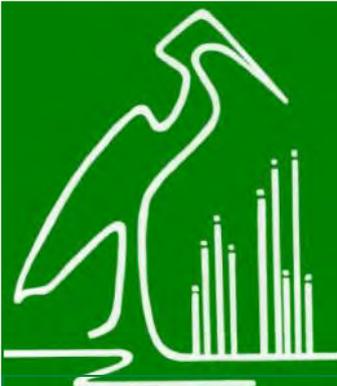


CRREPA NEWS

Newsletter of the Canning River Residents Environment Protection Association (Inc)

Editors: Stephen Johnston and Sue Stanley

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To see your CRREPA Newsletter in COLOUR view or download it from the SERCUL website.

www.sercul.org.au/crrepa

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Urban Forest Strategy strengthens the case for more trees on the foreshore

by Stephen Johnston

The Urban Forest Strategy, unanimously approved by Council on 19 November, is another endorsement by the City of Canning for planting considerably more trees along the Shelley-Rossmoyne foreshore – complementing a principal objective of the City's Local Biodiversity Strategy and key recommendations of the Shelley-Rossmoyne Foreshore Management Plan.

The central objective of the Urban Forest Strategy is to address the depauperate level of tree canopy cover in the City – 7.6 per cent, one of the lowest in Perth – and increase it by 22.3 per cent through the establishment of a net addition of 61,215 trees. That's a massively challenging target particularly considering:

- that being a net figure, to allow for mortality of new trees, the actual number that will have to be planted will be significantly more;
- that to achieve the target canopy level in 20 years the trees will have to be planted over the next 10 years; and
- that it is based on planting at least one tree on every road verge, but in 2015 it was estimated only 27.5% of verges within the City had a tree and in the absence of a change of City policy major improvements in that percentage will require an unlikely huge surge of owners' requests for verge trees.

The second and third factors place added importance for two main reasons on tree planting in the City's public open space (POS), which includes the foreshore :

- the City can determine - with some public consultation - what, when, where and how many trees it plants there and can therefore make, budget pending, significant headway towards its POS target in a relatively short time;
- there is a lot of POS across the City where many trees can be established
 - * without the special requirements and physical limitations of verge planting, and
 - * without impeding recreational activities, indeed enhancing the recreational experience by beautifying the POS, providing more shade and more habitat for birds and insects.

The goal for the POS is to increase canopy cover from 17.6% to 40% with an additional 35,500 trees. A significant number of these should be designated for the foreshore to fulfil the key revegetation recommendations of the management plan's strategy to maintain and enhance ecological linkages. These recommendations are common sense and look quite innocuous but their implementation may unfortunately be contentious with the antipathy of some residents to anything that might affect, in even the smallest way, their view of the river and the arrogant, baseless presumption that paying a premium sum for prime real estate entitles the owner to determine what will or will not be grown on the adjacent public land.

While public engagement with local residents, along with selection, placement and management of trees by the City to complement rather than block out views of the river, will be important parts of the implementation plan, there must be no backtracking from the essential objectives of major increases in tree cover along the foreshore – and throughout the City.

Good news for Canning River seagrass but threats remain

There's some good news from the Department of Biodiversity, Conservation and Attractions (DBCA) on a key indicator of the Canning River's health – the state of the seagrass (*Halophila ovalis*) meadows.

While the Department has yet to complete analysis of a survey conducted earlier this year, the seagrass was found further upstream in the Canning and Swan and coverage in the Canning appeared very good compared to previous surveys. The most upstream occurrence in the Canning, found in a 2011-12 survey was just west of Salter Point. This year it was found up as far as Beryl Avenue. At these upper limits the seagrass is seasonal, dying back over autumn/winter due to fresh conditions and low temperatures, then growing back from seed or rhizome remnants as conditions become more saline and warmer in late spring/early summer.

The survey, the fifth since 1976, was by a team of volunteers and DBCA staff led by Dr Jeff Cosgrove. It extended along the southern shoreline to about Nearwater Way and along the northern shoreline to the Andrew Thompson Park river viewing jetty. The Department is looking to repeat the mapping every five years and, unlike previous surveys, use consistent methods that will allow better comparisons.



Courtesy of DBCA

Apart from being a great food source for Black Swans which consume up to 25 per cent of total seagrass production, it has multiple, critical values for rivers including removing nutrients from the water, stabilising sediments and providing oxygen to the water column and to the top layers of sediment. Its benefit as habitat for fish and prawns is not well known but a DBCA/Edith Cowan University project is currently investigating this aspect.

Halophila ovalis, commonly known also as paddle weed, is the dominant of four species of seagrass in the Canning and Swan. And it's also the hardiest in the very dynamic estuarine environment with its range of salinities, temperatures and light levels. It grows very well in marine conditions and can tolerate up to two thirds of the salinity of seawater with no adverse effect.



Courtesy of DBCA

Dr Cosgrove said that throughout much of the lower estuary where the water is clearer and conditions more stable, the seagrass grows to depths of about 3.5 to 4.5 metres. "This is reduced to 1.5 to 2 metres depth maximum further upstream as sediments become siltier and water clarity decreases," Dr Cosgrove said. "Seagrass is usually patchy near its depth maximum, but shallower meadows can be very dense."

Unfortunately, seagrass faces multiple threats in Perth's urban estuary. Eutrophication or excess nutrients in the river contribute to excessive growth of macroalgae and increased frequency and intensity of micro-algae blooms. These result in shading, increased organic loading to sediments and modification of oxygen conditions in both the water and surface sediment layer.

Seagrasses prefer coarser grain-size sediments and only rarely grow in muddy sediments. Sediments with low oxygen allow sulphate-reducing microorganisms to produce sulphides which are toxic to plants.

Seagrass can counteract this, to an extent, by pumping oxygen from their leaves down to their roots. Oxygen is then 'leaked' to the sediments, detoxifying sulphides by oxidation.

As seagrass grows in the shallows it is often damaged by people – by trampling, from kayaks at popular launching points and boats leaving propeller scars. Everyone can help reduce impacts on seagrass by fertilising wisely, picking up dog faeces, having river-friendly gardens, stopping chemicals and organic refuse getting into stormwater drains and responsible boating behaviour.

Multiple benefits from Nurdi Park - Living Stream project

by Colma Keating

Transforming an open parkland and an adjoining fenced, open drain into a living stream at Nurdi Park, Willetton, opposite the intersection of Leach Highway and Beatrice Avenue, is close to becoming a reality thanks to conversations over weeding, being in the right place at the right time and being willing to share information and work together.



Beatrice Main Drain showing start at Apsley Road, Willetton and finish at Beatrice Avenue, Shelley [Source: Water Corporation]

The Beatrice Main Drain (BAMDKD) is owned and managed by the Water Corporation. It collects road runoff and underground seepage from a large catchment that includes part of the Willetton light industrial area. Water moves in a mix of open drains, compensation basin (Roxby Lane) and underground pipes (eg Leach Highway) until it empties into the Canning River at the western end of Shelley Beach Park (Beatrice Avenue), Shelley. This final point has also become an important resting and foraging site for birds after being rehabilitated by the City of Canning (CoC) and CRREPA. It has recently been recognised as a significant habitat area in the Shelley Rossmoyne Foreshore Management Plan.



On-site meeting with representatives from Water Corporation, City of Canning, SERCUL, DBCA and CRREPA.

In addition to creating a more interesting and aesthetically pleasing parkland and wetland, the living stream will also develop a natural ecological system that will aid in stripping nutrients and rubbish from the water before it enters the Canning River. The objectives of Water

Corporation's "Drains for Liveability" initiative could also be met at this site by designing and constructing a living stream, that is safe and ensures the water flow is not impacted during high flow events.

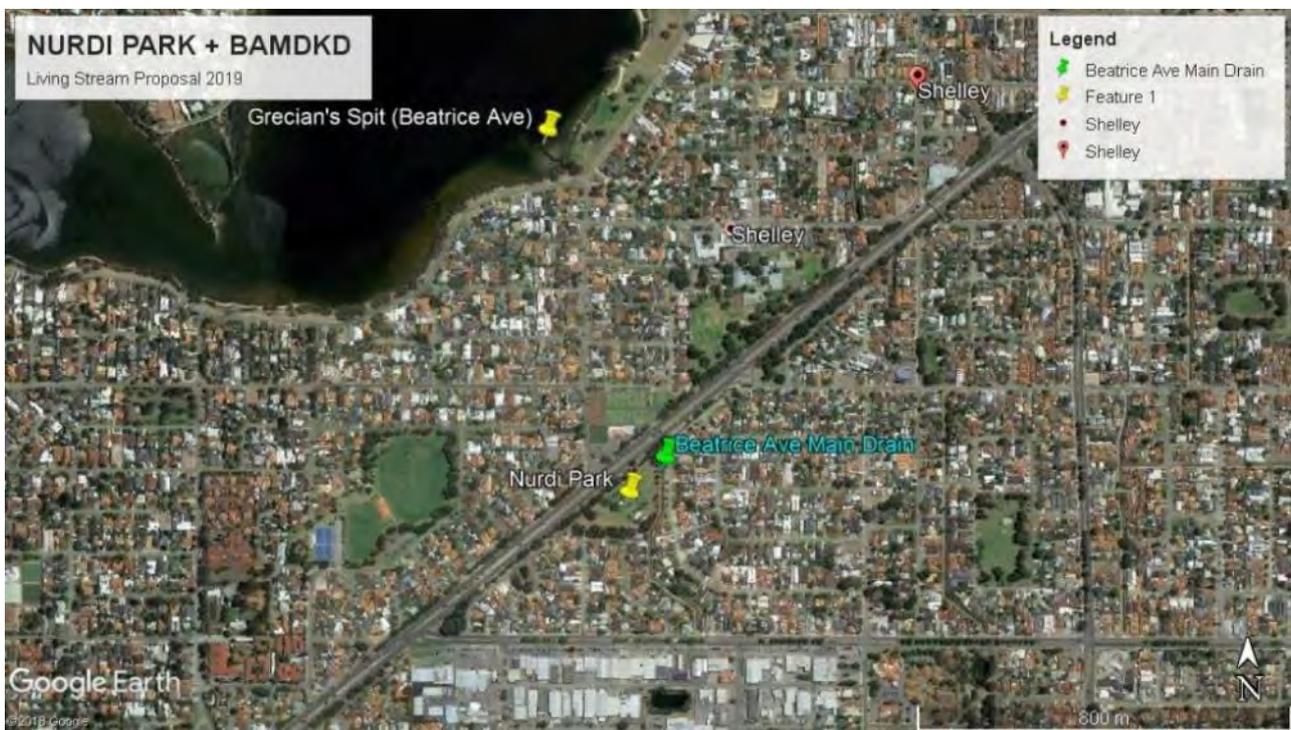
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The proposal brings together:

- ⇒ the Water Corporation (WC), with its 'Drainage for Liveability' program brings engineering design and experience and resources;
- ⇒ the South East Regional Centre for Urban Landcare (SERCUL), with its experience in streamlining and project management;
- ⇒ the CoC, with design and rehabilitation experience, resources as well as one of the most capable bobcat drivers around;
- ⇒ the Department of Biodiversity, Conservation and Attractions (DBCA) design and implementation experience;
- ⇒ CRREPA with local rehabilitation knowledge and experience;
- ⇒ a funding grant from the Australian Government's Swan Canning River Recovery Program (SCRRP) that was relinquished by the City of South Perth when they chose not to proceed with a project at Bodkin Park, Waterford;
- ⇒ Perth NRM which manages the SCRRP grant program;
- ⇒ the local community and schools through involvement in design and hands-on work.



An interesting side note is that both officers from WC and DBCA had contributed to SERCUL's streamlining activities, knowledge and experience before taking up their new roles. Grecian Sandwell (CRREPA's previous Foreshore Coordinator) and SERCUL's then CEO, Brett Kuhlmann (now with DBCA) dreamt of streamlining Nurdi Park in 2015. Now Stephen Johnston's role on SERCUL's Committee and his keen interest in what is happening on the opposite bank of the Lower Canning River brought together the knowledge that a streamlining grant had become available.



NURDI PARK AND BEATRICE AVENUE MAIN DRAIN (BAMDKD)

Join us for the End-of-year Sundowner

- WHEN:** Sunday 1st December 2019 at 5.30pm
WHERE: Shelley Beach Reserve (near Beatrice Avenue roundabout)
A shady spot with a beautiful view
CRREPA PROVIDES: Roast Chickens and glasses
BYO: Salad or nibbles to share *as well as your drinks, picnic utensils, chairs, rugs etc*

RSVP for catering by November 26th: Madeline 0402 646 595
CRREPA@gmail.com

OUT and ABOUT

Always nice to see smiles amongst the volunteers



Big Day Out Among the weeds



It was a fairly uneventful bird count this year. Only 32 species were recorded compared with 38 last year at both Grecian's Spit and Wadjup Point. We were entertained by the resident Ospreys and managed to catch site of a Little Grassbird which you generally only hear or see swiftly moving through the sedges.

Aussie Backyard Bird Count



TAFE students learning from CRREPA and CoC

by Colma Keating

On the morning of 19th August 2019, CRREPA hosted 10 Certificate IV Conservation and Land Management students from South Metropolitan TAFE, Murdoch campus and their lecturer Ms Liz Penter on the Rossmoyne-Shelley foreshore.

We looked to showcase a range of rehabilitation sites and approaches that would provide the broadest learning opportunities for the students including:

- Central Avenue Living Drain CoC = open drain with limestone to disperse energy
- SCRRP and CoC (opp 123—129 Riverton Drive) = mix of planting and fencing as well as an area that used matting (weed management was amazing)
- Halophila Bay = hard engineering involved in rehabilitation (limestone toe, matting, recycled jarrah light poles, planting, brush matting)
- Murray's Ditch & Nearwater living drain = comparing benefits of bubble-up and open drains
- barrier strip = reducing invasion of grass by maintaining a cleared strip between sedge banks and grassed areas
- Grecian's Spit = rehabilitation using plants and fencing combined with managing disturbance of bird habitat by people and dogs
- Wadjup Point = hard engineering to rescue mature Tuart as well as point and longshore impacts of hard engineering. This also shows a bubble-up pit and rehabilitation using plants, limestone toe, coir logs and limited fencing.



We also visited two erosion sites (Corinthian Avenue and Wadjup Point West) where the students were invited to provide guidance, drawing on their in-class and on-site learnings and experiences.

Approaches to educating and welcoming the community were discussed over our morning tea break at Shelley Beach Park including Wadjup-Gabbilju foreshore walk, National Birdlife projects (Shorebirds 2020 and Great Aussie Backyard Bird Count), bird walks, local photographic displays, working with local schools (River Rangers and Bush Rangers) and Canning River Eco Education Centre.

Whilst it certainly took some planning, photo searching and computer work, it was

good to revisit our sites with CRREPA members, CoC colleague Max Box and students. It refreshed lots of things and again demonstrated the importance of great and respectful working relationships, which add enormously to the enjoyment of the time and energy contributed by all.

As a reflection, CLM/Horticulture Lecturer Ms Penter sent through photographs from the day and commented *“Just wanted to say another great big thank you for the excursion you hosted on Monday. The itinerary for the day was so informative and the time given by Colma, Max, Steven, Grecian and Sue was greatly appreciated.*

“It really was a fantastic opportunity to highlight the enormous efforts CRREPA and the council are putting into better preserving these areas.

“Thanks again and maybe I can talk you into doing it again some time !”

CRREPA is glad to hear it is worth a 're-run' and I'm sure we would provide a similar on-site visit in the future. It was particularly rewarding to see what approaches were relevant to the students' projects (e.g. the coir logs at Wadjup). It was also great to have Max participating his knowledge, experience and also practical approaches for people looking for careers in this area.

A former punk rocker now plays lead at the NAT

by Stephen Johnston

Some people seem destined from an early age to follow a certain career path while others try this and that, then almost by chance find their true calling. Max Box would freely acknowledge he comes firmly into the latter category.



[Photos courtesy of Max]

Max was a private school drop-out from Perth's western suburbs who got into punk rock, moved to Sydney and fell into screen printing to make a basic living before moving back to Perth at the age of 20 with his girlfriend, later wife, to raise their son. By then, Max's aptitude for rock music as a bass guitarist was set and continued for about 25 years in various bands playing original music at pubs like the Grosvenor, Rosemount and Old Melbourne where they might pick up \$100 from the door charge on a good night.

It was only when they moved to Pemberton to open a café/restaurant attached to an art gallery that Max discovered his vocation in horticulture while tending the fruit trees and vegetable patch in the garden of their rented house. The restaurant was "a nightmare" of seven-day weeks, high rent and low patronage from people in the then timber town who had little time for the greenie gallery owner. So, it was back to Perth and back to screen printing. But with digital printing methods taking over, Max set off on his new career path, opening a landscape gardening business and undertaking a Certificate 3 in horticulture at TAFE. Retail experience followed as manager of a garden centre in Beechboro for about five years before becoming groundsman at the historic Houghton winery in the Swan Valley.

Max's 10 years at Houghton unexpectedly brought a final shift in his career that had nothing to do with pruning the roses, mowing the lawns and cleaning up after major outdoor events. The property had a few hectares of Swan River frontage, some wetland near the Swan-Yule Brook junction and about four hectares of banksia woodland. When management asked if any staff were interested in looking after these natural assets, Max put his hand up and was sent off to TAFE to learn how to do it with a Certificate 2 course in Conservation and Land Management (CLM).

"It was a bit difficult because I was on my own trying to figure out how to do things," Max recalled. "It was also a bit frustrating because I could only go out and work in the bush after I'd finished all my other garden work. But I learnt a lot, propagated some of my own plants and at one stage we had a grant to deal with some woody weeds. I also did my Cert 3 in CLM then later a Diploma."

With his career direction finally set, to his great surprise Max landed the job at the City of Canning as head of the Natural Areas Team (NAT). "Jenni Andrews took a bit of a chance with me as I didn't really have much experience. But I think what got me over the line was working in a big organisation like Houghton and the exposure I got there to things like occupational health and safety."

With so many natural areas in Canning to look after, ranging from few hundred square metres to 26 hectares around the Canning Vale Landfill and Recycling Facility and only four in the team, a strategic approach to the work is essential. Smaller areas in the middle of residential areas are more difficult to maintain because of their proportionally longer exposed edges for weed and feral animal invasion.

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“All our sites are divided up into high, medium or low priority and we have a work schedule with time allocations for each,” Max explained. “Some places like the foreshore and Bannister Creek are divided in our work schedule into different sections. The conditions of the sites help set the priorities and if there’s community group involvement we want to complement the group’s work.”

“The nature of work hasn’t changed much,” Max said. “We do more wildlife rescue now, mostly injured birds but also reptiles – there’s a nasty thing going around now called Bobtail flu - and the occasional mammals, echidnas and bandicoots mostly at the Canning Vale site.”

Weed control takes about 80 per cent of the NAT’s time – about 60 per cent hand removal and 30 per cent spraying - with other jobs ranging from fencing and erosion control to revegetation and feral animal control. Weeds are prioritised against three categories – those of national significance like Blackberry, Lantana and Bridal creeper, WA-declared weeds like Geraldton Carnation and Cape Tulip, and Swan Coastal Plain weeds like Watsonia, Gladiolus and Veldt Grass.

“We have contractors who map the weeds including the density and coverage of priority weeds. With that and our own observations we get an idea whether our methods are successful. Most of the weed control is very long term but there are times that you can see you are making a difference. You’ve been walking through some bush over the years and you can see fewer weeds. But you also know how quickly it can reverse if you stop doing it.”

ACKNOWLEDGEMENTS and THANK YOUs

We are very grateful for the support provided by the City of Canning, SERCUL and DBCA.

YOUR CRREPA COMMITTEE 2018—2019



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