year when the fauna would probably be under greatest stress from the effect of raised salinities.

Since the 1830s, the Avon pools have been used for the watering of livestock, particularly in the dry season, and in earlier periods of low stock density and salinity little if any harm would have been done to the aquatic environment and biota. Over the last 30 years, however, since the introduction of subterranean clover and other innovations, the sheep population of the Avon district has risen about three-fold (Bureau of Statistics data) and no doubt total stock density on the river and adjoining land has increased substantially over this period. No figures are available, but the quantity of animal waste deposited during a dry season in the main and tributary channels and adjacent land must be considerable. The sudden reactivation of this material by summer or autumn rains can lead to crises of deoxygenation and eutrophication in the pools, which are the dry season refuges for the fauna.

The traditional practice of permitting livestock generous access to the pools, channel and banks of the Avon and its tributaries, initiated in a bygone age of low stock densities and relatively fresh water, should now be reappraised in the light of its apparent and significant contribution to the advanced degradation of the river environment.

It is conceded that the above comments are largely intuitive and lack the authority that would derive from a series of more representative, controlled observations; however their relevance to the overall problem of the ecologic stability of the Avon is undeniable. The uncertainties that exist in relation to this question only emphasise the fact that no authoritative investigation into the combined effect of increased salinity and animal waste pollution on river biota's has ever been undertaken in Western Australia. Other potential sources of river pollution, less amenable to direct observation, including chemical fertilizers used to excess, weedicides and pesticides, but nothing is known of their presence in the Avon and effects, if any, on the biota.

This article will be continued in the next edition of 'Biddip'. There are more very interesting facts about our river to follow, including "A River of Sand", and "Wanted: A new approach".

One of the contributors to the article was the late Jim Masters, a foundation member of the 'Friends'.

The original WA Naturalist Journal with this article is still available from the WA Naturalists Club. Email address for the Club is:

Ten Years On.....

In 1996 after much thought, my wife and I found ourselves wending our way from the Metro area to live in Toodyay on a 1/2 acre block, which was spoken about at that time—as on the edge of town!

With all the intensity of settling in, beginning a garden and continuing my work with the W. A. Agriculture Department and travelling by train to and from, I learnt of an interesting community voluntary group 'The Friends of the River'.

Making enquiries, I learnt that the fundamental aim of this enthusiastic group was to improve the health of the 'Avon river' and surrounds within the precincts of Toodyay Having grown up in a village on the banks of a very large river system in Holland, I made the decision to join the group. Hearing all my enthusiasm, within 12 months my wife became a member also.

From thence, began our walks of exploration along a not very clear path down the river from Newcastle bridge to the 'Avon Banks' caravan park.

What did we find?

Much plant growth that shouldn't be there, such as:- the dreaded Bridal Creeper, Tamarisks, Castor Oil plants, Sour Sop, False Bamboo and to us other unknown species.

Looking to the river, we noted eroded banks and large deposits of sand midstream. On the positive, birdlife is to be seen in this area - , such as White Egrets, Blue Cranes, Mountain and Brown Ducks and an occasional Pelican . There are also some signs of marine life i.e. Crustaceans and Tadpoles.

The canopy of the Melaleucas on shore creates shade for walkers and birdlife alike. We see Red Cap Robins, Honey Eaters, Rufus Whistlers and Silvereyes.

Ten years on, and many 'Sunday working bees' later with T. F of R., we can now say there is much less of the aforementioned weed infestation. Only twice in these years of walking this path, has flooding stopped us in our tracks! We occasionally meet up with tourists from the caravan park and some are critical of this "PATH", so we dream of the day that this path is more enjoyable for the walkers, bike riders, and pram pushers.

THEONE AND JOHN PYLE

Department of Water ongoing support...

Over the years the State waterways management agency has enjoyed a variety of titles – The Waterways Commission (WWC), The Water and Rivers Commission (WRC), The Department of Water and Catchment Protection (DEWCAP), Department of Environment (DoE) and currently, The Department of Water (DoW). To prevent confusion, I will utilize each of the titles according to the year of use of the particular title.

In 1994, our Patron, Viv Read (then the Regional Manager of the WWC) planted the seeds of forming a 'friends' group with Wayne Clarke, then a member of the Avon River Management Authority (ARMA). The Department, under any of the above titles, has been a tower of strength and support to the Toodyay Friends of the River since those seeds were sown.

The specific aim of the proposed group was to involve the community in the rehabilitation process of the River and its tributaries. Major parts of the process would be the removal of feral plants, the rehabilitation of the foreshores with endemic plantings and the removal of rubbish of every description. An inaugural meeting was held in Duidgee Park on Saturday 10th December 1994 - and the cleanup began.

Guidance from the Department was given with the establishment of a Regional Environment and Employment Plan for the Avon River through the Shire of Toodyay; it was completed in 1997. This was followed, in March 1998, by the Department erecting a comprehensive and very large, colourful sign in Duidgee Park inviting volunteers to join in River Recovery projects with the Toodyay Friends of the River (Friends).

Support was given to the group to incorporate, which they did on 18th September 1998, and the Water and Rivers Commission donated a computer to the Friends in February 1999; it was the beginning of a busy, but extremely exciting, year. February also saw the launching of the *River Recovery Plan* for Section 3 of the Avon River, with the Department taking financial care of the advertising and the eats following the 'launch'.

Provision of chemicals and loan equipment, including a 4WD motorbike, in May 1999 assisted the group to attack woody weeds along the River such as Tamarix.

3rd October 1999 saw negotiations for the donation of a parcel of river frontage land from the Lloyd family of Toodyay to the State of Western Australia. Negotiations then began for the WRC to accept vesting of the land, not an easy task when this was against current policy.

June 2000 saw the Department's acquisition of a community trailer, with all equipment, to aid in the destruction of all types of weed plants; this was loaned to

Department of Water ongoing support...

the Toodyay Friends of the River prior to them acquiring their own trailer.

In September 2000 a Shire of Toodyay 'Damming of the Avon River Committee' had been formed; a member of the Department attended to offer expert advice re the economics and environmental issues of the proposed venture. Talks also began between the Friends and the Water and Rivers Commission for the Friends to manage the land (later known as Lloyd Reserve) on behalf of the Commission.

An excellent Rivercare Workshop was held on 9th September 2000, fully funded and staffed by the Department. Participants were educated in the values of the riparian plants and assisted in the planting of sedges and rushes at the site. The day was well supported by local community members and thoroughly enjoyed by all participants.

On 31st May acceptance was taken of Lloyd's Park, now known as Lloyd's Reserve, by the Minister of the Environment and Heritage, Dr Judy Edwards, with vesting in the Department of Environment. Financial assistance was given for the catering and the hiring of the marquee and chairs on the day.

A second Rivercare Workshop on the Toodyay Brook was organised and staffed by the Department in November 2003 with an enthusiastic reception by the many participants.

Members of the Friends participated in the pre and post reviews of Avon Descent to maintain the conservation principles of the River in September 2004.

Liaison between the Toodyay Friends of the River and the University of WA for a *Winter Extension Course*, including a bus tour, during May 2006 resulted in an extremely interesting learning experience. The Department provided course notes and take-away bags with information and literature.

The Department of Water was very generous with assistance in November 2006 with the printing of the Friends' newsletter, the 'Biddup'.

In April 2007 materials were provided for an urgent project, before the onset of the winter rains, on Boyagerring Brook with the construction of a large riffle with two smaller riffles thirty metres upstream and downstream. The volunteers were also given a lovely lunch at the site.

Financial assistance was given with the restoration and maintenance of 'all weather' river crossings at Long Pool, Munnapin and Strahan crossings in April 2007. Further assistance was given with on-ground works at Weatherall Reserve and Cobblers Pool in June 2007, prior to the Avon Descent. The latter project was funded by an *Avon Descent Environmental Levy* as a result of liaison between Northam Avon Descent Association, the Department of Water and the Toodyay Friends of the River.

Department of Water ongoing support...

Part sponsorship was given in October 2007 to a weekend of Curtin University volunteer students to enjoy two days of learning. Among the participants were those completing various degrees pertaining to the environment with one lass from Malaysia thoroughly enjoying the experience of a weekend in the country.

A third very successful Rivercare Workshop was held 24th November 2007, once again, on the Toodyay Brook.

As a summary, the Toodyay Friends of the River acknowledge the ongoing support and assistance given the group by the Department of Water. This includes assistance with:

Funding applications

Displays at the annual Toodyay Agricultural Show

Waterways advice

Sandbag sedge trials

Cadastral mapping

Liaison on sediment issues

Development of a Fire Policy for the Toodyay townsite

Exploration of the cause of frequent fires in West Toodyay

Provision of colour signage of River Recovery Sections 1 and 2 at West Toodyay Bridge

Support and championing on-going representation of Toodyay Friends of the River members to the Avon Waterways Committee

Project and financial support that is backed by visits of Departmental staff to the Toodyay Friends of the River when possible.

The ongoing work and interest of a voluntary organisation, in such a long-term project as rehabilitation of the Toodyay section of the Avon River and its tributaries, could not continue without the continued support and interest from the staff of the Northam Regional office of the Department of Water. For this, the Toodyay

Toodyay Naturalists' Club turns forty years of age!!

The Members of the Toodyay Friends of the River extend their best wishes to the Toodyay Naturalists' Club who have reached the wonderful milestone of forty years since its inception in 1968.

The Friends look forward to continuing to work in cooperation with the Nats Club in furthering conservation of the unique flora and fauna, both terrestrial and aquatic, in the Shire of Toodyay.

Congratulations, Toodyay Nats!!!

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*"Make Friends with
our Avon River"*



Toodyay Friends of the River

The objects of the *Toodyay Friends of the River* are to *work towards the conservation and rehabilitation of the Avon River and its environs. In the bigger picture of natural resource management, we are committed to implementing the Avon River Management Program and its associated River Recovery Plans for each of the four sections of river that pass through Toodyay.*

Special thanks are extended to the Shire of Toodyay for the works attended at:

- *Weatherall Reserve*
- *West Toodyay Bridge parking area*
- *Removal of tamarisk in vicinity of Toodyay townsite*

History of the Toodyay Friends of the River project

Currently, the complete history of the Toodyay Friends of the River is being compiled in a chronological order. This begins from the time of the sewing of the first seeds of the idea in 1994. The Constitution was approved by the Department of Fair Trading on September 18th 1998; the history will also cover the first decade from that date. Some of the highlights of this exciting period include:

- 1994 Inaugural meeting in Duidgee Park
- 1997 Strategy developed to evolve to River Recovery Plans
- 1998 Feb. first busy-bee
- 2006 May Gaven Donegan hosted on ABC television
- 2006 July funding obtained to procure a custom-built work trailer

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

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