



WORLD-CLASS BEAUTY & NATURAL ENVIRONMENTS

Celebrating our Parks was the theme of a two-day conference organized by the Forum Advocating Cultural and Eco-Tourism (FACET) and the WA Parks Foundation, and held in Perth during October.

Providing a platform to raise awareness and appreciation of our unique and ancient landscapes, the conference drew international speakers and attendees, as well as participants from the State's tourism sector, government agencies, the academic community, cultural, ecological and scientific institutions, and the general public.

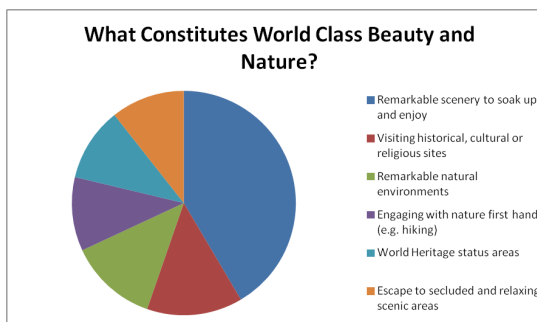
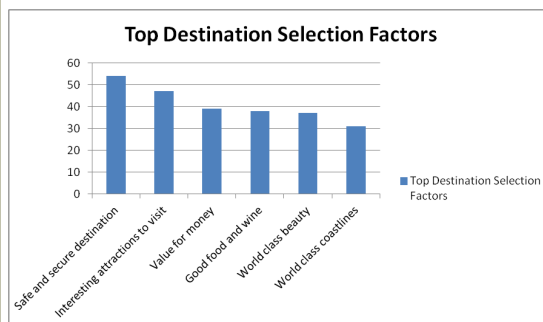
The WA Parks Foundation's vision is for *WA Parks to be increasingly loved and visited and the plants, animals and landscapes and cultural values they embody to be protected and a source of pride for all Western Australians.*

Introducing the conference, Her Excellency the Honourable Kerry Sanderson AC, Governor of Western Australia and Chairperson of the Foundation commented: *Our parks and conservation estates should be celebrated for their unique attributes and for providing us with so many benefits. We all have a role as stewards for them to ensure that they are protected and enriched for future generations.*

In its presentation, *Tourism WA* provided some interesting statistics, including from *Tourism Research Australia*:

- *World class beauty and natural environments* is in the top five importance factors for 37% of all travellers.
- Of that 37%, over half associate the importance factor with Australia.
- Natural attractions make up the top five preferred attractions.
- Among the Chinese market, Australia performs strongest with respect to natural beauty.

The most appealing WA tourism products to travellers are *natural*, and include nature-based and wildlife experiences.



WA Tourism Statistics

10.4 million overnight visitors

19.6 million day trips

Visitor spend = \$10.1 billion

109,000 jobs = 8.1% of State's employment

...YOU DON'T KNOW WHAT YOU'VE GOT 'TIL IT'S GONE...



It seems a tragic lack of appreciation and vision that the superb ecological and landscape values of Alfred Cove - an internationally important Marine Park and A-Class Nature Reserve of remarkable beauty and cultural and environmental significance, twenty minutes from the CBD - are currently under threat from an unsympathetic development proposal.

Alternative locations **are** available for *Urbansurf's* idea of a massive artificial wave park and retail complex - locations that will profit the private developer without compromising other community values.

We hope wiser heads at the State level of decision-making will reject their application to build at this treasured place.

Carefully protected and billed as a 'star attraction' for tourists in Scotland, resident osprey are one of many outstanding natural values of Alfred Cove.

Photograph courtesy I Nielsen

PERTH'S RIVER GUM UNDER PRESSURE

The flooded gum or moitch (*Eucalyptus rudis*) is Perth's river gum, growing along our rivers, lakes and water courses. Its range extends north to Geraldton and into the south-west of WA.

A majestic tree of 15–25 meters it has rough bark on its trunk and lower branches, but smooth bark on higher branches. In winter it produces cream flowers and later small hemispherical gum nuts appear.

Along with many other important ecological functions directly benefitting human-kind, the tree provides habitat for a variety of native fauna. For example, its hollows are used for nesting by various duck species and by owls, kingfishers, pardalotes, possums and parrots.

Sadly, due to over-clearing for various purposes, including recreation, transport, housing and preferred views, there are now very few trees remaining in the lower Estuary mature enough to have hollows.

As well, each spring over recent years flooded gum have been heavily impacted by insects, with attacks by leaf miners and leaf blister sawflies and by 'explosions' of psyllid bugs. While rarely a problem in intact vegetation communities, repeated heavy attacks in altered areas weaken the trees, contributing to their decline.

Human intervention has upset the balance between such insects and their natural enemies and allowed some to 'escape' the regulatory influence of predators and parasites. Towards rectifying this imbalance, where a site allows, we have not only planted young flooded gum saplings but have increased plant density and diversity to improve the control exerted by natural enemies.

By planting native under-storey species, including thickets of hakeas and grevilleas which will provide safe feeding and nesting sites, we hope to attract and support greater numbers of insectivorous birds such as honey-eaters, wrens and fantails, as well as lizards, frogs and micro-bats - all beautiful little native predators.



Eucalyptus rudis
Photograph courtesy Perth NRM

A PARDALOTE NESTING BOX FOR JIWEI LI

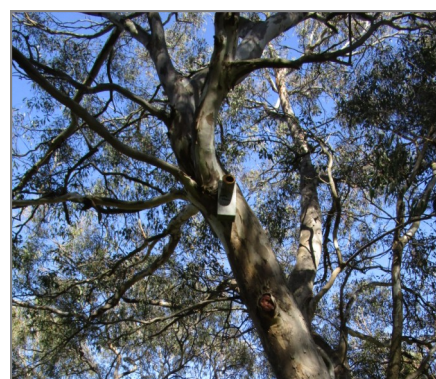
The final UWA@PP session for 2017 was held in early October, allowing students to concentrate on their studies during the remaining weeks of the academic year. It will resume in March 2018 for Clean Up Australia Day.

Representing the UWA Guild Volunteering Hub, Jiwei Li has kindly coordinated the gathering of student volunteers to help SERAG for a couple of hours each month at Pelican Point. They have contributed a total of 218 hours this year.

As a token of our appreciation for Jiwei's efforts, SERAG commissioned Joe Tonga from *Natsync Environmental* to construct an artificial nesting box for pardalotes and install it in a tree at Pelican Point in her honour.

Pardalotes are exquisite, jewel-like bush-birds that nest in tree hollows. They are insectivorous, eating a wide variety of insects and their larvae, which are usually captured by picking them from the surfaces of leaves. They are especially important in securing the health of trees such as *Eucalyptus rudis*, as they are small enough to remove the lerp of sap-sucking psyllids.

There are few natural hollows remaining in this altered environment - and it will take a long time for new ones to develop - so hopefully the nesting box will prove very useful to young pardalote families for a good number of years.



COMMUNITY ACTION GRANT TARGETS SERIOUS WEEDS

State NRM funding has assisted SERAG in its determined efforts to deal with significant outbreaks of Pampas Grass (*Cortaderia selloana*), Black Flag (*Ferraria crispa*) and Arum Lily (*Zantedeschia aethiopica*) at Alfred Cove.

Pampas Grass is a large, tufted perennial which has become a problem weed in part of the A-Class Nature Reserve.

It displays silvery flowers from late summer to autumn, each plume holding up to 100,000 seeds, which the wind carries great distances. With dangerously sharp long leaves crowded at the base of the plant it forms huge clumps difficult to remove. (In New Zealand, where it is also a serious weed, its common name is 'cut-throat grass'!)

The Riverparks Unit of the Parks and Wildlife Service bravely commenced the mammoth task of carefully cutting the seed-heads from around half a dozen enormous plants, then slashing the remaining structures with a chainsaw. A contractor was subsequently employed to followed up with a herbicide treatment when new growth appeared.



Perspectives of the pampas problem!
Photographs courtesy R Carter & R Tunncliffe



Black Flag is one of the most invasive species of bushland weeds that are still available for purchase - either commercially or privately.

Outside the flowering season, Black Flag can be recognised by its unusual succulent -looking bracts and leaves.

Its purple-black-brown mottled flowers appear between July and November and have an unpleasant odour. They last for one day only.

The reproductive capacity of Black Flag makes it an insidious invader. It is pollinated by flies but can also produce seed from self-pollination. An unusual system of stacked corms, of which only the most recent are susceptible to herbicides, makes it difficult to kill. Each year plants produce new corms that are added to the column of dormant corms. There can be 15 to 20 corms in a single column.

Areas of Black Flag at Troy Park and on the Attadale foreshore were targeted.

A 'Declared Weed' in WA - making it illegal to introduce, propagate or sell - **Arum Lily** engulfs gutters, streams and wetlands, including the drain near Atwell House where the photograph (right) was taken.

Arum Lily has a tuft of dark green, shiny, somewhat succulent leaves arising annually from perennial tuberous roots. The large leaf blades are heart-shaped to arrow-shaped and usually about 250 mm long on a stalk almost as long.

It is easily recognised by its conspicuous large, white, funnel-like 'flower', which has a central, orange, pencil-like column of minute male and female flowers. In fruit, the tiny female flowers at the base of this column are replaced by orange-yellow berries. All parts of the plant are toxic.

It is highly likely that more work will be needed to finally clear these particularly challenging weeds from the area, so careful monitoring for their re-emergence will be undertaken.



Black Flag
Photograph courtesy Department of
Agriculture and Food



Treating Arum Lily near Atwell House
Photograph courtesy M Tucker

TOMPKINS PARK STAGE 2 COMMENCES

In perfect September weather, and with the help of a corporate team from *Woodside* generously organised by *Conservation Volunteers Australia*, SERAG commenced restoration of the narrow corridor of riparian vegetation between the dual-use pathway and the Swan Estuary Marine Park along the eastern margin of Tompkins Park.

Following a briefing about the importance of the site, most of the day was spent in hand-weeding wild radish and other seasonal weeds from along the foreshore, with the final session devoted to planting a hundred bags of mature sedges - *Juncus kraussii* with a few *Gahnia trifida*.



Woodside at work Photographs courtesy C O'Neill & K Ronald

The project will build on our efforts at the western end of Tompkins Park, helping to conserve the natural values of the Marine Park, protecting its ecological well-being while at the same time facilitating community access to enjoy views of a more healthy Estuary.

Once bordering a rubbish tip and badly neglected for many years, the site has been heavily impacted by rampant running grasses and seasonal and woody weeds. Large stands of Brazilian pepper and *Typha orientalis* and outbreaks of woody starwort, wild radish and fleabane dominate the foreshore.

Narrow and subject also to many other urban pressures, it is in terrible condition.

Steadily replacing weed species with indigenous vegetation will strengthen its habitat function, reinforce eroding embankments and assist in filtering nutrients and contaminants from surface and ground water entering the river system. Signage will be installed to improve community awareness.

The initial project will be a twelve-month collaborative effort between the City of Melville, the Parks and Wildlife Service of the Department of Biodiversity, Conservation and Attractions and SERAG - and is partially funded by a Coastwest grant.

BEHIND THE FENCE AT ALFRED COVE

Media students from Edith Cowan University spent time with our *TREEmendous* Tuesday team recently, speaking with volunteers about the importance of the Estuary's Marine Parks and how and why SERAG volunteers contribute their time and energies to the conservation, restoration and protection of remaining areas of native riparian vegetation.

The team was hand-weeding among sedges at the time, and as a question was asked on what motivated the group, a Buff-banded Rail suddenly appeared where veldt grass had been cleared. As this species of bird was once listed as no longer to be found in the Reserve, our answer was clearly visible - much to the delight of the students.

We found that the Rail was one of a breeding pair. While the male was ostensibly feeding on exposed goodies, in reality he was probably bravely attempting to entice us away, as we then noticed the female hidden nearby in the sedges and long grass, warming a chick and a clutch of eggs. Regretting our disturbance we beat a very hasty retreat, leaving the weeds to help shield the family from further distress.



ECU students meet Buff-banded Rails and regular volunteer Photographs courtesy R Napier

MIGRATORY SHOREBIRD CONSERVATION ACTION PLAN

Migratory shorebirds have arrived in the Swan River Estuary, with Grey Plover, Common Sandpiper, Common Greenshank, Great Knot, Curlew Sandpiper, Red-necked Stint and Bar-tailed Godwit spotted so far.

They are some of the thirty-seven species that regularly visit Australia. All are protected under a range of domestic and international frameworks, including the Environmental Protection and Biodiversity Act (EPBC Act 1999), bilateral agreements with China (CAMBA), Republic of Korea (ROKAMBA) and Japan (JAMBA) and the Convention on Migratory Species (CMS).

Bar-tailed Godwit (*Limosa lapponica*) Photograph courtesy J Vogel



Finalised in October and led by Birdlife Australia, a *Migratory Shorebird Conservation Action Plan* has been developed by Australian and international stakeholders working in shorebird conservation, management and research within the East Asian-Australasian Flyway (EAAF). The aim of the Action Plan is to improve coordination and collaboration between those involved in protecting these threatened species.

The initial phase will be to implement some of the high and very high priority actions in the Australian Government's *Wildlife Conservation Plan for Migratory Shorebirds* across its four objectives:

- Protection of important habitats for migratory shorebirds has occurred throughout the EAAF.
- Wetland habitats in Australia, on which migratory shorebirds depend, are protected and conserved.
- Anthropogenic threats to migratory shorebirds in Australia are minimised, or where possible, eliminated.
- Knowledge gaps in migratory shorebird ecology in Australia are identified to inform decision makers, land managers and the public.

We hope that the Department of Biodiversity, Conservation and Attractions will respond by implementing stronger protections for the three Marine Parks which provide feeding and resting habitat within the Swan River Estuary.

JOHN CURTIN WEEKEND

To celebrate *World Habitat Day*, SERAG hosted a group of volunteers from Curtin University participating in what is known as the 'John Curtin Weekend' (JCW).



JCW volunteers
and the
'Fairy Tern'
Photographs courtesy
C O'Neill



The JCW is organized each year by *Curtin Volunteers!* and is their largest community project, whereby university students work with local groups on community programs at metropolitan and regional sites.

SERAG was fortunate to welcome six students for around five hours of habitat restoration at Pelican Point.

Our task focused on the planting and mulching of a section of Bush Forever Site 402, supporting recently planted marri trees and a grass tree, and reclaimed from struggling couch and kikuyu.

The event was filmed by three young people from Curtin's Transmedia Production Unit. Their job was to find a powerful JCW 'story' and to tell it in such a way that would entice other Curtin students to become involved in the volunteering opportunity.

They chose to explain the need for Estuary conservation from the perspective of the Fairy Tern (shown left!) - a threatened species whose nests are simple scrapes of sand on beaches and is so easily disturbed or trampled by walkers and their dogs.

In return for their terrific efforts, SERAG volunteers provided a delicious morning tea and lunch - and hopefully an interesting, worthwhile and enjoyable experience.

YOUNG AND INQUIRING MINDS

A new generation of interest in the well-being of Alfred Cove was evidenced recently by the research efforts of a small group of year 10 students from Applecross Senior High School.

Tasked with investigating a local environmental issue Felicity, Emerald and Emma chose to explore the impacts of feral species of flora and fauna on Alfred Cove, and contacted SERAG as a source of information.

At our meeting on site, the students proved intelligent, articulate, enthusiastic and confident. We were very impressed with the depth and breadth of their questioning.

Later they sent SERAG a copy of their final report. Unsurprisingly it was excellent.



Emma and Felicity
Photograph courtesy C O'Neill

BOLSTERING SEDGE-BANKS

Over the past year our *Saturday Morning at the Cove* team has focused most of its attention on an important site on the Attadale foreshore.

With support from a Community Action Grant received through the State NRM Program, weeds have been removed and sedges and shrubs planted to filter flow from a storm-water drain, to stabilize the shoreline and to restore a diversity of habitat for native fauna. As well, thanks to a generous donation of large pots of mature *Juncus kraussii* from the Parks and Wildlife Service, sedge-banks have been bolstered in places particularly vulnerable to erosion.

The site is now healthier, and we hope the new plantings will establish themselves over summer months to better withstand the increasingly destructive storm surges of winter.



Planting mature sedges
Photograph courtesy P Guiton

SOMETHING FISHY AT OUR AGM

Dr Fiona Valesini is a coastal and estuarine ecologist with a particular interest in fish and benthic invertebrate communities and their relationships with the environment. She is currently a Senior Research Fellow in the Centre for Fish, Fisheries and Aquatic Ecosystem Research at Murdoch University, so it was a privilege to hear her speak on the topic *Fish fauna of the Swan-Canning Estuary - how things have changed since the late 1970s* at our recent AGM.

Estuaries play a crucial role in the life cycle of numerous fish species. Although many fish species either enter estuaries during a particular period of their life or use them as a migratory route for moving between their spawning and main feeding areas, a few species spend the whole of their life in this type of environment. All are reliant on healthy rivers and estuaries for their survival.



Black Bream

Courtesy Dept of Fisheries

After describing the principal species of fish and the varying uses they make of the Swan River Estuary, Dr Valesini presented detailed research data on particular iconic species, including Black Bream (*Acanthopagrus butcheri*), revealing significant changes in their populations, behaviors and growth patterns over the past few decades.

Conclusions indicate the impact of reduced river flow due to climate change and increased nutrient run-off — a pattern replicated through the south-west of the State.



FOR YOUR DECEMBER CALENDAR

- TREEmendous Tuesdays: Alfred Cove 7.00am - 9.00am
- 06 (Wed) Bushcare Pelican Point 8.30am - 2.30pm
- 11 (Mon) Monthly Monday at Milyu 7.00am - 9.00am
- 23 Saturday Morning at the Cove 7.30am - 9.30am
- Watering at Alfred Cove and Pelican Point

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



We wish everyone joy and good health this Christmas and New Year season.



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