... about the Estuary



We acknowledge the Whadjuk Noongar People as the Traditional Owners of the Derbal Yerrigan and surrounding country in which we are privileged to work. We pay our respects to their Elders who have handed down and continue to hand down their deep connection to country to future generations.

What's In A Name?..... The Melville Bird Sanctuary holds the Answers!!

Shorebirds - Seabirds - Wading Birds - Waterfowl - Raptors - Bush birds - Nocturnal Birds

How extraordinarily fortunate is our Perth community to host birds of all these types on our city's doorstep in the Swan Estuary Marine Park, now incorporating the newly declared Melville Bird Sanctuary. We join the founders of the Friends of Melville Bird Sanctuary, Jenny Christenson and Tom Lubin in thanking both DBCA and the City of Melville Council for their unanimous approval of the boundaries of the Sanctuary – see below. The City of Melville will soon release a map of the exact boundaries via a GIS (Geographic Information System).



This inner-city bird haven is a witness to the importance that City of Melville residents, and indeed Perth city residents, place on the conservation of the environmental values of the Swan. Our sense of place is inextricably associated with the river, its swans, dolphins, ospreys, pelicans, right down to the tiniest shore birds, especially those that travel across the world every year to come here.

To encourage all these different bird types we need to be aware of their widely varying habitat requirements; for finding food, for roosting and resting and for breeding. It underlines the unique nature of our Swan Estuary Marine

Park that it can support all these birds, and impels us to give the highest priority to its environmental health.

So let's look at some of these birds and how we can care for them.

One of our most unique birds is the Tawny Frogmouth (pictured), which can be found roosting cryptically in a paperbark or eucalypt during the day, and will venture out at night to search for its food of lizards, mice or the like. Fallen branches and logs in the Reserve encourage the presence of these small prey. Another *nocturnal* bird that is occasionally seen roosting is the Southern Boobook Owl.



Photograph - J Christenson

Bush birds feed, roost, rest and nest in natural bushland containing nectar-producing flowering shrubs and trees and the insect life so vital to their successful breeding. Old growth trees are needed by some species for nesting hollows too. Removing weeds and increasing natural understory below our Flooded Gums and Paperbarks will assist the soil biota to nurture the health of both old-growth and younger trees and allow for self-sown saplings to become the old-growth trees of the future.







Mistletoe Bird



Osprey
Photographs - T Graham-Taylor

Whilst many *raptors* have been recorded at Alfred Cove, our resident Ospreys are there daily, catching live prey by swooping and grasping with their talons the fish that are feeding in the shallow waters of the Marine Park. Sadly some Osprey have been seriously injured and even have died from entanglement with fishing tackle, so declaring the waters of the Marine Park off-limits to fishing would greatly reduce the risk of this damage to our magnificent top predator.

Our *waterfowl* include our swans, ducks, cormorants and darters — all these birds paddle or swim to find their food, be it seagrasses for the swans and ducks or fish for the diving birds. But seagrasses only grow where the estuary is shallow and healthy enough, and a robust native riparian vegetation is key to ensuring this. Swans also use this vegetation to build their nests and whilst successful at Pelican Point this year, their nesting attempt in Alfred Cove was spoilt by human disturbance.



A vital resting place on the mudflats

Photograph - T Graham-Taylor

An eye-catching sight on any day is the Great Egret, gleaming white against the dark sedges, and no less beautiful is the White-faced Heron, not forgetting of course the ubiquitous White Ibis. These tall *wading* birds are iconic to the Marine Park wetlands.



Great Egret



White-faced Heron

Most *seabirds* are pelagic, spending the greatest part of their lives out to sea, floating on the water to rest and diving to catch their prey. Others are more coastal and we are fortunate to enjoy the spectacular Caspian and Crested Terns displaying their diving skills over our estuary waters. A very special treat in summer is seeing the silvery Fairy Terns, often heard before they are seen, seeking bait fish in the Marine Park shallows and nesting on the shores of the Point Walter spit island. These endangered birds rely on undisturbed nesting sites, so the current practice of DBCA to place temporary fencing and signage at the end of the spit has proven vital to their successful breeding there.







Fairy Terns

And finally *shorebirds* – in a class all of their own – including both trans-equatorial migratory birds and our local shorebirds.

Despite traversing oceans, these extraordinary migratory shorebirds have to flap every inch of the way, because they can't float to rest on the ocean! Hence they can only come down to rest and revive when they reach shallow shores

along the East Asian-Australasian Flyway, where they rely on finding their food by probing the mud and shallows with their specialised beaks.

These same needs apply to our local shorebirds which nest in scrapes in the sand amongst the samphire – Red-capped Plovers and Pied Oyster-catchers, to mention the two more commonly seen. These are breeding on the shores of the Marine Park in our Spring and Summer months also.

Sadly, the numbers of local shore birds and these trans-equatorial shorebirds are diminishing due to human disturbances along their route and at their final destinations. So it is all the more critical that those which manage to arrive at our Swan Estuary Marine Park find healthy shallows with minimal disturbance to allow them to fatten up over summer, and for our breeding shorebirds to safely raise their chicks.



Black-tailed Godwits and Common Greenshank

The Marine Park can still meet these needs provided the exposed mudflats and sandbars are prioritised as essential shorebird habitat, and in time, fishing, prawning and kite-surfing are excluded, and lights and noise are minimised at night to allow for undisturbed roosting around the Cove and Pelican Point.

SERAG is pleased that the City of Melville together with DBCA has developed its 10-Year Foreshore Master Plan that intends to increase the foreshore vegetation buffer to help reduce human disturbance and keep the waters and mudflats of the Marine Park healthy.



Pied-Oyster catchers with young

We trust that our hard work over the past 13 years to improve and restore the foreshore vegetation of the whole of the Marine Park as a haven for local and migratory birdlife, as well as preserving the vital ecological linkage that they need, will continue to be supported. There is still much rehabilitation and protection needed in each of the areas, especially essential for the Melville Bird Sanctuary to thrive —

Without the habitat there is no sanctuary.

Photographs - T Graham-Taylo

Community Rivercare Grant Review

In April, Chairperson Margaret Matassa and Committee member, Rosemary Peek, were pleased to have the opportunity to meet Michelle Crow, who oversees the Community Rivercare Grant Program, to highlight the work that volunteers have undertaken around the Attadale, Alfred Cove and Tompkins Park foreshores over the last year.

The tour was an on-site review to assess SERAG's progress with rehabilitation work it had agreed to do in the first year of its 4-year Community Rivercare Grant. A written report, which is required to be submitted annually, has been completed to add to the visual inspection.

Michelle was clearly amazed by the planting at Tompkins Park (more about that process in one of the other articles in this newsletter) and said that being in amongst the Typha and seeing the newly planted *Juncus kraussii* was like

entering a secret garden.



Juncus kraussii planted in March 2023



Sedges on 15th July 2023 showing good growth

The success of the first spraying of the *Carex divisa was also seen by Michelle as well as the work to try and mitigate the impact of erosion at the casuarina trees on the Attadale foreshore near Haig Road. If all goes well, next time Michelle visits she will be able to observe the impact of the thousands of plants that have been planted over winter.

A huge thank you to Tim Heckler who does all the spraying work for SERAG and who was prepared to take on the challenges presented by the Typha and *Carex divisa outbreaks along with the usual weeds and grasses.

*Carex divisa What is it?

A species of sedge that has a rhizome and can grow to about 70 centimetres high. It goes by the common names Divided Sedge and Separated Sedge. A native to Europe, Asia and parts of North Africa it was deliberately introduced in some areas in eastern Australia to stabilise stream banks. But in a familiar story it is now regarded as a serious environmental and agricultural weed having soon become invasive and impacting indigenous riparian vegetation and pasture.

The difficulty with containing *Carex divisa has meant that it is now considered naturalised in Western Australia, Queensland, Victoria and Tasmania, New Zealand and some parts of North America.

It reproduces by both rhizome and seed. Salinity inhibits the germination of seed but once growing it can tolerate salt.

Why are we bothering to try and eradicate it along the foreshore? Because it tends to form large dense swards to the exclusion of other species. Our own observation indicates that it spreads quickly to the detriment of our indigenous sedges which provide important habitat for native fauna.



Divided Sedge, *Carex divisa, (i) under Casuarinas



*Carex divisa, (ii) out in the open, on the Attadale foreshore

Who was that masked bird?

It was a lone Black-fronted Dotterel with its distinctive black eye mask (not the Lone Ranger), which SERAG members were fortunate enough to see at Alfred Cove during the June bird survey. These small, 17cm long birds are recognised for their mask and another black, V shaped band across their white chest.

Out of the 66 surveys SERAG has conducted at Alfred Cove since May 2018, the Black-fronted Dotterel has only been observed in 4 of them, most often in winter, and once in spring. Possibly this is the same bird observed each time, since they are usually sedentary birds – residing permanently in the same area as a single bird, a pair, or as a family. Happily, a second dotterel was seen there in the next few days, so perhaps a mate has been enticed along.



Photograph - J Christensen: Melville Bird Sanctuary, Alfred Cove

Although they are considered sedentary, Black-fronted Dotterels will also travel and flock, mostly in non-breeding times and where food conditions are suitable. They are even thought to have travelled from Australia to New Zealand - first being seen there in the 1950's. Though it's possible they arrived there by human means. They are only found in these two countries.

Black-fronted Dotterels live along the shallow edges of freshwater wetlands right across Australia, such as lakes, swamps, ponds, billabongs and rivers. In Perth they can be seen year round at locations such as Bibra Lake, Herdsman Lake, and Lake Joondalup. They have also been observed at Lake Claremont in summer when the water is most shallow. Although more common along freshwater areas, Black-fronted Dotterels are sometimes seen along brackish waterways as well. Perhaps with enough rain, and the stratification of freshwater over salt water, places like Alfred Cove becomes an acceptable feeding place in winter, at least for the lone bird observed by SERAG.

Black-fronted Dotterels will eat insects, seeds, small crustaceans and molluscs from water only a few millimetres deep or from the mud. Sometimes they peck frequently in the water as a technique to disturb insects and see them more easily. These birds tend to prefer a more open environment and avoid thick vegetation, even when nesting.

Breeding occurs spring to early summer in southern Australia and autumn to winter in northern Australia, and may occur more than once per year. The nests are a simple scrape in gravel, close to the water's edge, and are also built up a little with additional stones, shells and twigs. The exposed nest location enables the parents to see predators approaching and share incubation of the 2-3 eggs, as one can feed nearby while the other is nesting.





Black-fronted Dotterel eggs (photos D. Johnston) https://mdahlem.net/birds/9/

Black-fronted Dotterels have evolved several means of protection in their preference for such exposed habitat: both adults and chicks have mottled brown feathers on top of their head and back for camouflage; they are able to adapt the colour of their eggs to the surrounding ground, and will also adapt the nest to the colour of their eggs; adults will feign injury and call loudly to lure intruders away from the nest; and chicks are able to leave the nest a day after hatching to hide in a less exposed location, while parents continue to care for them. Chicks are coloured similarly to the adults, but lack the orange on their beak and eye ring, and are without the V-shaped black chest band.



Camouflaged Black-fronted Dotterel chicks in their nest (photo M. Eaton)

https://mdahlem.net/birds/9/blfrdott.php

Although Black-fronted Dotterels are not considered to be endangered, having such exposed and well camouflaged nests means it is important for their urban nesting areas to be protected from people and dogs. So next time you are out enjoying Perth's wetlands keep an eye out for this brave, yet carefully hidden little bird.

Sources:

https://lyreades.wordpress.com/2017/03/01/claustrophobic-birds-that-nest-in-dangerous-places/

https://friendsoflakeclaremont.org/?page_id=3026

https://mdahlem.net/birds/9/blfrdott.php

https://waders.org.au/about-waders/shorebird-identification/waders-regularly-seen-in-australia/black-fronted-plover/

https://australian.museum/learn/animals/birds/black-fronted-dotterel/

https://en.wikipedia.org/wiki/Black-fronted_dotterel

https://www.centennialparklands.com.au/visit/environment/birds/black-fronted-dotterel

SALP Grant Supports Restoration Work at Pelican Point

On 9th March 2023, SERAG members Margaret Matassa and Yvonne Fong attended the Swan Alcoa Landcare Program (SALP) presentation ceremony to receive the 2023 SALP grant for the restoration of the Saltmarsh and adjacent bushland at Pelican Point, Crawley.

The evening at Riverbank Estate gave the opportunity to catch up with other groups and with Perth NRM staff, including Senior Manager Dr Ingrid Sieler.





Yvonne Fong (SERAG) & Dr Joanna Pearce (Swan River Deputy Dr Ingrid Sieler (Perth NRM) (right) with Margaret Matassa & Yvonne Fong

SERAG is very grateful for the ongoing assistance received from the SALP program administered by Perth NRM (National Resource Management) over the years, which helps to cover the cost of purchasing tube stock for planting as well as professional weed management. Then with the terrific help of the UWA students and our regular volunteers, the transformation of the Point and Lot 4 is steadily progressing.

> Photographs - Courtesy of Perth NRM Article - Y Fong

SERAG Volunteers - Take a Bow!

Some quick facts taken from our first report on our Community Rivercare Grant:

- SERAG volunteers contributed over 1,500 hours to work directly related to the grant planting, weeding, watering, community education and project management (which includes planning, ordering plants, paying the invoices, getting the ute loaded with tools and equipment, collecting the plants, preparing a delicious morning tea, getting the attendance sheets signed, cleaning the tools at the end of each session, and the list goes on);
- 4,643 tubes, 10 litre bags and sedge hedges were planted. The biggest sections were:
 - ♦ at the Typha site 7 Juncus kraussii hedges, 200 x 10 litre bags of Juncus kraussii, Gahnia trifida and Cyperus gymnocaulos (all different types of sedges native to the area) and 1,145 tubes of a variety of plants with local provenance, many of which will flower over spring and early summer; and
 - ♦ at the *Carex divisa sites along the Attadale foreshore and in front of the apartments near Atwell House 1,760 tubes of sedges;
- although not part of the grant, SERAG volunteers also worked on City of Melville land at the Blue Wren Site in Attadale planting another 560 tubes this winter and contributing a further 470 hours weeding, planting and watering throughout the year.

To all our volunteers who have contributed so superbly over the year in many different capacities – take a bow and thank you!

Pelican Point - A Point Worth Appreciating - Boorloo Heritage Festival

On Saturday 1 April, around 30 Swan Estuary Reserves Action Group (SERAG) volunteers and members of the public gathered by the Derbal Yerrigan, the Swan River, for the first event of the month-long Boorloo Heritage Festival.

We began our walk by acknowledging the significance of Katamburdup (a place of high importance), as Pelican Point has been known to Whadjuk Noongar people, the traditional owners, for more than 40,000 years. We then heard from SERAG Chairperson Margaret Matassa and historian and SERAG volunteer, Sue Graham-Taylor at various points of interest.



Attendees learnt about the Western Australian Government's declared 'War on Mosquitoes' in the 1930s and the impact it had on the river generally and Pelican Point in particular. We also heard about the undercover activities of the Sea Scouts during World War I and the impact on Pelican Point of the United States Navy presence and the Catalina flying boat base in World War II.

Walkers appreciated the importance of the reserve to birds, both local and those migrating annually from the Arctic. We learnt that sea grass is 35 times more efficient than rainforest at sequestering carbon. Hence the importance of SERAG's restoration activities in strengthening and restoring fringing vegetation is both in improving habitat for birdlife and also in removing nutrient overload and pollutants from groundwater before it reaches the river. Participants were then invited to plant around 100 sedges on the foreshore.

This was a special SERAG/Boorloo Heritage Festival event, but if you are interested, SERAG welcomes volunteers on the first Saturday of every month. Just contact us on admin@swanestuaryreserves.org and enjoy our Website and Newsletter on www.swanestuaryreserves.org

Green Banking

On two occasions in May, SERAG was delighted to have corporate volunteers from Bankwest join our weekly *Treemendous Tuesday* sessions. We welcomed around 20 volunteers to each session.

Both sessions focussed on areas that had previously been overrun by the invasive sedge *Carex divisa. The Carex had been sprayed earlier by a professional contractor and now both areas needed to be replanted with species indigenous to the area.

The first area to come under our spotlight was Alfred Cove, Marradungup. We were working very close to the water's edge and (to put it mildly) it was WET! Luckily this area was large enough to accommodate both those who had come prepared with gumboots and those who had not. Those of us with more waterproof footwear soon learned not to stand still for more than a few seconds because we would guickly start to sink into the mud.

When a SERAG volunteer commented to the Bankwest volunteers nearby that, instead of squelching around in the mud, they could be dry and warm back in their offices, almost to a man and woman they said they'd much rather be where they were at that moment.

This is wonderful for us to hear as it means we've been successful in passing on our passion for the areas in which we work and the importance of that work.

During this 3 hour session, the SERAG and Bankwest volunteers planted 800 tubestock of *Juncus kraussii* species. By the end, the only bits of us not covered in mud were the parts of our trousers tucked into

boots! Hot drinks and delicious food for the morning tea that followed was very much appreciated by all volunteers.

The second group of Bankwest volunteers joined us on the Attadale foreshore, where another large area of *Carex divisa had been cleared. This group didn't realise how easy they had it - it was DRY!

This time our group of volunteers planted another 760 tubestock of *Juncus kraussii* and *Cyperus gymnocaulos* as well as another 100 mixed species including Scaevola crassifolia, Olearia *axillaris* and *Rhagodia baccata*.

It will be wonderful to watch these two areas as they rehabilitate and progress over the coming seasons.



Committing to Restoring our Estuary

On 24th June, SERAG's regular monthly *Saturday Morning @ the Cove* moved to Tompkins Park for a planting session. We were joined by a group of around 15 volunteers from the "Green Office Action Team" of engineering firm GHD.

The area being worked on was a site of Typha monoculture on the foreshore in the Alfred Cove Nature Reserve. Over summer, this area had been sprayed by a professional contractor. This had then been followed up by 3 sessions with the *Treemendous Tuesday* team, with wonderful help from DBCA team members, gradually re-establishing the wet areas with local species, mainly *Juncus kraussii*.

For this session, volunteers planted dry land species (including *Atriplex cinerea*, *Ficinia nodosa*, *Lepidosperma gladiatum*, *Calothamnus quadrifidus* and *Conostylis candicans*) on the higher ground next to the shared pathway. The corporate volunteers were welcomed by Margaret Matassa and given a demonstration of the planting techniques required for this difficult place. This requires a dish or bowl to be dug first, followed by a deeper, narrow hole at the base of the bowl for the tubestock to be planted in. This method of planting ensures that any tiny amounts of water (from rain, runoff from the path or reticulation overspray from the adjacent oval and grassed areas) will be captured by the plants over the summer months.



Photograph - M Matassa

A SERAG volunteer was assigned to around 3 or 4 GHD volunteers to reinforce the importance of the planting technique and to generally supervise and answer questions.

All up, about 500 tubestock were planted - a fantastic effort, leaving SERAG only one more planting session required to finalise the initial rehabilitation of this area.

As usual, the session was finished with a great morning tea provided by SERAG volunteers.

The input from groups like these is invaluable to the work that SERAG is able to achieve and we are extremely grateful for their help.

Article - R Napier

The season of Djilba-Kambarang - August to November (1st and 2nd Spring)

These Noongar Seasons are represented by the colour pink/orange/yellow. These months symbolise warmth returning and the flowering of wildflowers & plants.

A Pretty Problem

How many popular street and park shrubs are actually problem plants? They might be a feast for our eyes but they starve our native insects and animals of much needed food.

These introduced species gain a huge advantage over our local species because their growth is unchecked by the natural processes of being eaten for food by local insects or animals.

Classic examples are the pretty Coastal Teatree (*Leptosperemum laevigatum) and Flinders Range Wattle (*Acacia iteaphylla), which have graced our roadsides over many years, and with their prolific seed production are a real problem in native bushland such as at Pelican Point's Lot 4.







1. Coastal Teatree

2. Flinders Range

3. Broad-leaved paperbark

- 1. https://keyserver.lucidcentral.org/weeds/data/media/Images/leptospermum laevigatum/leptospermumlaevigatum23.jpg
- 2. https://www.bushlandperth.org.au/weeds/flinders-range-wattle/
- 3. https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.invasive.org%2Fbrowse%2Fdetail.cfm%3Fimgnum%3D5163020&psig=AOvVaw1 McaSdYTw55 2aehAWmo&ust=1690709048046000&source=images&cd=vfe&opi=89978449&ved=0CA8QihxqGAoTCJCRkqvMs4ADFOAAAAAAAAAAABDXAO

The general public start to think of these as native to Western Australia, and even increase the problem by further plantings. Another frequent example of this is *Melaleuca quinquenervia or Broad-leaved Paperbark, an eastern states variety that has even been planted as a commemorative native plant in restoration projects in Perth.

SERAG has been grateful for DBCA officers' help in cutting back some of these problem plants in Lot 4, Pelican Point to allow local native plantings more light and space to thrive.



Men at work!

SERAG would like to acknowledge the wonderful support from DBCA officers who came to the rescue at the Typha site.

As detailed elsewhere in this newsletter, planting the sedges was not a job for the faint hearted. But a team effort got the job done -DBCA provided the large augers to drill into the mud, the magnificent men from DBCA did the drilling with a few of our own magnificent men assisting, and SERAG volunteers followed behind planting.

Merci beaucoup!



Photograph - M Matassa Article - R Peek

Mark the Date! 🖊

SERAG's AGM

We warmly invite you to our Annual General Meeting

Wednesday evening, October 18 at 6pm

The meeting will include a talk on Seagrass monitoring & Marine Park health as well as the chance to catch up with friends over a delicious supper.

We encourage you to take a look at our Facebook page as well as our LinkedIn page -

https://www.facebook.com/swanestuaryreservesactiongroupserag/

https://www.linkedin.com/company/swanestuaryreservesactiongroupserag/ and follow them if you are active on either platform. You may need an account to view LinkedIn.

Regular Events for Your Calendar



- TREEmendous Tuesdays Bush Care activities Alfred Cove 7.30am 9.30am
- Saturday @ Pelican Point Bush Care activities 8:30am 10:30am
- Monthly Bird Count please contact SERAG for dates & times
- Monthly Mondays at Milyu Foreshore Rubbish Clean-Up 7.30am 9.30am
- Saturday Morning at the Cove Bush Care activities (4th Sat) 8:00am 10:00am

Please contact SERAG to register your interest in any of our events.

Contact SERAG -

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