



We acknowledge the Whadjuk Noongar People as the Traditional Owners of the Derbal Yerigan 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.

SERIOUS CHALLENGES AT PELICAN POINT

Will Research Find Answers?

SERAG has held major concerns for many years about the severe erosion happening at Pelican Point, especially on the north-eastern side of the Point itself, and the ongoing disturbance to birdlife once the old fence delineating the bird sanctuary on the Point was taken down at either end and not replaced several years ago.

Geoff Barrett of the Department of Biodiversity, Conservation and Attractions brought together several of those who hold these same concerns, to meet onsite at Pelican Point in August, including Dr Nic Dunlop and Dr Claire Greenwell of the Fairy Tern Network, Dr Kerry Trayler, Stephen Lloyd and Toby Rees of DBCA, Dr Tim Gourlay, a hydrological engineer from Perth Hydro and Margaret Matassa, Sue and Tim Graham-Taylor of SERAG.

The group viewed the north-east side of Pelican Point from the vantage of the Pelican Point Sea Scouts' foreshore, making the following significant observations:

- Large aggregations of birds were resting on the Point; others were already nesting or engaged in nesting activity, similar to this view of the Point taken in 2021.



North-eastern side of Pelican Point with birdlife seen to be filling the foreshore in the background - August 2021

Photograph - Cathie O'Neill

- Dynamic wave action had eroded the foreshore completely and cut a major breach in this north-east foreshore of the Point, creating a wide new channel to the lagoon. The older smaller channel was silted up.

Disturbance Issues

Margaret Matassa explained that a Disturbance Study conducted by Birdlife in the previous summer had shown significant disturbance to waterbirds, including the vulnerable Fairy Tern and resident shorebirds, principally due to recreational activities along the shoreline such as walking, jogging and fishing.

Claire Greenwell spoke of the importance of Pelican Point as one of the last remaining sites where aggregations of local birds can occur, explaining that many water birds rely on aggregation as a protective device when resting and roosting. With the endangered Fairy Tern nesting on Point Walter, Pelican Point is an important feeding and resting place for them. It is also a site for trans-equatorial wading birds such as the Red-necked stint.

Pelican Point is also one of only two remaining sites where the Red-capped Plovers breed on the Swan Estuary and these small birds nest in sand scrapes that are extremely vulnerable to walkers, as their eggs are cryptically coloured and cannot be seen.



A young Pied Stilt with a Red-capped Plover in breeding plumage at Pelican Point. October 2022

Photograph - Tim Graham-Taylor

Geoff Barrett enquired as to whether any records of birdlife at Pelican Point have been kept and Tim Graham-Taylor spoke of the 50 years of continuous weekly Bird Counts that have been recorded by the Pelican Point Bird Group.

Geoff Barrett indicated that DBCA would be placing a temporary fence on the South West side of Pelican Point this summer, assuming that the breach in the foreshore on the North East side will remain to inhibit walkers from accessing the Point from that direction.

The temporary fence appears to be helping with Oyster-catcher and Pied Stilt chicks seen on the Point already.

Erosion Issues

Stephen Lloyd spoke on behalf of Mel Evans who is the DBCA land manager responsible for Pelican Point Marine Park, including the terrestrial section. Their view is that the current erosion is largely as a result of the removal of dredged infill soils dumped in the 1950's. Given that sand replenishment is prohibitively expensive (>\$100,000) and brush-walling considered unsuited to such a steep site, there are thus no current DBCA plans for erosion control on the Point.

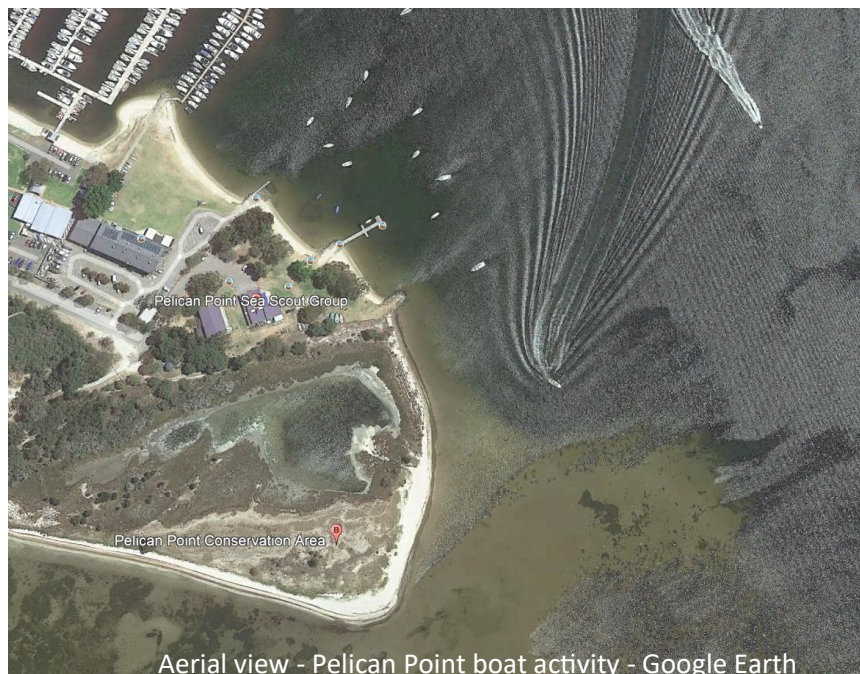
A subsequent search of maps has confirmed dredging and infill activities around Pelican Point in the 1930's as well as the 1950's, but the terrestrial section of the Point appears to have been excluded from dumping, most likely because it was declared a Bird Sanctuary from the 1930's and managed as one from the 1960's when the protective fence was erected.

Whilst it is clear that the erosion in winter can be exacerbated by the combination of high tides with a storm event, others spoke of the need to understand the cause of extremely high levels of wave energy in the vicinity of Pelican Point.

Dr Kerry Trayler had approached the UWA Engineering Department to suggest a study of the wave dynamics by Fourth Year Engineering Students but the response was to suggest that DBCA offer a scholarship for a Masters student to complete this study. Dr Kerry Trayler will investigate this possibility for Semester 1 in 2023.

Dr Tim Gourlay explained the relevance to Pelican Point of his 2010 study: *Full-Scale Boat Wake And Wind Wave Trials On The Swan River*. He pointed out the similarities of the driving forces that caused the severe erosion at Chidley Point in Mosman Park early this century, and which had been arrested and reversed following his advice to the Department of Transport to change the boating speeds in the vicinity.

Tim offered to gather the necessary scientific evidence at Pelican Point relating to boat wake and wind wave erosive effects in early summer 2022 to decide if boat wake is a significant erosion factor on the Point. The cost would be in the order of \$10,000.



DBCA does not have current funding available for such a study, and the Department of Transport spokesperson Mark Briant, told SERAG Chairperson Robert Harvey that it does not have sufficient evidence to consider any change to boat speeds at present.

However, SERAG will continue to pursue other possible sources of funding to allow this important scientific study to go ahead, early this summer if possible.

NESTING BIRDS' SHOCK IN THE NIGHT

Last month a speeding boat came out of the night and crashed into Pelican Point, missing a nesting swan by barely metres and scattering Stilts and Red-capped Plovers in alarm.

Its speed carried it up the beach, on through the vegetation, coming to a halt only as it hit the high ground. The two young drivers abandoned the boat, leaving the startled birds and damaged vegetation in their wake.



Two SERAG members monitoring birds came upon the scene the next morning and alerted DBCA. It took members of the water police, DBCA, the owner and scout members several hours to return the boat to the water, with birds looking on anxiously nearby, unable to return to their nests until the job was done.

Open speed limits in the waters off Pelican Point combined with the influence of alcohol took a heavy toll.

To notify DBCA of any incident in the Swan Canning Riverpark after hours phone the **Riverpark Duty Officer on 9278 0981**.



Article - M Matassa

Photographs - SERAG Volunteers

Season of Djilba-Kambarang - September - November (1st and 2nd Spring)

This Noongar Season is represented by the colour yellow. It symbolises the season of birth.

LOCAL FEDERAL MINISTERS VISIT THE SWAN ESTUARY MARINE PARKS

SERAG has been very pleased to host onsite visits to Alfred Cove Marine Park & Nature Reserve for Sam Lim MP, and to Pelican Point Marine Park & adjacent Bush Forever Site 402 for Kate Chaney MP, as these areas fall within their respective Federal constituencies.

SERAG welcomes their interest in knowing more about these vitally important areas and how they contribute to the health of the whole of the Swan Estuary through the powerful oxygenation processes of the Seagrass meadows and Samphire flats within the Marine Park.

In both areas, SERAG has been following DBCA's management plans to care for and to revegetate the Marine Park foreshore areas for these past 12 years, and our Chairperson Robert Harvey and committee members were pleased to show the positive outcomes that SERAG has achieved over this time.



There are many remaining challenges and Sam Lim took genuine interest in the soft erosion control processes by which SERAG has so far successfully limited the loss of foreshore areas and prevented tree losses down by the Estuary's edge at Alfred Cove.

Sam was taken on a whirlwind tour of the 4.2 kilometres of the Estuary foreshore and saw for himself the extreme narrowness of the foreshore buffer vegetation, whilst seeing the great beauty of the Marine Park, including the largest remaining stretch of Samphire and Saltmarsh in the whole of the Swan Estuary at the Cove itself.

SERAG is pleased that the current Federal Government is continuing to offer small Volunteer Grants to support some of the ongoing costs incurred in the work of volunteer groups, and we are grateful that SERAG's Expression of Interest to gain one of these grants for their work at Alfred Cove has been accepted and Sam Lim will be informing groups of the final outcome later in the year.

The tour of Pelican Point showed a different picture to Kate Chaney. Although growing up in Nedlands, the beauty of the terrestrial section of the Point with its lagoon and samphire and sedges took Kate by surprise. Kate was treated to Nature in action with some teal ducks parading for her on the lagoon until bigger and bossier Shelducks came to try to drive them away, unsuccessfully as it turned out.

Kate was surprised to learn that the north-eastern foreshore has been all but lost to high energy wave action despite SERAG's efforts to control the erosion, and she appreciated SERAG's ongoing efforts to discover the cause of this erosion, in order to hopefully arrest it.

The University and high school students' efforts in planting understory in the Bush Forever site was also of great interest to Kate.

SERAG presented both Kate Chaney and Sam Lim with a detailed summary of SERAG's efforts at Pelican Point and Alfred Cove respectively, together with an outline of the many challenges, and SERAG is glad of their commitment of ongoing interest in meeting these challenges.



A TOUR DE FORCE



An invitation to SERAG last September to meet with Kim Giddens MLA at her office was gladly accepted and the four attending committee members were able to discuss with Kim the ongoing challenges that SERAG was facing in their aim to enhance the long-term ecological health of the Swan Estuary A-Class Reserves bordering the Marine Park.

Kim already appreciated the incredible importance of the Seagrass meadows and Samphire flats to the health of the Estuary as a whole, and that healthy riparian vegetation on their foreshores was the best way to protect them.

Hence Kim immediately grasped the inherent problem of the extremely narrow Tompkins Park foreshore, hemmed in as it is by the Principle Shared Pathway for cyclists and pedestrians. A few metres of native vegetation is nowhere near sufficient to allow the roots to trap excess nutrients and pollutants in the groundwater, or to filter run-off water and storm water as it flows into the river, thereby endangering the health of the seagrasses.

Whilst the City of Melville's Foreshore Master Plan includes the intention to create 30-metre buffers by moving the PSP, this will require a great deal of funding support from all levels of government.

SERAG also discussed concern about erosion of these already narrow borders, and told Kim of our success in Alfred Cove with soft erosion control methods, yet the failure of these same methods at Pelican Point, where an alarming amount of foreshore has been lost to erosion in the past few years. SERAG added that DBCA had recently explained that replenishment or brushwalling were precluded by the terrain and that they currently had no solution in mind to stem this loss at Pelican Point.

Kim offered to seek a meeting for SERAG with the Minister for the Environment, and SERAG was extremely grateful when Kim organised an onsite visit with three of the relevant State Government representatives – the Minister for the Environment and Climate Change, Hon Reece Whitby MLA, the Member for Bicton, Lisa O'Malley MLA, and Kim herself, the Member for Bateman MLA.

Starting with a discussion over glasses of iced water at Tompkins-On-Swan overlooking the Swan Estuary Marine Park, SERAG explained to the Minister the vital importance of the Marine Park and of the need for a healthy broad riparian vegetation buffer. The problem of the Principle Shared Pathway being too close to the river to allow for such a buffer zone was clearly evident, as the group looked toward the beautiful stretch of the Marine Park there. SERAG also explained that the expanded buffer zone would incorporate the Crown Land Lot 9789 and that the DBCA Swan Estuary Management Plan has intended that the Crown Land be incorporated into the Conservation Estate.

The group then agreed to be driven around to see for themselves the restoration work that SERAG has achieved with funding through the State NRM and other funding bodies and they immediately appreciated the contrast between one site full of weeds and yet to be restored, and the site immediately alongside now thriving with native plants, including stretches of samphire that had returned by itself once the weeds were removed. Clearly the challenge of the steepness of the immediate foreshore and the infill over a rubbish tip would require a great deal of money to rectify, but the rewards of the return of the Samphire and Saltmarsh would be a huge gain for Blue Carbon capture.

The tour finished at the Burke Drive viewing platform, with Minister Whitby expressing his pleasant surprise at this 'hidden' beauty in the Cove. More of these viewing platforms are planned, starting with the one to be built on Point Waylen, thanks to the support of a State Government grant facilitated by Lisa O'Malley. These will be a feature of the proposed Melville Bird Sanctuary and as SERAG put to the Minister, this unique area with its beauty and remarkable avian fauna that attracts locals and tourists, surely deserves a greater level of protection than it currently receives.

SERAG sincerely thanks Kim for facilitating this meeting with Minister Reece Whitby, who promises to maintain interest in the issues impacting the Marine Park.

SERAG will also be very glad of a suggested joint meeting early next year with the three Electoral Representatives whose electorates include the Marine Park, being Katrina Stratton MLA who joined SERAG on KAB day at Pelican Point in March, together with Kim and Lisa, to consider the challenges facing the Swan Estuary Marine Park as a whole.

CORPORATE TEAMWORK TRIUMPHS

It was a cloudy day with the threat of rain ever present, but that did not deter a team of twelve enthusiastic volunteers from the corporate group NGIS joining with five SERAG volunteers to spend 3 hours planting sedges at the Blue Wren Site in Attadale.



NGIS is a company that specialises in the use of geospatial technology to make a positive impact in the world. It uses software and data to tackle issues such as sustainable development, biodiversity and conservation, preservation of Indigenous rights and interests, climate change and disaster risk reduction. So, with an interest in those issues, the NGIS group were a perfect match to work with us restoring under the swathe of old growth trees adjacent to the Alfred Cove A-Class Nature Reserve. This is an area where SERAG has been gradually replacing the weeds and grass with native understorey, following the management plan of the City of Melville.



The challenge was to plant two hundred 5 and 10 litre pots of sedges (*Lepidosperma gladiatum*, *Gahnia trifida* and *Baumea preisii*), which had been made available and delivered to the Blue Wren Site by the City of Melville.

With only a short break for some drinks and fruit the group had planted 195 pots when a sudden heavy downpour stopped all activity 15 minutes early! But the results of the afternoon's work were immediately obvious and we have received a number of positive comments from people who regularly walk in the area.

Thanks to everyone involved, especially our NGIS volunteers for making it such a successful afternoon. We look forward to seeing you again at the Attadale foreshore!



Article & photographs - R Peek

PLANTS GALORE !

As mentioned throughout this newsletter, Winter 2022 has seen a tremendous amount of planting activity in the reserves which SERAG is working to rehabilitate and protect.

At Pelican Point the tube stock was purchased with funds provided to SERAG pursuant to a grant under the Swan Alcoa Landcare Program and further plants were contributed by DBCA.

The plantings along the foreshore in Attadale and at Tompkins Park were funded by our 4 year Community Rivercare Grant.

At the Blue Wren Site in Attadale, the tube stock and large plants were provided by the City of Melville.

Without this funding and support and, of course, the help of our volunteers we would not have been able to achieve such a wonderful result. Thank you everyone!



Department of **Biodiversity,
Conservation and Attractions**



REPORT ON SERAG'S DEPUTATION TO SEPTEMBER COUNCIL MEETING OF THE CITY OF MELVILLE

Councillors were asked to help increase community understanding of the importance of extended buffers as set out in the Attadale Alfred Cove Foreshore Master Plan

At the September meeting of the City of Melville Council a petition was considered that requested two significant changes to the Attadale Alfred Cove Foreshore Master Plan (AACFMP). In response to the issues raised in the petition, Margaret Matassa made a presentation to the meeting on behalf of SERAG.

In essence, the petitioners were requesting:

- i) that the existing alignment of the pathway that passes between the Attadale Conservation Reserve and the river foreshore be retained, but with the eroding pathway replaced by a high boardwalk; and
- ii) that the pathway beside the dog exercise area in Attadale be retained in its current alignment.

The AACFMP had recommended that the foreshore buffer zone be extended to at least 30 metres in both these places. This was supported by the City of Melville Environmental Management team and DBCA. The Councillors had also heard from a Coastal Engineer that the eroding pathway was on unstable infill land and should be closed, allowing the river to regain its original shoreline, plus allowing for any future fall back.

This evidence was available to the community during the year-long process of consultation on the AACFMP but, as is so often the case, there are those, including these 140 or so petitioners to whom the changes came as an unwanted surprise.

How do Councillors then find a way to justify why they are declining to support the petitioners?

SERAG has realised over the years that many locals simply do not know that the Attadale/Alfred Cove /Tompkins Park foreshore borders the Swan Estuary Marine Park for its full length, nor what the significance of that might mean for its management.

Of course, this is fully understood by the local Aboriginal Elders, and Margaret began her address by acknowledging how this area has deep spiritual and cultural connections for the Whadjuk people of the Bibbulmun nation, and thanking their elders past and present for their ongoing care and love of this, their country.

However, Margaret recalled a time 50 years earlier when, along with many others, she would walk along the shoreline at Attadale not necessarily appreciating the impact that could have on the foreshore vegetation and birdlife. Now with the escalating rate of change in nature and with human impacts becoming more invasive and frequent, the overriding issue is:

“How do we ensure that we still have a beautiful river to enjoy in 20 years’ time?”

Sometimes a look back at history can change the way we think and indeed help us to accept and support what is needed to ensure a treasure like the river and foreshore is there for future generations to enjoy.

In a brief overview of the foreshore history, Margaret explained how in the 50's & 60's Melville Road Board followed public opinion and dumped rubbish and infill onto the Attadale / Tompkins Park foreshores, obliterating the wetlands there.



Tompkins Park August 1961

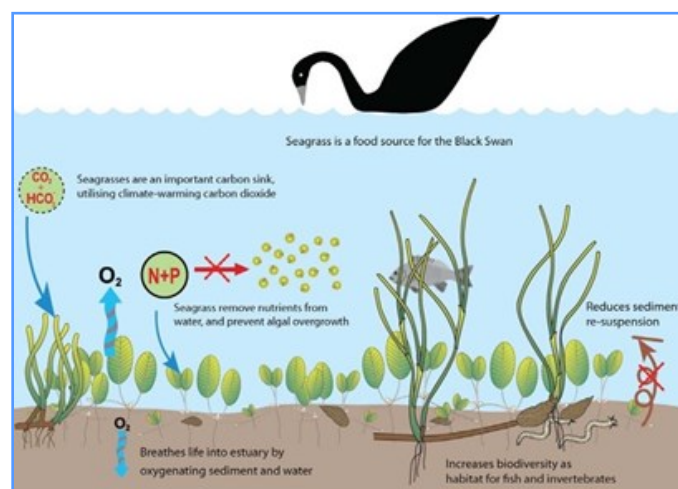
But what the public didn't know in the 50's & 60's was that wetlands act as a filter of nutrients and pollutants through the deep roots of the sedges and samphires, thus preventing groundwater from fouling the river and damaging seagrass meadows. Furthermore, they didn't know that wetlands are biodiversity wellsprings for fauna and flora, and are a powerful carbon sink.

Melville residents were then, and in large part still are, unaware of how important it is to have these seagrasses growing in the river next to these devastated wetlands – indeed most residents probably don't even know they are there.

The vital importance of the seagrasses and shallows to the survival of Estuary life is demonstrated by this DBCA poster.

Seagrasses and shallows provide:

- Oxygen in water
- Oxygen in mud
- Crustacean nursery
- Shelter to fish
- Food for swans
- Biota in mud flats
- Food for shorebirds and bind sediments.



Then in the 1980's public concern grew about the poor health of the Perth – Melville waters, and the State Government responded by legislating to protect remaining seagrass meadows and shallows at Attadale/Tompkins Park, Pelican Point in Crawley and Milyu in South Perth. The foreshores became A-Class Nature Reserves and the shallows and seagrasses the Swan Estuary Marine Park.

In Melville, these areas are to gain even more public recognition and appreciation when they become the Melville Bird Sanctuary Stage 1.

The community up to now mostly were not aware of this history, so when the City of Melville held the AACFMP public consultation in 2021-2022, the community finally had the opportunity to learn about the original wetland foreshores and how they had been overlain with dredged materials and rubbish to create the flat raised grassed areas and playing fields of today. The consultation also stressed how there is an urgent need for extended buffers for:

- pollution and nutrient control
- river fall-back onto pre-existing wetlands
- wildlife protection and habitat, especially for birdlife, some of which are threatened.

Hence with respect to the boardwalk request, DBCA explained that they do not agree with building it inside the buffer zone where erosion will be an ongoing problem, given that hard erosion control causes further damage to the Marine Park through scouring and loss of shallows.

Margaret acknowledged that there is no doubt that a boardwalk along the existing pathway alignment would offer beautiful river views, but the question is for how long and at what cost? The AACFMP has planned for viewing platforms nearby which would provide beautiful, contemplative views of the city and river such as the one below, without the erosion concerns nor the disturbance issues of a pathway or boardwalk.



Furthermore, the AACFMP has plans for a boardwalk through the Attadale Reserve which will provide an interesting and different bushland experience, still with sightlines through to the River.

As to the request to retain the current path alignments, Margaret pointed out that SERAG's twelve years of experience in revegetation of the foreshore has shown the need for a hard pathway along the edge of buffer zones to halt the invasion of running grasses and to reduce the inevitable wind-blown weeds from intruding too far into the native vegetation.

Finally, Margaret reported on recent studies at three points along the Attadale / Alfred Cove foreshore which have found:

- high levels of nutrients in groundwater at the foreshore; and
- high levels of metal contaminants at Point Waylen

In conclusion:

Expanding the natural buffer zone to at least 30m will:

- trap more contaminants and more nutrients in the root systems of sedges and saltbush, cleansing the groundwater reaching the river;
- help lower the water table through deep rooted native vegetation;
- help prevent smelly algal blooms along the foreshore; and
- help prevent loss of the seagrass meadows of the Marine Park,

for the benefit of present and future residents, the wider Perth community and the wild creatures that depend on a healthy estuary for their survival.

Deputy Mayor Tomas Fitzgerald spoke of buffers allowing for changing tide levels over time and to be wary of making decisions based on acquiescent tidal years. Councillor Karen Wheatland also spoke of the crucial need for extended buffers.

SERAG was very glad that Councillors voted unanimously to accept the City of Melville Officer's recommendation to reject the petition.

Article & photographs - M Matassa

SERAG'S AGM - 19th October 2022

We are very pleased to invite you to our **Annual General Meeting** to be held on Wednesday evening **19th October** at **Bracks Library, Meeting Room 1** commencing at **6.00pm** and concluding by 8.00pm with light refreshments.

We are delighted to have **Dr Rose Weerasinghe as our Guest Speaker**, who has conducted research on the restoration of Samphire and Saltmarsh habitat, which we now know to be one of the most important of the Blue Carbon Sinks and for which Alfred Cove has the most extensive range within the Swan Estuary.

Please join us!



WELCOME HOME!

October is the month that countries of the Southern Hemisphere celebrate World Migratory Bird Day, as the trans-equatorial migratory shorebirds arrive from their breeding grounds in the Lower Arctic and Siberia to spend their summer months.

The weekly bird count group at Pelican Point were delighted to sight a group of the tiniest of these intrepid travellers, the Red-necked Stint, flying on to the point and busily feeding – the fact that shorebirds, including these, have to flap every inch of their way across the world is so extraordinary, and their safe arrival almost a miracle.



Red-necked Stints flying in from Siberia



Red-necked Stint at Pelican Point

Photographs - Tim Graham-Taylor

Equally thrilled were those of us doing SERAG's monthly bird count at Alfred Cove when we spotted the first arrival in mid-September out on the mud shallows – it was a Grey Plover or Black-bellied Plover, still sporting its breeding plumage and most likely to be a female, as these tend to travel the furthest distance in their annual migration. If all goes well, she will be joined in time by one or both of her chicks, which spend longer in the Arctic spring thaw feeding on the multitude of insects, before heading off in groups to make their own way unaided on their epic journey for the first time.



A trans-equatorial Black-bellied or Grey Plover on the Alfred Cove mudflats in September 2022, still in breeding plumage.

Photograph - Jenny Christenson

SERAG hopes that the declaration of the Alfred Cove Marine Park and adjacent buffer zones as the Melville Bird Sanctuary will help to heighten people's awareness of these amazing birds and thereby reduce the incidences of unintended disturbance of their feeding and resting, so critical to their safe passage back to their breeding grounds at the end of summer.

SERAG has arranged for a display about the trans-equatorial migratory birds to be held in the Bracks Library, Melville from October 3rd to October 14th. It shows the Flyway route and the various shorebirds that make this annual journey, some of which will be spotted by the many interested residents and visitors who make their way to the Alfred Cove Marine Park to see them every spring and summer.

Article - M Matassa

PRACTICAL ENVIRONMENTAL EXPERIENCES WITH SERAG

To recognize World Environment Day in early June, a class of secondary students and their teachers learnt first-hand the practicalities involved in overcoming the environmental damage caused by poor decision-making of earlier Perth authorities.

At Pelican Point in the 1930's and again in the 1950's, dredging materials from the creation of channels in the adjacent Swan Estuary were dumped onto some of the beautiful samphire and saltmarsh wetlands, thinking this would 'stop the mosquitos from breeding and spreading disease'. This created the nutrient-poor soils found in the Lot 4 section of this Bush Forever Site 402 that borders the 'Bird Sanctuary' section on the Point itself.

Over the past 12 years, SERAG volunteers have been slowly overcoming the weed-infestations and non-native plantings to turn Lot 4 back into a place of beautiful native biodiversity.

On this occasion, students gained experience in the many steps required to plant each and every seedling, in order to overcome these historical mistakes:

- Digging a wide basin for trapping rain long enough to overcome the water resistance of the aqua-phobic soil
- Drilling down the centre of the basin with a trowel to the depth of the tube stock
- Mixing a clay and minerals supplement into the soil
- Burying a plant nutrient tablet in the bottom of the drilled hole
- Carefully removing the seedling from its tube and planting it down into the base of the basin
- Firming the soil to remove any air pockets
- Watering the newly planted seedling by filling its basin
- Marking the seedling with a stake to ensure continued watering through its first summer.



Secondary students in a practical celebration of World Environment Day

The students finished the day with a walk through the site and SERAG hopes they will enjoy seeing the fruits of their labour over the next few years.

A younger cohort of Year 4 students came to Alfred Cove Nature Reserve in early August to learn first-hand about this significant wetland and the birds and plants that make it so special.

In an exercise of listening first then looking with binoculars, students were delighted with the close-up views of many of the birds that frequent this birding hotspot. After a short morning tea break, they then tackled a challenging exercise in planting some seedlings in a swale alongside old-growth trees, made more difficult with rubble intermixed with dredging soil.

The students and their teachers did a great job and the old-growth trees will greatly benefit from the native understory that will grow up to replenish the soil and replace the weed grasses.



Looking and Listening—Year 4 Students at Alfred Cove



Planting seedlings to create a healthy understory to these old growth trees

The next stage of their learning will be to create posters about the Swan Estuary wetlands and its birdlife, and submit them to the national schools' poster competition run by ANSTO (Australian Nuclear Scientific and Technology Organisation). SERAG is providing some book prizes for the best posters associated with the Swan Estuary Marine Park, and we wish the students all the best.

SERAG thanks Birdlife WA for the loan of their binoculars which greatly enhanced the students' experience.

BANKWEST VOLUNTEERS AT PELICAN POINT

SERAG welcomed the offer from Perth NRM to host a corporate group of volunteers from Bankwest in June, and Pelican Point was chosen as the best place for a morning of planting and weeding.

So despite threatening weather, the volunteers worked hard and transformed a section of Bush Forever Site 402 with understorey plants replacing the winter grasses.

The group also appreciated learning more about the significance of this very special part of the Swan Estuary Marine Park, its importance for water birds as well as for bush birds, being part of the corridor of bush linking Kings Park, the University of WA with the foreshore.

SERAG thanks Perth NRM for facilitating this Bankwest volunteering morning.



BankWest Corporate Volunteers sponsored by Perth NRM

SATISFACTION ON A WINTER'S MORNING

On any Tuesday morning you will find the TREEmendous Tuesday team of volunteers somewhere along the four and a half kilometres of Alfred Cove foreshore, with winter no exception.



Indeed winter brings the joys and challenges of planting infill native understorey, with each seedling given the best chance of survival by being planted into the bottom of a 'dish' fashioned from the dredging infill soil that is characteristic of the Marine Park foreshore.

SERAG has found this method increases the survival rate of the plantings on the foreshore from less than 10% experienced in past plantings, to around 80% in most cases. Why such a difference? With seedlings planted directly into the soil by those using a 'pod' planter, any rain runs across the aqua-phobic soil and only superficially wets the surface causing surface roots to form.

On the other hand, SERAG's use of a 'dish' can trap any rain or summer watering, forcing it to soak through the bottom of the dish thereby taking the roots of the seedling deeper down and away from the 'killing' heat of the summer sun.

So with rain no deterrent, this year saw 3000 seedlings carefully planted throughout the Marine Park in Alfred Cove, Pelican Point and Milyu by volunteers from the University of WA, Curtin University, school children, corporate groups and DBCA, all assisted and guided by SERAG volunteers.



MILYU RESERVE

There's something about Milyu

Crossing over the freeway, from the overpass we see the cars stampeding into the city and streaming out of town. And the noise ...ugh !

Then onto the path, we file along wary of the cyclists rushing along to the beat of their ear buds and oblivious to the river. Soon we cross to the water's edge .

We are here to clean up the foreshore .

After startling the resident Common Sandpiper, we enter the Milyu Reserve. It's a narrow beach with a fringe of rushes and small plants that lead to a canopy of trees providing shade and shelter. It's quiet and peaceful .

The debris includes plastic, glass, paper and metal in the usual form of bottles, containers, thongs, hats, ropes, masks etc and even a drone and a golf club.

Ahead the local Oyster Catchers lead us away from their nest site from which we think we heard chicks. Further along we come to the site where DBCA officers together with SERAG and Curtin University volunteers have planted hundreds of small rushes and bushes. Each one to grow into a sentry and ward off the waves and wind. A few have escaped so we round them up and rebury them.

It's a calm warm morning and in the clear water blue nosed Mullet meander along and the odd Flathead bursts out. Its not always like this. At other times we lean into the wind and rain grimly hanging onto our ballooning bags.

Retracing our steps, we continue picking up rubbish from the smallest to the largest we can carry, leaving big items at spots where the council can collect them. Then over the freeway where by now the cars are jammed and crawling along.

At the end we weigh and assess the rubbish, recycling it as we go. Coffee and biscuits appear at a table and we compare notes.

We have cleaned Milyu and I feel we have also cleaned ourselves.

There's something about Milyu



DBCA Officers and Curtin volunteers planting at Milyu



Pied Oyster Catcher eggs hidden away
and a new chick starting out



Article - G Webster Photographs - R Weir

BEGUILINGLY DELICATE AND PRETTY

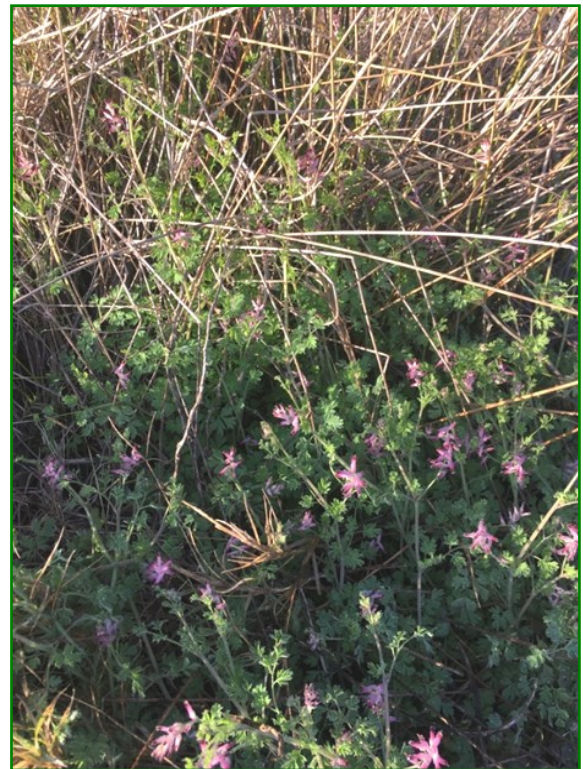
What an innocent looking plant is Climbing or Whiteflower Fumitory (**Fumaria capreolata*). It pops up with the first autumn rains as a delicate spray of bright green leaves on a flimsy stem, and the pretty white flowers appear within a couple of weeks. You would have seen it on verges and along footpaths – it even seems to be able to grow out of rock.

It is easy to remove by hand, so it should be easy to control – but that is far from the truth!!

Among its common names are White Ramping Fumitory or Rampant Fumitory – names that describe exactly how we experience it in our bush-care endeavours. After just a month or so we will find it climbing over and within the native shrubs whilst flowering profusely, making it hard to remove fully down to the roots. It can also hybridise with **Fumaria muralis* and spraying both varieties with metsulphuron methyl has been tried as another option, but the results are found to be unreliable and variable, with resistance to herbicides a problem.



White Fumitory (**Fumaria capreolata*) entwined within Hakea prostrata



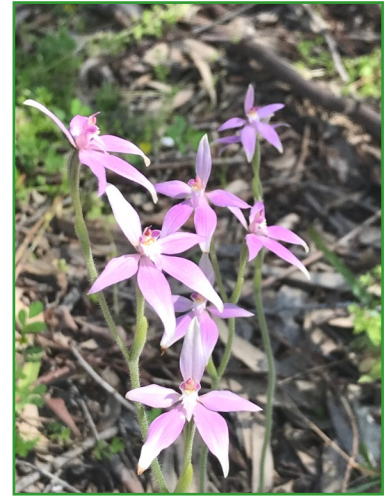
Climbing Fumitory (**Fumaria muralis*) invading sedges.

One single stem can get to one metre in length as it smothers shrubs, so if left unchecked Fumaria can even cause structural damage to plant communities.

Worse still is the fact that it rapidly progresses to prolific seed set, which then persists in the soil for 20 years!! That is a really long time to stay vigilant in removing this weed before seeding. It also means that it is important to minimise soil disturbance when removing by hand so as to avoid further germination from the seed bank.

In our regular bush-care activities along the foreshore of the Marine Park and nearby Reserves we try to return every couple of weeks or so to keep removing it, and we are glad that our volunteers are out there watching for this 'trickster' weed and removing it as fast as it pops up within our bush areas. The native flora will be grateful.

MAGIC HAPPENS!



For SERAG volunteers, these Pink Fairy Orchids (*Caladenia latifolia*) are aptly named as they seemed to 'magically' appear a few years ago in an area of barren dredging soil. Yet we know only too well it was due to the long-term effort that had gone into establishing native understorey there, which slowly but surely increased the soil biota as needed by these specialised plants.

Having discovered the first tiny orchids, we hastened to request the City of Melville to manage the area as a No Spray zone, and our volunteers have been diligently hand-weeding the area ever since - in summer-autumn, winter and spring.

Hence even more rewarding to us is how each year the numbers of this small but beautiful orchid are increasing and now exceed one hundred plants.

With dedicated volunteers, 'magic' happens!

Article - M Matassa

Photographs - M Matassa & R Peek



SERAG'S AGM - Wednesday 19th October at Bracks Library Room 1 from 6:00pm – 8:00pm
with guest speaker **Dr Rose Weerasinghe**.

Regular Events for Your Calendar



- **TREEmendous Tuesdays** - Bush Care activities at Alfred Cove 6.30am - 8.30am
- **Saturday @ Pelican Point** - Bush Care activities 8:30am - 10:30am
- **Monthly Bird Count** - 3rd Saturday at Alfred Cove 7.30am - 9.30am
- **Monthly Mondays at Milyu** - Foreshore Rubbish Clean-Up 6.30am - 8.30am
- **Saturday Morning at the Cove** - Bush Care activities 8:00am - 10:00am
- **Watering at Alfred Cove** - across a weekend every month or three weeks - Friday, Saturday and Sunday

Please contact SERAG to register your interest in any event.

Contact SERAG -

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