



## COMMUNITY GROUP CONSERVATION AWARD

In December last year, the Chairperson of the Conservation Council of Western Australia, Dr Carmen Lawrence presented the 'Len Howard Community Group Conservation Award' to the Swan Estuary Reserves Action Group.

The annual award '*is presented to a community group which has demonstrated an outstanding commitment to the WA environment*'.

That SERAG has been recognized in this way not only honours the work of our dedicated volunteers in and around the margins of the Swan Estuary Marine Park (SEMP) at Alfred Cove, Milyu and Pelican Point, but it also highlights the importance to the wider community of conserving the ancient natural and cultural heritage values of the Estuary.

We warmly thank the Conservation Council and everyone who has supported our efforts over many years.

## THE ESTUARY'S SUMMER BEAUTY

Noongar country spans the Southwest of Western Australia - from Leeman in the northwest to beyond Cape Arid in the southeast. The Noongar calendar includes six seasons in a yearly cycle, representing and explaining changes in the natural environment we see annually in this part of the country - such as the flowering times of different plants and the various activities of native animals.

The hot and dry months of December through to March correspond with Birak (season of the young) and Bunuru (season of adolescence), with Bunuru being the hottest time of the year. The images below of life on the Swan River Estuary at Pelican Point illustrate some of the beauty of these two seasons.

At around April the heat will make way for the cooler season of adulthood - Djeran.





# POINT WALTER FAIRY TERN COLONY PROTECTED

In February some members and friends were fortunate to accompany Fairy Tern researcher Claire Greenwell on a visit to view - from a distance - the tern colony on Point Walter Spit and the island formed at its end over recent years.

With a fence and signage deterring people from accessing the site, it has become one of the very few protected nesting places available to the 'threatened' Fairy Tern in the Estuary. Consequently, this season the site has successfully supported an estimated minimum of ~150 breeding pairs.

That number of nests was reached in December, just before an unusually high tidal surge inundated much of the colony - with terrible losses. Thankfully there was a good recovery. New pairs arrived, and some that had lost eggs or chicks nested again, on higher ground.

Feeding conditions also proved suitable, with adults catching lots of fish to take back to their nests, and young terns able to hone their skills.

As well, DBCA and the City of Melville used social media to highlight the vulnerability of eggs and chicks to disturbance, reminding people to stay behind the fence.

Such careful protection of nesting and feeding areas is *crucial* to the species' survival - and there is strong community support for these measures.



*Photographs courtesy C Greenwell & C O'Neill*

## COMMUNITY COLLABORATIONS AT THE COVE

Over recent months SERAG has joined the Friends of Melville Bird Sanctuary and BirdLife WA in hosting a series of 'Bird Walks' in the vicinity of Alfred Cove. They are proving very popular, with long waiting lists for each event.

The different habitat types in and around the Cove support wonderful assemblages of local, nomadic and migratory species.

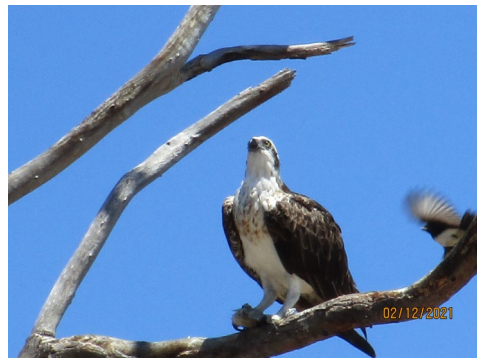
With seasonal and daily variations: among the hundreds of birds resting on sandbars just off-shore are pelicans, various terns, cormorants and gulls; feeding on exposed mudflats and in saltmarsh lagoons are wading birds and ducks of many kinds; Pied Oyster-catchers probe the beaches, swans graze in seagrass meadows and rails, quails and Little Grass Birds hide among sedge-banks. Ospreys, silver flashes of Fairy Terns and formations of Little Black Cormorants may appear in the skies over the water - and while beautifully camouflaged Tawny Frogmouths snooze, the conversations of honeyeaters, pardalotes and bee-eaters drift from pockets of remnant melaleuca-eucalypt woodland. A Sacred Kingfisher may be seen occasionally.



*An Avocet feeding in a saltmarsh lagoon  
Photograph courtesy M Matassa*

According to BirdLife data, over the last five years 147 different species of bush- and water-birds have been recorded in this area of Marine Park and Bush Forever Site 331 - making it a very special place, deserving of priority and careful management as Melville's Bird Sanctuary.

## CAN'T ENJOY A MEAL IN PEACE AT THE POINT!



A plucky Willy Wagtail was keen to move this osprey on - bombarding her from all directions as she was trying to finish her fish

*Photographs courtesy C O'Neill*

# OSPREY TOWER RENOVATIONS

The Eastern Osprey (*Pandion cristatus*) is a magnificent bird. While populations may be diminishing generally due to loss of habitat (eg a 26% decline has been noted in South Australia over the last five years) we feel enormously privileged to still have ospreys in the Swan River Estuary. Importantly, we understand their continued presence here is dependent on the availability of enough suitable and safe resting, nesting and foraging habitat.

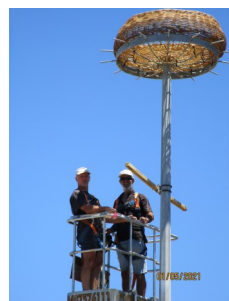
Six years ago, in response to the persistent loss of tall trees along Estuary margins - and with the help of DBCA, various advisors, sculptor Tony Jones and donors (including SALP) - SERAG installed a nesting tower at Pelican Point.

While ospreys still use it for watching and eating, unfortunately their original enthusiasm for nesting on it hasn't progressed since a pair took ownership and built almost immediately after the structure was erected.

Some possible reasons have been suggested: disturbance from kite-surfers straying from their designated areas into the Marine Park and from increasing numbers of people walking close to the tower; excessive exposure to strong winds and storms, or its proximity to the range of another osprey pair.

Three practicable responses were identified: leave the tower *in situ* as is, content that osprey find it useful (if not for nesting); leave the tower there, but modify the design of the structure and its surrounds to provide extra amenity and safety for them, or move the tower to a different location. Again after considerable thought, discussion and advice we decided to pursue the second option, knowing that the first and third options remain, should the tower continue to be unsuccessful for nesting.

Renovations took place on National Bird Day in January: a strong cane basket beautifully woven by local artist Fiona Gavino was bolted to the existing framework and a roosting perch cantilevered beneath. Preparations for the revegetation of a 'track' below commenced soon after, to lessen disturbance from passers-by. As well, DBCA plans to replace lost marker-buoys that once clearly delineated the borders of the Marine Park, and will liaise with kite-surfers and sailboard riders to reduce the impact of those sports on ospreys and other birdlife.



The osprey tower at Pelican Point: 2015 ospreys build a nest; 2020 with sticks removed, tower used only as a lookout or for eating fish; 2021 basket and perch added. Photographs courtesy T Graham-Taylor, B Conway, A Kane & C O'Neill

They are all positive steps, but will they be enough to entice nesting again? Whatever the outcome, it will have been worth the effort - and of course SERAG will continue to do what it can to support this fabulous priority-listed species.

## KITE-SURFERS AT PELICAN POINT

The extreme sport of kite-surfing is a very exciting pastime, but it is now among the various recreational activities impacting on the conservation values of the Swan Estuary Marine Park (SEMP).

On windy days and afternoons with a sea-breeze, kite-surfers regularly stray into the Marine Park at Pelican Point.

The sport's 'fast and furious' speeds and jumps and the height and thwack of the kites scare off birdlife. (The swans in the photo had been quietly feeding, but quickly left the site!) As well, when surfers take a tumble, seagrasses are trampled - with a steady cumulative effect.



Photograph courtesy C O'Neill

We hope the lost buoys will be replaced soon to better alert kite-surfers and sail-boarders to the SEMP boundary, and thus quickly address this threat to the Park's conservation purpose.



# CELEBRATING AUSTRALIA DAY AT PELICAN POINT

On Australia Day, while families were picnicking at Matilda Bay, a large crowd of young people was 'partying' next door at Pelican Point. Apparently the event was reported by a passer-by and eventually broken up by Police in the evening.

Entry was gained through the protective fence on the northern border. The aftermath: fence cut; signage uprooted; birdlife badly disturbed; fragile vegetation habitat trampled; litter scattered far and wide. The damage was shocking.

The site has been impacted by 'after-hours' partying on a number of occasions. Perhaps a review of security is required.



## MONITORING DISTURBANCE AT PELICAN POINT

The Estuary's native flora and fauna face increasing threats to their survival. Not only do they have to contend with traditional challenges, such as the vagaries of weather, competition for resources or predator behaviour, but they also now face increasing disturbance and loss of their habitat due to urban expansion and pressures associated with climate change. The small amount of natural environment remaining in and around the Estuary is being steadily chipped away.

Most people in Perth treasure the Estuary's natural heritage values - its native flora, fauna and landscapes - and we tend to assume places recognized and 'set aside' for their outstanding conservation values (eg the SEMP and Bush Forever sites) are safe and protected.

The SEMP sustains a plethora of local, nomadic and migratory birds. It provides essential habitat to threatened and priority species - such as trans-equatorial migratory shorebirds, Fairy Tern and Osprey - and we have binding responsibilities towards these birds and their breeding and non-breeding habitats. Hence there is mounting community anxiety at increasing levels of incompatible recreational activity within the conservation area, especially at Pelican Point.

In response, the Conservation Council of Western Australia has spear-headed a 'citizen science' project, enlisting the support of BirdLife WA to properly monitor and assess human disturbance factors. During January and February, trained volunteers used a proven standardised methodology to observe and record recreational activity in the Marine Park at Pelican Point.



Swans and Fairy Terns at Pelican Point  
*Photograph courtesy T Graham-Taylor*

It is hoped that a 'snap-shot' documenting, quantifying and analyzing the nature and impact of various activities on birdlife will encourage best-practice management for effective biodiversity conservation in the SEMP.

## A TERRIFIC TELSTRA MORNING

On a very hot day in late February, SERAG was pleased to host a small group of volunteers from *Telstra*. Facilitated by *Landcare Australia*, the morning session enabled some much-needed work at Pelican Point.

Tasks focused on arresting the human-induced erosion rapidly expanding at the end of a 'goat-track' near the osprey tower, and preparing the surrounding badly-degraded area for winter planting.

Additional coir rolls were installed and sedges planted on the foreshore to mitigate wave action, and the ever-widening track was part-covered with coir matting and branches. Seasonal weeds were removed too.

When the weather breaks, with the first rains we will begin extensive revegetation, using native seedlings generously donated by *Plantrite*.

Many thanks to all involved.



Erosion mitigation work  
*Photograph courtesy C O'Neill*



# THE IMPORTANCE OF SEAGRASSES



This map shows the estimated distribution of seagrasses in the Swan Canning Estuary, as of 2019.

It is based on visual assessment of imagery, bathymetry and field experience. We understand it matches fairly well the more recent mapping completed by Murdoch University researchers working on a project for The Nature Conservancy. Note the correlation between seagrass meadows and the Swan Estuary Marine Park: the shallows off Alfred Cove, Milyu and Pelican Point.

Seagrass meadows form some of the most important ecosystems on Earth and are vital to the overall ecological health of estuaries.

In the Swan-Canning Estuary, as well as providing a nutritious food source for ducks and swans, they form part of a greater benthic community supporting many different creatures - worms, mussels and the like - which in turn feed larger fauna such as crabs, fish, dolphins and many species of birds. Seagrasses also offer nursery shelter for immature fish, stabilize the riverbed and act as carbon sinks, absorbing CO<sup>2</sup> in greater proportions than do dry-land forests.

Seagrass habitat in the Estuary has reduced by over one-third since the 1980s. The causes of its loss may be direct or indirect - but for the most part have their origins in human activity. Direct causes involve the loss of the seagrass or the sediment in which it grows through, for example, storm-damage, trampling, excavation/infrastructure, and scarring from boats. Indirect loss occurs when stressors on seagrass are increased beyond tolerable levels, and may involve levels of light, nutrients, salinity, temperature and toxicants.

Some stressors are more easily addressed than others. For example, loss of seagrasses from trampling and scarring can be simply fixed by excluding some activities from the meadows; while managing toxicants and nutrients requires a complexity of responses. However, with good policy, commitment and adequate resourcing, all threats can and must be tackled to improve the health of the River.

## RIVER DOLPHIN RESEARCH

Traditionally offering abundant fish resources on which to feed, a relatively safe nursery in which to raise their calves as well as a place to socialize, the Swan-Canning Riverpark currently sustains around twenty-one resident dolphins. Each dolphin has been individually identified through their markings and given a name.

Although it is difficult to be sure, dorsal fin markings indicate the dolphins in this photo (taken at Pelican Point) may be *Bottomslice* and his good friend *Blackwall* - two of the Riverpark's five resident males.



We think these may be *Bottomslice* and *Blackwall*  
Photograph courtesy T Graham-Taylor

The well-being of our river dolphins is fundamentally dependent on the ecological health of the Riverpark. Sadly, it seems we can add climate change to their many existing threats, as this article explains:

[https://ausprint.meltwater.com/print\\_clip\\_previewer/304209346?text=on&keyword=on&pdf=new](https://ausprint.meltwater.com/print_clip_previewer/304209346?text=on&keyword=on&pdf=new)

## SUMMER WATERING TEAMS

It is disheartening to find seedlings, carefully planted in winter, have not survived their first summer. Not only is it a loss of 'hard-won' plants and the environmental benefits they were to provide, but it is also a waste of the efforts of our members and friends. Hence, in early mornings and late afternoons over hot dry months, a major task is watering.



At Pelican Point we can tap into DBCA's irrigation system. At Alfred Cove we sometimes use Melville's watering trailer. If these sources are unavailable, we fill large plastic barrels, transport them to the site, then bucket water to each plant.

It is a big commitment - but so far teams are achieving a good rate of plant survival.

Photographs courtesy C O'Neill

## MILYU UP-DATE

Over its last three clean-up sessions the MMM team has collected a total of 62kg of litter from Milyu. The items removed have included not only the usual rubbish - bait bags, cigarette butts, tops and bottles, plastic straws and packaging and the like - but also unexpected items such as a laundry mop and a shopping trolley (weight not included).

The breeding season was successful for at least a few species of Milyu's birds: for example, we have noted pairs of Pied Oystercatchers, Red-capped Plovers and Pied Stilts, each with young. It is good to see osprey nesting on a communications tower nearby too. And we were pleased to see Fairy Tern families fishing off-shore and resting on the beach during our February clean-up.

Re-vegetation sites are also doing well - sedges and shrubs all growing strongly and so far withstanding erosion pressures.

## WORKING WITH TANGAROA BLUE

In December SERAG joined with Tangaroa Blue to analyse litter problems at two river locations at Alfred Cove.

While at the same time weeding at one relatively small site off Troy Park, our *TREEmendous* Tuesday team removed 506 items of rubbish, filling ~3 bags and weighing a total of 16.5kg. The top ten items found were as follows:

Top ten	Item	Total
1	Plastic packaging food (wrap, packets, containers)	103
2	Plastic bits & pieces hard & solid	67
3	Plastic film remnants (bits of plastic bag, wrap etc)	51
4	Paper & cardboard packaging	36
5	Foam insulation & packaging (whole & remnants)	31
6	Glass beer stubbies & pre-mixed alcohol bottles	27
7	Glass or ceramic broken	21
8	Lids & tops, pump spray, flow restrictor & similar	18
9	Straws, confection sticks, cups, plates & cutlery	18
10	Tape: adhesive, electrical, duct, hazard marker & rolls	15

The data has been uploaded to the Australian Marine Debris Database (AMDI) for comparison. The AMDI was created to enable volunteers and organisations who were running beach clean-up events to also collect data on what they were finding with a consistent methodology, so it can be collated into a standardised national database on marine debris.

## CLEAN UP AUSTRALIADAY

SERAG will again host a Clean Up Australia Day event at Pelican Point: **Sunday 7th March, between 8.30am and 10.30am.**

If you are interested in helping, please register your attendance on the website: [Clean Up Australia \(cleanupaustaliaday.org.au\)](http://CleanUpAustralia(cleanupaustaliaday.org.au)) or contact SERAG at [swanestuarygroup@gmail.com](mailto:swanestuarygroup@gmail.com)

Doing so will help us ensure we have enough equipment.



Two of the Milyu team with some of the litter collected - including a 'perfectly good' mop  
*Photograph courtesy C O'Neill*



Some of the TT team & Dan from Tangaroa Blue  
*Photographs courtesy M Matassa & S Quartermaine*





# STUBBLE QUAIL

Please try to ignore the piece of litter, the leaves dropped by an exotic tree and especially the healthy Black Berry Nightshade in this photograph, taken in February at one of our recovery areas. They are but some of the location's many on-going challenges!

Instead, please focus on the lovely little bird - a Stubble Quail (*Coturnix pectoralis*) - an Australian native species found over much of south-eastern and south-western Australia, but rarely seen in this vicinity.

It is a plump ground dwelling bird characterised by dark brown feathers with a cream coloured line down the centre of each, creating softly camouflaging stripes down the length of its body.

Stubble Quails feed during the day, scratching around on the ground for seeds, grasses and foliage.

Breeding is influenced by rainfall, cover and food availability. Their nest is a scrape in the ground lined with dried grass or pieces of nearby vegetation. The female lays seven or eight yellowish eggs and incubation takes about eighteen days.

Foxes and cats are their main predators. (*If you have a pet cat, please keep it inside!*)



Stubble Quail (female) Photograph courtesy T Heckler

# BLACK BERRY NIGHTSHADE - AN ENVIRONMENTAL WEED

Having its origins on other continents, Black Berry Nightshade (*Solanum nigrum*) is considered an 'environmental weed' in Western Australia. Environmental weeds are plants which affect the conservation values of land which has a primary purpose of conserving native flora and fauna.

Black Berry Nightshade is an erect short-lived herbaceous plant or small shrub that usually grows to about 1 metre in height. It competes vigorously for space and nutrients - the second photo shows it has flourished to around 2 metres, out-growing a mature *Calothamnus quadrifidus*.



(It seems many weeds can grow to 'giant' proportions on the foreshore - evidenced also by the size of the fleabane being removed by two of our Tuesday morning volunteers!)

Black Berry Nightshade has a strong taproot and many lateral roots. It produces delicate white star-shaped flowers which form rounded fruit (globular berries) that turn from green to dull black or purplish-black in colour when mature. The berries contain prolific amounts of seed with very high germination rates (>90%). Research indicates the seedbank can persist to around five years - although under ideal conditions some seed may remain viable for up to four decades.

Alas for our weeding teams, there is vigorous recruitment from soil-stored seed after rain.

Weeds & Weeders

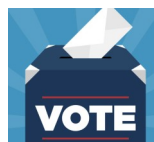
Photographs courtesy C O'Neill & M Matassa



## FOR YOUR MARCH CALENDAR

- TREEmendous Tuesdays Alfred Cove 6.30am - 8.30am
- 07 (Sun) UWA@PP Clean Up Australia Day 8.30am - 10.30am
- 08 Monthly Monday at Milyu 7.00am - 9.00am
- 11 (Thur) CV! Pelican Point 9.00am - 12.00noon
- 25 (Thur) CV! Alfred Cove 9.00am - 12.30am
- 27 Saturday Morning at the Cove 7.30am - 9.30am
- Watering at Alfred Cove and Pelican Point

Please contact SERAG to register your interest in any event.



In the forthcoming State Election, please consider the interests of our superb native flora and fauna and natural landscapes - especially those surviving in and around the Swan River Estuary.



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