



FAMILY TIME IN THE SWAN ESTUARY MARINE PARK

Families of tiny Red-capped Plovers enjoyed a summer at home on the bare beach sand, in amongst low-growing samphire of the Swan Estuary Marine Park at Pelican Point.

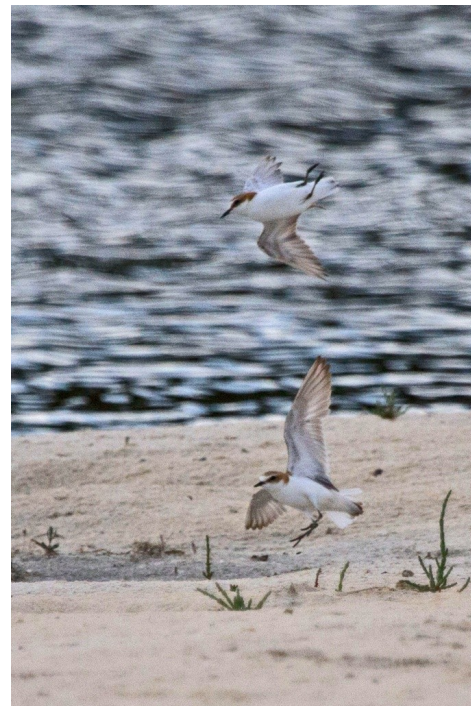
From some distance using a telescopic lens it was possible to observe one pair incubating a nest of well-camouflaged speckled eggs while another carefully supervised their chicks.

Red-capped Plovers are plump, active wading birds, averaging 150mm in size and 37grams in weight. They feed mainly on small invertebrates using a 'stop-run-peck' method.

Their nest is simply a shallow depression in the sand, between the water and low vegetation. Both parents share nesting duties - and if the nest is threatened they will try several distraction methods, including feigning injury by dragging a wing to lead predators away.

Red-capped Plovers may be found in pairs or small groups along quiet sandy beaches, coastal lagoons, estuaries, bays and inland saline wetlands.

While presently considered the most common and widespread of Australia's beach-nesting shorebirds, these tiny jewels are vulnerable to disturbance and habitat loss - and surely deserve our protection.



Red-capped Plovers at Pelican Point *Photographs courtesy T Graham-Taylor*

CROWN LAND TO PROTECT MARINE PARK - PETITION FAILS

A very narrow ribbon of Crown Land described as Lot 9789 abuts the Swan Estuary Marine Park at Alfred Cove.

Last year SERAG petitioned both Houses of Parliament to formally protect the outstanding natural and cultural values of the Swan Estuary Marine Park at Alfred Cove by opposing any sale of the Crown Land to the City of Melville, and to legislate as matter of urgency to draw Lot 9789 into the conservation estate.

The Petition to the Legislative Council was referred to its Environment and Public Affairs Committee for consideration. Correspondence now indicates the Committee will not be making any recommendations regarding Lot 9789.

Despite the Marine Park's internationally recognised ecological importance, the accepted need for significant buffers to such conservation category sites, and past whole-of-government recommendations - and even though the WAPC has not as yet received any development application - the Government has chosen to wait on the outcome of some possible future application and planning process, before being willing to consider conserving this narrow but vital Swan Estuary Marine Park buffer and wildlife corridor at Alfred Cove.

The correspondence on Petition 087 can be found in the current petitions of the 40th Parliament on the Committee's website www.parliament.wa.gov.au/env, including comments by Environment Minister Hon. Stephen Dawson, Lands Minister Hon. Ben Wyatt and City of Melville CEO Mr Marten Tieleman.

A SYMBIOTIC RELATIONSHIP

This tiny male Mistletoebird (*Dicaeum hirundinaceum*) was spied in a *Casuarina obesa* tree with mistletoe growing in its branches.

Feathered in greys and whites, with a touch of pinkish-red under her tail, the female is more subtly coloured.

During the past million years a symbiotic relationship has formed between hemi-parasitic mistletoe plants and the Mistletoebird. In exchange for its delicious fruits, the bird distributes the mistletoe seed far and wide. However, while mistletoe is not solely dependent on the Mistletoebird, the bird is dependent on mistletoe to survive.

The Mistletoebird has a simple digestive system through which the mistletoe berries quickly pass. Fleshy outer parts of the berries are digested and the sticky seeds deposited on other tree branches, to germinate into new plants, thus providing additional habitat.



Mistletoebird (male) at Pelican Point
Photograph courtesy T Graham-Taylor

NRM GRANT ANNOUNCEMENT

SERAG's new year commenced with an invitation to attend the announcement by the Hon. Alannah MacTiernan MLC of the successful recipients of Natural Resource Management *Community Stewardship Grants*, for 2019.

These grants support community-based projects that help conserve, restore, rehabilitate or enhance a local natural area, conserve WA's biodiversity and maintain or build the capability of NRM community groups across the State.

SERAG has received \$3,190 to assist in weed-management at two project sites along the narrow margin of the Swan Estuary Marine Park at Tompkins Park. As always, our volunteers will significantly augment the value of the grant through their generous hands-on contribution.



Minister MacTiernan and Lisa O'Malley MP
on site with SERAG representatives
Photograph courtesy C O'Neill

WEED-MANAGEMENT CHALLENGES



This year Community Rivercare Program funding will continue to support our recovery efforts along the Attadale foreshore, including the management of weeds in the badly neglected western reaches of the A-Class Nature Reserve.

Running grasses such as kikuyu, buffalo and couch are of particular long-term focus, with the need to carefully distinguish between native couch (*Sporobolus virginicus*) and the invasive lawn variety.

Over summer, prickly lettuce, wild radish and *Euphorbia terracina* were among the seasonal weeds targeted for hand-weeding. Volunteers have also commenced removing *Juncus acutus* - a very challenging job!

Erosion-mitigation will also form a major part of our restoration program.



Some of the many weed-management challenges along the western end of the Attadale foreshore

Photographs courtesy C O'Neill

BURNT AREA PROGRESS

SERAG was very pleased to host a small team of CVA volunteers in mid-January to help with weed-management at our focus plot at Pelican Point - an area destroyed by fire just over twelve months ago.

A large area of burnt Brazilian pepper had been sprouting gloriously from its roots and person-high woody starwort grew among the entanglement of dead and blackened branches, needing our swift attention.

Unfortunately the density of Brazilian pepper re-growth forced us to lop the shoots and paint the multiple 'stumps' with herbicide - a less than optimal management technique - and some too difficult to reach were left for another day.

A volunteer had removed the flowering stems from a swale of watsonia during spring, to prevent its further spread, so this time we were able to carefully dig out existing corms. Young plants of tambookie were cut and hundreds of tiny Victorian tea-tree seedlings were pulled.

By the end of an exhausting day our skip bin was filled with all manner of weeds. A few weeks later APACE was able to treat outbreaks of various running grasses for us.

So far seedlings planted during winter are surviving well. We are also delighted to see the recovery of mature *Melaleuca cuticularis*, as well as *Jacksonia sp* and other native seedlings emerging from the ashes.

While the site will require further management we are pleased with the progress being made, and extend our warmest thanks to all involved.



Photographs courtesy C O'Neill

TRIALING SOLARISATION ON *CAREX DIVISA*



Laying black plastic on an area of *Carex divisa*
Photograph courtesy C O'Neill

Outbreaks of *Carex divisa* along the Marine Park foreshore at Alfred Cove and Attadale are causing us concern.

This invasive weed spreads rapidly, having strong rhizomes which smother other vegetation in its path. It reproduces both vegetatively and sexually, with an inflorescence containing both male and female flowers, producing seed in the form of a dark yellow-brown nut.

Rather than applying herbicide, SERAG is trialing 'solarisation' on a plot at Tompkins Park. Solarisation is the technique of placing plastic sheets over weeds for a period of time during their main growth, to inhibit photosynthesis and increase temperatures beyond the weed's tolerance levels. Black plastic blocks the sunlight so that plants cannot produce sugars through photosynthesis, but importantly will not kill soil micro-organisms or fungi.

Large recycled sheets of black plastic will remain in place over summer into autumn, by which time hopefully the *Carex divisa* will have died and the site ready for winter plantings of local species.

'NEW' SEDGE DISCOVERED ON FORESHORE

While working in a section of Marine Park foreshore at Tompkins Park, where we are managing a great plethora of weeds, an unfamiliar sedge was discovered, growing strongly in the mud.

Fearful that it may be yet another weed variety, a sample was taken to the Herbarium where it was identified as a species of *Schoenoplectus* referred to in Western Australia as *S. pungens* - an Australian native. However, due to some anomalies, it has been recommended that the sedge is monitored for any invasive characteristics that may require further investigation.

The sedge is dark green with triangular stems and its small flowers are grouped in dense spikelets.



Photograph courtesy C O'Neill

PROTECTING RAINBOW BEE-EATERS' NEST

Once again Rainbow Bee-eaters (*Merops ornatus*) have returned to Bush Forever Site 331 to nest over summer. Again one pair has chosen a particularly 'dangerous' part of the Site to construct their nesting chamber!

Near the River, where beautiful remnant melaleuca and eucalypt woodland provides habitat conditions needed by these birds, the site is also attractive to people.

There is an extensive and popular dog exercise area immediately adjacent - and despite signs indicating this particular part of the foreshore is a 'no-go' area for dogs, unfortunately the signs are generally ignored. The grass is also regularly mown by heavy machinery and trees subject to vandalism.

Fortunately this year we discovered the Rainbow Bee-eaters' nesting burrow in time to implement a number of strategies to protect the nest from dogs and hopefully reduce human disturbance.

We thank the City of Melville's Environment staff for their prompt action in erecting temporary fencing, and raising community awareness through their website and by installing signage.

So far things seem promising. The fence hasn't been destroyed and the pair has been spotted a few times. (If you enlarge the photograph, you will see one of the nesting pair on the bunting.)

We hope a long-term solution can be found - a protective plan that will enable community enjoyment of the natural beauty of the area without harming the very things that make it special.



Photographs courtesy R Napier & C O'Neill

ANOTHER BUSHLAND BEAUTY: THE PINK-BELLIED MOTH



Saturday morning at the Cove weeders were rather grateful to pause in their exertions to marvel at the subtle camouflage patterning of a Pink-bellied Moth (*Oenochroma vinaria*), that had settled on a member's hivy shirt.

The colour of the adult moths of this species varies from pink to brown. It has a brown or yellow line across the upper surface of each wing - helping to disguise itself as a leaf - and its forewings curve upwards at the tips.

From the hundred or so pale green oval eggs laid by the female, caterpillars will emerge to feed on the leaves of various grevillea, banksia and hakea.

The caterpillars will then form pupae, hopefully from which a beautiful moth like this one will eventually unfold!

Photograph courtesy M Paterson

KEEPING WINTER PLANTINGS ALIVE

A particularly dry summer has kept our watering teams very busy at various locations at Alfred Cove and Pelican Point. Volunteers have been watering winter plantings every two to three weeks to support the new seedlings over their first summer.

When available we have borrowed the City of Melville's trailer for watering at Alfred Cove, and used our barrels and buckets when it has not. We have also engaged a contractor to help at Tompkins Park and, in very hot spells, on part of the Attadale foreshore.

At Pelican Point DBCA has permitted us to tap into bore irrigation, allowing us to use a temporary network of pipes and hoses to get the water to various planting areas.

Early morning watering at Pelican Point

Photograph courtesy M Matassa



A STUNNING DISPLAY

How wonderful it was to see the Christmas tree (*Nuytsia floribunda*) in Bush Forever Site 402 at Pelican Point burst into flower over summer! There can be few more beautiful and striking compliments of the season.

A member of the southern mistletoe family, *Nuytsia floribunda* is a hemi-parasitic tree native to the south-west. Unlike most mistletoes, which grow as shrubs attached to trees, it grows as a tree of up to 10 meters. It belongs to the oldest lineage in the Loranthaceae family - from a time before most mistletoes had become aerial parasites.

It is deeply significant to Noongar people, and known locally as *Moodjar*.

Once common across the Swan Coastal Plain, changes in land use since colonization have seen it mostly cleared from around Perth. And it remains unprotected.

Nuytsia floribunda is extremely difficult to grow. In our restoration efforts at Pelican Point, so far not one of those we have carefully planted has survived.

Propagation from both seed and cuttings seems to be relatively easy but unfortunately plants generally do not survive long. This this means that we are not able to replace those that we continue to destroy through on-going urban sprawl and infill.

The translocation of mature plants from development sites has been suggested as a conservation strategy. While probably expensive, this idea will be certainly worth exploring further.



Christmas tree glowing in the sunshine
Photograph courtesy S Graham-Taylor

A TERRIBLE MESS AT MILYU

We are becoming used to the cigarette butts, bait bags, lolly-wrappers, plastic bottles etc littered along the Marine Park foreshore at our monthly cleanups at Milyu, and are pleased that the average weight collected seems to be diminishing a little.

However, volunteers at our February collection were shocked to find two sections of the Reserve's narrow bushland margin in a terrible condition, and ran out of bags to collect all the rubbish.

DBCA was contacted and responded very quickly, Riverpark officers removing six bags of waste as well as a tent, bicycle and prams. They will also be checking on the particular site a little more regularly.

Photograph courtesy D Letham



CLEAN UP AUSTRALIADAY

As usual SERAG will be hosting a Clean Up Australia Day event at Pelican Point on **Sunday 3rd March, commencing at 8.30am.**



The importance of such events and on-going care is obvious. Last year the amount of litter collected from along the Marine Park foreshore at Milyu during our monthly cleanups totaled over 200kgs, and principally comprised plastic items such as bags and bottles, and small pieces of plastic - and we remember the tragic deaths from entanglement of two river dolphin.

Eighty percent of ocean plastics comes from land-based sources, and it is estimated that around 100,000 marine animals and over a million seabirds lose their lives to entanglement and ingestion of plastic each year. In November 2018 a 9.5m dead sperm whale washed up on an Indonesian beach. Almost 6kgs of rubbish was found in its stomach, including 115 plastic cups, four plastic bottles, 25 plastic bags, two pairs of thongs, a nylon sack and more than 1000 other assorted pieces of plastic.

If you are able to come along to this or a cleanup site near you, please **register on the Clean Up Australia Day website** www.cleanupaustaliaday.org.au .

ROBUST CITIZEN SCIENCE AT ALFRED COVE

The inadequate and inaccurate information regarding the importance of Alfred Cove to birdlife, supplied to authorities by *Urbnsurf* for its wave park bid, has prompted SERAG to undertake two formal bird surveys each month to substantiate local knowledge.

One survey takes place on a Saturday morning, and covers the entire Marine Park at Alfred Cove, while another takes place on an evening, concentrating on the area that will be most directly impacted by the proposed wave park.

During the latter, volunteers with expertise in bird-identification are stationed at two platforms which together provide sweeping views of the semi-enclosed waters of the Cove itself. Nevertheless, many birds (eg rails and chicks) will remain hidden in the vegetation, and not able to be counted.

At around sundown observers note the numbers and species of birds nesting, foraging or settling for the night in the samphire and sedge-banks, on the mudflats and in the shallow waters of the Cove. Others less expert assist in spotting, with telescopes and binoculars used to confirm sightings. The evening concludes with a careful comparison of findings, to eliminate double-counting or misidentification, and the results logged with Birdlife Australia.

On the January evening this photograph was taken, among the many local and nomadic species identified and large numbers counted were two species of trans-equatorial migratory wader, totaling thirty-four birds.

We trust the robust scientifically-based data collected will result in good decision-making regarding this internationally important sanctuary and the threat to its survival posed by inappropriate and unsympathetic development.

STILL WAITING.....

As we anxiously await the fate of lovely Alfred Cove and its vulnerable creatures, a member has penned this reflection:



FOR YOUR MARCH CALENDAR

- TREEmendous Tuesdays: Alfred Cove 6.30am - 8.30am
- 03 (Sun) Clean up Australia Day Pelican Point 8.30am—10.30am
- 11 Monthly Monday at Milyu 7.00am - 9.00am
- 23 Saturday Morning at the Cove 7.30am - 9.30am
- 30 (Sat) Six Season Walk - Bunuru
- Watering at Alfred Cove & Pelican Point

Please contact SERAG to register your interest and for further details.

**In the six seasons of the Aboriginal calendar
Bunuru is the hottest part of the year.**

**It corresponds with February - March in the
Western calendar.**



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