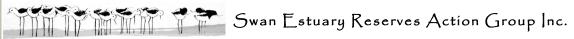
... about the Estuary



Djeren-Makuru 2022

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.

NATURALLY MARKING TIME

Our beautiful Rainbow Bee-eaters, Merops ornatus, seen gathering at Alfred Cove in large groups in March were noticeably mainly juveniles, lacking the streamer tail feathers, the black neck tie and the brighter colours of their parents. They were readying for their journey of thousands of kilometres to the north, and were just one of the distinctive signs that our Noongar seasons of Birak and Bunuru, time of the young and of adolescence were coming to



Photograph - J Christenson

Coincident with their departure, we notice the growing numbers of returning Musk Ducks (Biziura lobata) floating around in the calm waters of the Cove, staying throughout the seasons of Djeren & Makuru from April through to July. They will progressively display their bizarre courting behaviours as time passes, with the male inflating its throat pouch to call with a distinctive 'ploink, ploink', and spinning furiously to create as much splash as possible with its stiff erect tail, all to win over the demure female. These are some of the signs that the Noongar seasons of adulthood and courtship have arrived.

Then marking the turn of the season the Musk Ducks fly off to nest beside the now full inland lakes, and we know that Djilba has arrived – the season of conception. The bushland and waters of the Marine Park come alive with the mating calls of bush and water birds and we watch the pairs of handsome Australian Shelducks (Tadorna tadornoides) seeking out their nests in the tree hollows of the old river gum trees (Eucalyptus rudis), while the tiny Red-capped Plovers (Charadrius ruficillus) in their bright breeding plumage will scrape a nest in the sand at the highwater mark.



Photograph - Tim Graham-Taylor

Completing the full circle of seasons is Kambarang when we will be watching the skies in October for the return of the amazing trans-equatorial waders at the same time as the adult Rainbow Bee-eaters return to burrow their nests into the sandy soil and fill the sky with their trilling as they swoop after the bees and wasps to feed their young. Colour fills the bush too, all marking this beautiful season of the young.



Photograph - Tim Graham-Taylor

SERAG has decided to base their newsletters about the Estuary, around this yearly cycle of the six Noongar seasons, and hope to bring you many stories of how these annual events unfold in their three publications each year.

Article - M Matassa

In the Noongar seasonal calendar
Djeren and Makuru cover the
Autumn and Winter months
April - July

THREATENED SPECIES in YOUR NEIGHBOURHOOD

Developers from the University of Queensland have launched a new web app that lets Australians learn which threatened plants and animals live in their area.

The new app, called *Threatened Australians*, uses federal government data to introduce you to the threatened species living in your neighbourhood. More than 1,800 Australian plants and animals are considered at-risk of extinction.

By entering a post code, users can learn what the species look like, where they can be found (in relation to their electorate), and what's threatening them.

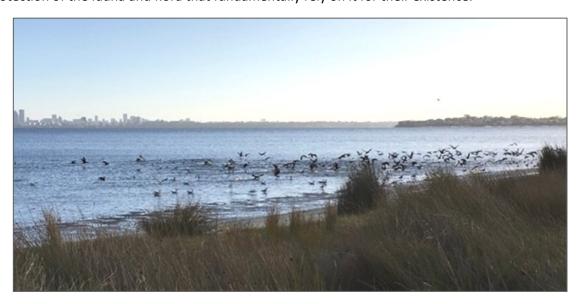
https://theconversation.com (Threatened Australians - May 3rd 2022)

ATTADALE ALFRED COVE FORESHORE MASTER PLAN

City of Melville's Attadale Alfred Cove Foreshore Master Plan

After 18 months of exhaustive community consultation, including commissioning a Charrette Process run by consultation company **element** which drew together consultants and the major stakeholders with interested parties and community members, the Attadale Alfred Cove Foreshore Master Plan – Final Draft was presented for approval at the City of Melville Council Meeting on 15 March 2022.

The thrust of this plan is to create a cogent strategy for the management of the Alfred Cove Marine Park foreshore stretching from the Page St dog beach at the edge of Point Walter to just past the Cunningham Street carpark in Applecross. Many people were previously unaware that these four and a half kilometres of foreshore were bordering such a vital section of our Swan River – the Swan Estuary Marine Park, set aside by an Act of Parliament in the 80's for the protection of the fauna and flora that fundamentally rely on it for their existence.



The responsibility for the management of this stretch of foreshore is held partially by the Department of Biodiversity, Conservation and Attractions (DBCA) and partially by the City of Melville, with oversight by the Swan River Trust within the Rivers and Estuaries Branch of DBCA. These days the foreshore is recognized to be part of the wetland itself or of the essential buffer zone around the wetland. The appreciation of the importance of this area has unfortunately come after much of it was treated as a rubbish dump followed by infill to create sporting fields and construction of facilities and housing.

People's understanding has been changing and, overwhelmingly, the community expressed their wish to see the environmental values of this important area prioritised, and supported the strengthening and the extension of the foreshore vegetation. This was well reflected in the Master Plan.

Furthermore, the community wished to see any changes to existing usage evaluated within the ambit of this overarching plan for the area.

SERAG appreciated the opportunity to be part of the Charrette process and has expressed its willingness to support the revegetation plans in whatever way it can. SERAG was very glad to see the high level of discussions between DBCA and the City of Melville that allowed the process to maximise the environmental outcomes that are so important to the future health of the Estuary, not only for the creatures whose very survival depend on it, but also for the health and well-being of the wider community.

Of course, the funding to extend the foreshore buffer will need to come from all levels of government. The State Government and the City of Melville demonstrated their good will by commissioning the first of the bird viewing platforms, this one on Point Waylen. The local member for the State Government, Lisa O'Malley MLA, is facilitating the funding of the platform, whilst the City of Melville is funding the revegetation, signage, paths and groundworks. This has given a strong impetus to the concept of designating the foreshore area as the Melville Bird Sanctuary (first stage) and SERAG is fully supportive of this campaign by the Friends of Melville Bird Sanctuary.



SERAG would like to see further support from the Government for the long-held plan to move the dual-use cycleway and pathway away from the edge of the river foreshore to the edge of the Crown Land Lot 9789 along the length of Tompkins Park. This will allow the urgently needed extension of the narrow foreshore vegetation buffer with a view to its inclusion in the Conservation Estate, an intention that already exists in the current DBCA Management Plan and for which SERAG has been campaigning for over 10 years.

SERAG hoped that all this goodwill and strong community support would encourage the Council to move forward with the Master Plan. In "acknowledging" the Master Plan rather than "endorsing" it as the resolution originally proposed, some Councillors expressed concerns that the implementation of the Master Plan would have long term financial consequences for the City. This completely overlooks the purpose of a Master Plan. As stated at the beginning of element's document:

"The Attadale Alfred Cove Foreshore Master Plan ... has been prepared to establish a vision for the area and assist in guiding future investments and support decision making processes over the next 20 years."

Clearly, funding details have yet to be worked out.

Similarly, the watering down of the second part of the resolution to "investigate the feasibility of progressing" rather than to "progress" the recommendations in the Master Plan is disappointing.

This failure to endorse and support the Master Plan is of particular concern given that as recently as 17 May 2022 the Council passed a resolution allowing a sporting body the right to park in an area to the north of the Troy Park oval. This use is completely at odds with that proposed in the Master Plan.

Given that the Swan Estuary Marine Park has been given such a high level of protection by the State Government through legislation, SERAG hopes State and Federal Governments will support the aims of the Master Plan by delivering the funding to ensure this protection is realised, hopefully on a quicker timetable than that currently proposed.



Of course, there will be ongoing clashes between people's wishes to retain and even expand existing facilities on the foreshore, as against the environmental needs set out in the Master Plan. SERAG understands the dilemma for Councillors listening to the disappointment and frustration of community members whose hopes for the development of the foreshore area may have been seen as reasonable in the past, but who are now faced with the realisation that environmental issues are of far greater importance to the wider community. The preservation of unique but rare pockets of the natural environment which still exist in the metropolitan area is paramount not only for the health and well-being of people but also for wildlife which completely rely on these areas for their existence and have nowhere else to go.

SERAG hopes that the voice of the majority, who are extremely concerned to act now rather than later with respect to prioritising the conservation of what little environmental quality we have left, will be heard for the sake of our children and children's children.



AN ODE TO THE AMAZING MUSK DUCK

Found only in the land "down under" is the strangest of birds *Biziura lobata*Earth's only member of this genus, with a slight divergence tween the East and us,
The largest of Australia's Ducks, better known for the male's pheromone of musk
Usually dispersed to interior deep wetlands in small flocks
They're congregating here, now to display kicks, calls and "plonks".

deep permanent water and marsh, for this performance locale
is what makes Marrandungup aka Alfred Cove so special

This aggregation is called a Lek, well you might ask ,what the heck is a Lek?

A gathering of males for competitive display,

To attract females who will choose with which male they'll mate

Consequently some ducks will lose

Such gathering also provides schooling for young,

And training has been observed as relatively long (possibly 2-3 years before sexual maturing) before vocalising and performance ritual skills are eventually won.

Males sexually dimorphic with a large pendulous grey lobe under the bill, legs positioned well to the rear affords deep diving skill

Dark feathered, three times the weight of females or immature

The preen gland at base of tail secretes pheromone now used as a lure

He plonk kicks and calls to gain her attention

then switches to whistle kick to ensure her selection,

copulation is quick, then displaying resumes

His competence and hierarchical dominance to assume

She leaves then to make her own nest

A small depression of grasses and leaves considered best,
laying about 3 large greenish eggs to brood all alone
The male of the species, not now required, left free to roam.
Precocious youngsters these hatchlings are swimming before very long
She feeds them on aquatic grasses and molluscs which make them strong
They will stay with their mother for several months yet
Till diving much deeper, bigger crustaceans to get.

So head to the Cove. What amazing good luck
To observe in our local environment
the amazing spectacle of an extraordinary Duck.





CLEAN UP AUSTRALIA DAY - March 7th 2022

SERAG organised a wonderful, happy group of 33 participants for Clean Up Australia Day at Pelican Point in March.

As well as local volunteers we were joined by enthusiastic students from Curtin University, the University of WA and St Catherine's College (UWA). We were also supported by the local MLA member for Nedlands, Katrina Stratton and City of Perth contractors who took away the rubbish that we had collected.

After a welcome by Margaret Matassa, Secretary of SERAG, all put on their Sherlock Holmes' hats and gloves to search for and pick up rubbish from the Pelican Point area. The 'treasure' hunt started at 9am and by 10:00am the intrepid collectors had collected 15 bags of general rubbish and 3 bags of recyclable materials—the most common of these being aluminum cans, glass and plastic bottles.

After such strenuous endeavours, morning tea and a chat was enjoyed by all.

Many thanks to all the volunteers who helped with this important project.









Article and Photographs - R Weir

DID YOU KNOW?

Single Use Plastics Ban

The WA Single Use Plastics Ban will be in place from Friday, 1 July 2022, banning the supply of items such as disposable plastic cutlery, straws, plates, bowls, containers, cups and bags.



WORLD MIGRATORY BIRD DAYS - MAY & OCT



Celebrated across the world on two peak days each year – on the second Saturday in May and the second Saturday in October – World Migratory Bird Day is the only international awareness-raising and education program that celebrates the migration of bird species along all the major flyways of the world.

In the Southern Hemisphere, WMBD in May celebrates these amazing birds reaching their summer breeding areas in Asia and the Arctic tundra, having left our shores in March/April. On WMBD in October, we welcome them back after their monumental flight.

The Effect of Artificial Light Pollution on Migratory Birds will be the focus of the World Migratory Bird Day 2022 campaign with the slogan "Dim the Lights for Birds at Night".

Artificial light is increasing globally by at least 2% per year and it is known to adversely affect many bird species. Light pollution is a significant threat to migratory birds, causing disorientation when they fly at night, leading to collisions with buildings, disturbing their internal clocks or interfering with their ability to undertake long-distance migrations.

Solutions to light pollution are readily available. For instance, more and more cities in the world are taking measures to dim building lights during migration phases in spring and autumn. Best practice guidelines are also being developed under the Convention on Migratory Species to address this growing issue and ensure that action is taken globally to help birds migrate safely and these include:

- Using smart controls (e.g. motion sensors, timer on/off switching);
- Lighting only the intended object or area;
- Using only the lighting intensity required for the activity;
- Using non-reflective, dark-coloured surfaces to buildings.

Migratory shorebirds feed both diurnally (daytime) and nocturnally (night time), depending on the tide. By allowing for greater visual foraging, night-time lighting

Grey Plover and Great Knot

may benefit some species. Where nocturnal roosts are artificially illuminated, however, shorebirds can be forced to move further away from foraging areas, causing them to use up essential energy in travelling further between areas.

SERAG recently had a display in the foyer of the City of Melville Civic Centre Library with information on this year's

theme plus more general information about these amazing birds. We are so privileged to have these birds visit our estuary every year and our display included photos of some of this year's visitors. We hope you had the opportunity to visit.



Great Knots





Common Greenshank

CITIZEN SCIENCE PROJECTS 2022

SERAG is a member of CCWA and BIRD LIFE Australia and has invited applicants to participate in Citizen Science field trips for 2022.



You can check the CCWA website, at https://www.ccwa.org.au/citizen_science_program and click on the top bar for the Citizen Science projects.

Trips are to capture responses of bird communities both seabirds and bush birds in various restoration projects in regional areas and for documenting biodiversity outcomes on carbon farms etc. These invitations are for those with bird watching expertise and novices keen to expand their knowledge and experience.

Surveys are of approximately 4 days self-catering camping style activity or accommodation provided at research stations.

Although field trips for 2022 are fully booked you can join the waiting list in case of cancellations.

For more specific information please go to claire.greenwell@ccwa.org.au to register. Claire, some SERAG members will remember, took us out on the Pt Walter spit last year to see the Fairy Tern breeding colony. Having completed her PHD Claire is now managing the Citizen Science arm of CCWA.

Article - J Ginbey

TACKLING AN ACUTE PROBLEM

Ask anyone to describe the characteristics of the Swan Estuary Marine Park and they will most likely start with the sedges - the beautiful *Juncus kraussii* that grace our shorelines. Shining green swathes in every season, they bend with the wind, glisten with the rain and shelter countless creatures in their midst.



Juncus kraussii bordering the Swan Estuary Marine Park at Alfred Cove

Photograph - M Matassa

But here and there their continuity is interrupted with some stiff upright stands of sedges, blue-green in colour, with extremely sharp ends, sometimes supporting a cluster of round, brown seeds – these are the 'interlopers' from the Americas, Asia and Europe, the serious weed *Juncus acutus. This vigorous weed species produces plentiful seed and its leaves and flower heads end in extremely sharp points that can easily pierce the skin.



Fig 7. *Juncus acutus invading Eadine Spring, a disturbed freshwater seep near Clackline. Photograph - Michael Lyons Photo and description from 'Managing Sharp Rush (*Juncus acutus) - Parks and Wildlife

As if this is not bad enough, the two Juncus species have produced a hybrid *J. kraussii X acutus* with the result that the native species is having to compete with not one but two non-native sedges. This hybrid is somewhat difficult to distinguish from its parent plants, particularly *Juncus kraussii*, and it too has spread in and amongst the stands of sedges, particularly along the Attadale foreshore.

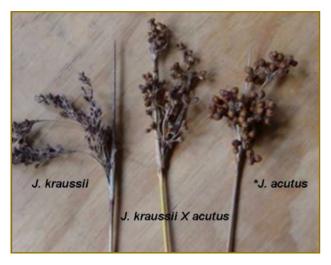


Fig 6. From left to right, *Juncus kraussii, putative hybrid (J.kraussii X acutus) and *J.acutus* from Lake Coogee.

Photograph - Bronwen Keighery

For some years now, attempts have been made to control *Juncus acutus on Attadale foreshore by poisoning, which has knocked it back, but not eliminated it entirely. Hence not only has it bred further from its seed but it has also meant that more hybrids have been produced and these hybrids themselves are also capable of reproduction from their seeds. There is a risk that the Juncus kraussii could eventually be overwhelmed if nothing else is done.

Recently, SERAG gratefully received advice from Greg Kieghery regarding these challenges, resulting in determination to fully remove every *Juncus acutus plant and then to monitor the hybrids and the Juncus kraussii, and most especially any new growth of *Juncus acutus from latent seed. The hope is that the J. kraussii will prove more vigorous than its hybrid and outcompete them eventually, assuming that the *J acutus isn't allowed to return to produce new hybrids.

Hence the other morning the TREEmendous Tuesday team armed themselves with safety goggles, secateurs and long-handled spades and set about identifying and digging out every *Juncus acutus they could find, with great hopes that they have achieved elimination - at least for the present.



Photograph - M Matassa

MONTHLY MONDAYS at MILYU



Now You SEE It.....Now you don't!

Litter gatherers at Milyu Nature Reserve -

- 2nd Monday of the month
- 7am (6.30am in Summer!)
- 6-8 enthusiastic litter pickers
- BYO kit bag, gloves, tongs, hi viz vest and sharp eyes
- Glorious river views, birds...... birds and more birds!
- Stillness in the midst of the city rush hour.
- 8-16kg of rubbish, weighed, sorted, and mostly binned, but lures (of the fishing variety), tennis balls (for our dogs) and plastic bottles (for *Containers for Change*) go home with members of the Milyu Mob.
- 8.30am Ah! morning tea BYO cup, shared sweet treats and good conversation.

And a good time is always had by all!

BEAUTY REFLECTED

This graceful White-faced Heron - Wyan - looking for an evening roost, is rewarded with the outstretched branchlets of a water-side stag paperbark - dead but still giving amenity with its welcoming roost sites.



Trees also provide nesting sites for herons where they build untidy stick nests for their clutch of pale blue eggs. Wyan (*Egrettta novaehollandiae*) have beautiful two-toned grey-blue feathers, white face and yellow legs, making them very distinctive and easy to identify.



By day they may be seen standing stock still in the shallow waters of the Marine Park waiting for their prey to swim by, or else stirring the water with their feet to attract their prey and even dashing after it.

A local beauty.

Article - M Matassa Photographs - Tim Graham-Taylor



SERAG Calendar of Events - June & July 2022 - Season of Makuru (June - July)



The Noongar Season 'Makuru' is represented by the colour dark blue as it symbolises rain and cold weather.

It is the best time for dry land planting.

June 2022 -

Sat 04 - UWA @ Pelican Point - Weeding & planting (8:30am - 10:30am)

Sun 05 - World Environment Day - 'Only One Earth'

Tue 07 - TREEmendous Tuesdays, Alfred Cove - Weeding & planting (7:30am - 9:30am)

Tues 07 - John XXIII Students, Pelican Point - Mulching & planting (11:00am - 2:00pm)

Fri 10 - NRM Bankwest Group, Pelican Point - Weeding & planting (9:00am – 12:00 noon)

Mon 13 - Monthly Monday at Milyu -Rubbish pick-up (7:30am - 9:30am)

Tue 14 - TREEmendous Tuesdays, Alfred Cove - Weeding & planting (7:30am - 9:30am)

Sat 18 - Monthly Bird Count, Alfred Cove (7:30am - 9:30am)

Tue 21 - TREEmendous Tuesdays, Alfred Cove - Weeding & planting (7:30am - 9:30am)

Sat 25 - Saturday Morning at the Cove - Planting (8:00am - 10:00am)

Tue 28 -TREEmendous Tuesdays, Alfred Cove - Weeding & planting (7:30am - 9:30am)

During this month some members will receive a renewal request inviting them to renew their membership by June 30th - thank you.

Please contact Margaret at SERAG if you are interested in helping with any event.

Email: admin@swanestuaryreserves.org

Phone: 08 9330 1791 and leave a message if necessary.

July 2022 – **July 1 - 31** - Plastic Free July

Sat 02 - UWA @ Pelican Point - Planting (8:30am - 10:30am)

Tue 05 - TREEmendous Tuesdays, Alfred Cove – Weeding & planting (7:30am - 9:30am)

Mon 11 - Monthly Monday at Milyu -Rubbish pick-up (7:30am - 9:30am)

Tue 12 - TREEmendous Tuesdays, Alfred Cove - Weeding & planting (7:30am - 9:30am)

Sat 16 - Monthly Bird Count, Alfred Cove (8:00am - 10:00am)

Tue 19 - TREEmendous Tuesdays, Alfred Cove - Weeding & planting (7:30am - 9:30am)

Fri 22 - NGIS at Alfred Cove - Planting - (1:00pm - 4:00pm)

Sat 23 - Saturday Morning at the Cove - Planting (8:00am - 10:00am)

Tue 26 - TREEmendous Tuesdays, Alfred Cove – Weeding & planting (7:30am - 9:30am)

Thurs 28 - Curtin Volunteers (CV!) at Pelican Point - Planting & weeding (9:00 - 12:00 noon)

Fri 29 - Lance Holt School at Alfred Cove - Planting

Sun 31 - National Tree Day

Please contact Margaret at SERAG if you are interested in helping with any event.

Email: admin@swanestuaryreserves.org

Phone: 08 9330 1791 and leave a message if necessary.

Regular Events for Your Calendar



- TREEmendous Tuesdays Weeding at Alfred Cove 7.30am 9.30am
- Saturday with UWA @ Pelican Point Weeding and planting 8:30am 10:30am
- Monthly Bird Count on a Saturday at Alfred Cove 7.30am 9.30am
- Monthly Mondays at Milyu Foreshore Rubbish Clean-Up 7.30am 9.30am
- Curtin Volunteers (CV!) Planting and weeding Second Semester from July 28, fortnightly at Pelican Point or Alfred Cove 9.00am - 12.00noon
- Saturday Morning at the Cove Planting 8:00am 10:00am

Please contact SERAG to register your interest in any event.

Contact SERAG -

Swan Estuary Reserves Action Group Inc.

Mail: PO Box 258 MELVILLE WA 6956

Phone: 08 9330 1791

Email: admin@swanestuaryreserves.org

Website: https://swanestuaryreserves.org

