

for our rivers

The Swan Canning Riverpark is at the heart of Perth, and caring for it involves the whole community. Parks and Wildlife partners with dedicated volunteers, through a range of programs and projects, to care for this special ecosystem. This helps improve river health, water quality and the community's overall enjoyment of the Swan and Canning rivers.

by Mark Thornley



he Swan Canning Riverpark comprises the Swan and Canning rivers and has a combined shoreline of 358 kilometres providing a diverse and resilient ecosystem. The Riverpark is home to a varied fish community, with more than 100 species recorded, and a resident population of 20-25 Indo-Pacific bottlenose dolphins and their calves. Seahorses coexist with anemones, and seagrass, prawns and crabs abound. More than 85 bird species including black cockatoos, ospreys and swans have been recorded around the rivers. While small mammals such as water-rats, brushtail possums, quenda, snakes, lizards, spiders and insects also inhabit the foreshores.

The river system has cultural significance for the Whadjuk people, who have had a connection to it for more than 40,000 years. Today, it is also a source of limitless recreational opportunities for all Western Australians, whether it be walking along the riverbank, participating in water sports or picnicking, or taking advantage of the vibrant commercial and tourism activity. More than 40 parks and reserves line the banks, and, at most times of the year, the fringes of the rivers are teeming with people enjoying the park's natural values.

BY THE COMMUNITY, FOR THE COMMUNITY

Managing and protecting this river system is an immense responsibility. As with all the lands and waters it manages, Parks and Wildlife works with the community to conserve the intrinsic values of the Riverpark. It does this through a range of programs and initiatives designed to support and facilitate community involvement. Some of the ways people can become involved include:



Previous page Main South Perth foreshore at sunset. Photo – Andrew Skiers Inset top Western Australian seahorse. Photo – Alex Steffe/Lochman Transparencies Inset centre Wakeboarding is a popular and colourful activity on the river. Photo – Luke Baker

Above The Point Walter sandbar walk is a favourite with Perth families. *Photo – Danny Dellaca*

Left River Guardians. Photo – Miranda Jackson/Parks and Wildlife

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RIVER GUARDIANS

River Guardians is Parks and Wildlife's overarching community engagement program for the Riverpark. It involves a variety of popular citizen science and community behaviour change projects including *RiverWise*, *Dolphin Watch* and *Prawn Watch*. It provides volunteers with training, workshops, special events and presentations from leading scientific and behaviour change experts about how we can all help to keep the river system healthy.

The program now has 2,478 members and works with more than 40 stakeholder groups. *River Guardians* are also actively involved in more than 10 major environmental education events per year including river festivals and the Kings Park Festival. Most volunteers register to become a *River Guardians* member before volunteering for the department's citizen science and behaviour change projects.

River Guardians connects members of the community with educational river programs and projects that cater to individuals, schools, community groups and corporations. Membership is free and includes access to cultural, environmental and historical presentations, volunteering opportunities, educational river cruises plus fun discounted river activities and events. Projects can be carried out by people in their homes and gardens or while walking their dog.

For more information, including boating, fishing, gardening, and household tips, visit www.riverguardians.com.





DOLPHIN WATCH

Dolphin Watch focuses on identifying, monitoring and protecting the resident population of 20-25 Indo-Pacific bottlenose dolphins that frequent the Swan and Canning rivers. Another 20 dolphins regularly visit the Riverpark from Cockburn Sound.

Parks and Wildlife, together with Murdoch and Curtin universities, developed *Dolphin Watch* as a collaborative, citizen science research and education project which integrates scientific research and community involvement with management efforts of industry and government.

The project recognises the importance of protecting the dolphins in the river system and their value as potential indicators of river health. It helps provide a better understanding of dolphin ecology and their interactions with human activities.

More than 900 trained *Dolphin Watch* volunteers are involved in providing observations and help assist with responding to dolphin births, entanglements and boat strikes.

These citizen science observations are uploaded as texts, photos and videos in real time via a customised *Dolphin Watch* smartphone application. This data is then shared with scientists to inform research and is accessed by the relevant stakeholders when responding to a critical dolphin incident.

Dolphin Watch has captured the hearts and minds of Perth's community and has the patronage of former Chief Scientist of Western Australia Professor Lyn Beazley. It is regarded as one of the world's leading citizen science projects and is the only citizen science cetacean research project in a major capital city.

To date, more than 1,200 students from 25 metropolitan schools have engaged with *Junior Dolphin Watch*. This fun project offers young students the chance to participate in field trips to observe and identify Riverpark dolphins through a specialised FinBook.

For more information, visit www.riverguardians.com/projects/dolphin-watch.

Far above right An Indo-Pacific bottlenose dolphin in the Riverpark. Photo – Wayne Theobold

Inset above right *Dolphin Watch* volunteer Jenny Hunt records another sighting. *Photo – Delphine Chabanne*

Inset right *Prawn Watch* training and logbook. *Photo – Miranda Jackson/Parks and Wildlife*

Below Prawning was a big part of river culture and the community is now helping to bring back the western school prawn. Photo – Stewart Allen



Prawn Watch Scan this QR code or visit Parks and Wildlife's

'LANDSCOPE' playlist on

Hear more about



PRAWN WATCH

Prawning on a hot summer's night was once an integral part of Perth's river culture until a decline in the river prawn population gradually saw this popular recreational pastime taper away.

In 2013 the community's passion for prawning in the rivers was reignited after the Western School Prawn Restocking and Monitoring project achieved a world first and cultured 'schoolies' or western school prawn (*Metapenaeus dalli*). Since then scientists have introduced more than 4.5 million juvenile western school prawns back into the river system as part of a multi-agency project to increase the species' population.

Preliminary information suggests that the restocking has had a positive impact on prawn populations with monitoring extended into the 2016–17 breeding season.

Prawn Watch engages the community to monitor prawns in the Riverpark while





educating them about river prawns and sustainable fishing practices.

In 2015–16, *Prawn Watch* volunteers assisted with the release of two million western school prawns as part of the wider program to restock the Swan and Canning rivers. This year also saw the 4.5 millionth western school prawn released into the Swan Canning Riverpark.

The project has involved 179 community volunteers with university students also contributing more than 3,000 hours to support prawn monitoring.

Project partners include Murdoch University, the Department of Fisheries, the WA Fish Foundation, Recfishwest, South Metropolitan TAFE, and the Fisheries Research and Development Corporation.

For more information, visit www. riverguardians.com/projects/prawn-watch.

YouTube.

REEL IT IN Fishing Line Bin project

The *Reel It In* Fishing Line Bin project works to educate the community on reducing fishing line entanglements of dolphins, waterbirds and other wildlife in the Riverpark by binning unwanted fishing line.



Birds and marine life can drown, lose limbs, starve or die if they become entangled in fishing line or when fishing tackle injuries become infected.

There are now 57 fishing line bins at popular Riverpark jetties, fishing platforms, traffic bridges and foreshores.

Made of 100 per cent recycled materials, the bins provide an easy way to dispose of unwanted fishing line, tackle and bait bags and are supported by 10 riverfront governments.

Since the project was launched, more than 44 kilometres of fishing line, 7,600 hooks and sinkers and 6,600 bait bags have been removed from the Riverpark. Emptied weekly by Native Animal Rescue or River Guardians volunteers, the bins now collect more than 20 kilometres of fishing line per year.

Community members can participate by disposing of unwanted fishing line or tackle in the bins, adopting a Fishing Line Bin site and emptying the bin on a regular basis.

The project has also been adopted by the Fremantle Port Authority and City of Cockburn and bins can be found at Victoria Quay, the North and South moles and popular fishing locations throughout Cockburn Sound (see map on page 31). The recruitment and involvement of volunteers will enable the project to be expanded across the State to popular fishing locations such as Exmouth, Shark Bay, Albany, Rottnest Island and Busselton.

The Fishing Line Bin project is delivered in partnership with Recfishwest, Native Animal Rescue, Keep Australia Beautiful Clean Marine program and the Wildcare Helpline.

Bin locations are available from the *River Guardians* website at www.riverguardians.com. In February 2016 Parks and Wildlife started recruiting and training volunteers to help service the bins. To date, 20 volunteers have adopted 28 fishing line bin sites across the Riverpark.

For more information, visit www.riverguardians.com/projects/fishing-line-bins.





Riverpark facts and figures



of combined shoreline (Swan and Canning rivers)



21m

deepest point of the Swan River (near Mosman Bay)



130–160 gigalitres

amount of water in the Swan Canning river system



Landcare projects underway through the Swan Alcoa Landcare Program



4.5 million

western school prawns released into the Swan and Canning rivers since 2014

ڻ 23.5km

of fishing line safely disposed in 2015–16 and over 44km collected since 2013

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Left Fishing is a popular Riverpark pastime where fishers can catch black bream, flathead, tailor and mulloway.

Above The tasty blue swimmer crab is a prized catch.

Photos – Matt Kleczkowski

Inset above left Fishers help protect waterbirds and dolphins by discarding unwanted line and tackle into the fishing line bins. *Photo – Stewart Allen*







SUSTAINABLE GARDENING WORKSHOPS

Parks and Wildlife continues to provide free community RiverWise Gardening and behaviour change workshops hosted by a variety of expert providers including the Forever Project and Josh Byrne and Associates – well-known for his work on ABC TV's *Gardening Australia* program.

These fun, informative and interactive workshops run for two hours and are designed to share information on how sustainable gardening practices can save you time, money, water and angst, while attracting birds and other wildlife to your gardens.

Josh helps participants understand the impact of excessive nutrients such as phosphorus and nitrogen on the Swan Canning river system and the role that 'RiverWise Gardeners' can play in preserving the rivers' water quality.

Workshop participants learn about garden design including soil and nutrient zoning, plant selection and irrigation design and management. They also gain a sound understanding of soil testing, improving soil, responsible fertiliser use and the best application to create river-friendly and waterwise gardens and turn Perth's sand into fertile soil to grow amazing food gardens.

It's easy to help keep our rivers healthy. Small changes made at home or in your garden, or while you are out and about enjoying the rivers, can make a big difference to the health of our precious rivers and waterways.

For more information, visit www.riverguardians.com/projects/ riverwise.gardening.

Above left Ospreys can be found in the Riverpark.

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Above Brown jellyfish. *Photos – Matt Klezckowski*

Left and inset left RiverWise Gardening workshops inform the public about fertiliser alternatives. Photos – Miranda Jackson/Parks and Wildlife

SWAN ALCOA LANDCARE PROGRAM

The *Swan Alcoa Landcare Program* (SALP) is an outlet for community volunteers and corporate staff to help protect the Riverpark.

One of Australia's longest running and successful landcare programs, SALP provides funding to community groups to complete small on-ground restoration projects in the Swan Coastal Plain such as weed control, revegetation, native animal habitat and fencing projects.

Since 1998 SALP has funded 1,030 projects delivered by more than 200 community groups throughout the Swan Canning Catchment.

SALP's community-led projects help create, rehabilitate and protect habitat for native flora and fauna in an urban environment. They also provide ecological corridors between remnant bush and wetlands

During the past 18 years SALP volunteers have cleared more than 4,000 hectares of weeds, revegetated 1,763 hectares of degraded land, planted more than two million trees,

spread 1,200 tonnes of mulch and built and maintained 6,000 kilometres of fencing. The program also educates Riverpark residents and industry about the use of native plants in their gardens to help reduce phosphorus and nitrogen loads entering the river system

A joint program funded by Parks and Wildlife and Alcoa Australia, SALP is administered by Perth Natural Resource Management (Perth NRM) and recently celebrated 18 years of delivering funding to community groups.

Applications for SALP funding are sought from the community between February and April each year.

Above right River Guardians volunteers planting along the Swan River foreshore. *Photo – Parks and Wildlife*

Inset right SALP planting on Milyu Nature Reserve foreshore. Photo – Mark Thornley/Parks and Wildlife

Right The rivers are full of strange and unusual creatures like the flounder. *Photo – John Huisman/Parks and Wildlife*

Below The Swan Canning Riverpark is at the heart of Perth. *Photo – Matt Klezckowski*



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