ECA WA News

Autumn Edition 2017





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President's Message

By Jamie Shaw

This was the 30th year of our ever popular New Year Breakfast. My apologies for not being able to make it. Given we know that there were many members, like me, who couldn't make the event, the Committee thought it was useful for us to brief you on this and hopefully ensure you can juggle your diary in 2018 to get along.

This year the event was held at the brand-new Beaumonde On The Point, overlooking the Swan River. We have already had many positive comments on the view and food, which seemed to provide the right backdrop conditions for members to get together, catch up and network.

This year we had a great turnout of around 80 people, including two honorary life members, two past presidents, and nine invited guests from various State Government agencies including the EPA, OEPA, DPaW and Fisheries.

ECA WA Committee

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The ECA WA committee meets on the third Monday of the month. Please contact committee members or Bec James if there is anything you would like to raise for discussion.

Editorial contributions welcome

The editorial deadline for the next edition of ECA News will be advised in the ECA weekly email updates. Please email contributions to ECA News Editor, Jo Thierfelder at editorecanews@eca.org.au

ECA WA News is a periodical publication of the Environmental Consultants Association (WA) Inc. It aims to inform members on the activities of the ECA and its members, events and training, and developments in the environmental industry. The views and opinions expressed in ECA WA News are those of the article authors and do not necessarily reflect those of the ECA WA.

In general terms, based on various conversations and feedback, it seems like while business conditions remain challenging for environmental consultants, there are signs of increasing levels of opportunities and activity compared to the same time last year. 50 that gives cause for some optimism across the membership.

As usual we used the event to welcome members and guests into the new year and outline the key ECA themes and initiatives that were planned to be progressed by the ECA committee during the cours of 2017.

EIA practitioner's course

We are about to seek expression of interest to see if there is sufficient demand to run our well-known two-day EIA course. This program, which is run in collaboration with the OEPA through our partnering agreement, is one of the more pragmatic and directly applicable EIA training events available. It is a great opportunity to incorporate the recent policy and administrative changes, and I encourage you to alert us to your interest when we seek it. We need clarity around potential numbers to be able to make this work.

Potential upcoming events

Further to seeking expressions of interest late last year, we are currently in the process of developing a program for an offsets event, given the extent of interest shown. It is likely to be oriented around a practical review of actual offset outcomes, and we are forming a sub-group to organise further. Stay funed for dates and further opportunities to contribute to this.

In addition, we are also running a Biodiversity Constitution Act Briefing on 4 April 2017. Further details are outlined in this newsletter. We expect these to be the first of many ECA events in our planned program for 2017.

Professional Accreditation Scheme

We are continuing to liaise with the DER in regards to the State Governments' consideration of an environmental professional accreditation scheme. While there is no clear outcome or direction of this announced to date, given the relevance of this to our members we will advise as any further information comes to hand.

ECA website

Last year was a big year in terms of getting our new website up and functional. We seem to have ironed out some of the small bugs and intend on using this to its fullest functionality during 2017. In particular we intend to promote the members database/register to skills at industry as a way of finding environmental consultants with certain skills and experience

Specialist services recognition scheme
In addition to the members further build on our specialist services recognition scheme in 2017. We have had a number of members successfully gain recognition for service categories that they have particularly specialised capabilities, and this has helped us refine the process. We hope to see more members take up this option in 2017 and will be promoting accordingly.

Stakeholder Reference Groups

There are a number of SRG and other representative groups at which we represent the interests of our membership, including with EPA and DMP. We will continue to represent your interests at these and will endeavour to more regularly communicate back to you in regards to the outcomes from these.

Regular meetings with the Minister for the Environment

We met with the Minister for the Environment in 2016 to discuss a range of areas relevant to the membership, including the *Biodiversity* Conservation Act and any potential environmental professional certification scheme. We are hoping to make this a more regular event and will communicate back with the membership in this regard. In particular, we are looking forward to the opportunity to meet with the new Minister for Environment at his earliest convenience to discuss his plans for the coming term of government.

YECA events and activities

The Committee is committed to the ongoing support of YECA as a forum to support our younger and/or less experienced members in gaining more exposure to networking and learning opportunities. YECA will have a number of events during the course of the year of which we will inform you of well in advance. Read more in the YECA Update within this newsletter.

Membership drive

Finally, 2017 is the year that the committee is keen to really drive membership of the Association

across the industry. Given the challenges the industry has faced, we have been experiencing strong membership renewal rates, but definitely see opportunities to further grow the membership base. A large organisation means a stronger organisation that is better equipped to meet our members ever-changing needs. We ask that you all help us in this regard by promoting membership back to your respective organisations, and we will be taking opportunities to get out and visit various consultant organisations to outline what the Association does and the benefits it provides in the coming months. Please help us spread the word!

Honorary Life Membership

In addition to the above, it was with great pleasure that we were able to announce the recent award of Honorary Life Membership to Ian LeProvost, for services rendered to the association and to the environmental profession. As part of receiving this recognition, lan spoke fondly of both his time in the ECA, EPA and his involvement with many wellknown projects in WA.

Annual Photo Competition

To wrap up the ECA New Year Breakfast, we announced the winner of the 2016 Annual ECA Photo Competition, who this year was Bernie Masters from B K Masters & Associates, and the door prize draw was won by Damian Grose from Tranen Revegetation Systems.

We encourage you to continue submitting your photographs for the annual photo competition through the website at Annual Photograph Competition and we are currently exploring the potential to establish an ECA Instagram account to better showcase these entries throughout the year.

The Committee wishes all its members a happy new year and all the very best for successful 2017. We look forward to continuing to represent you and your interests into 2017 and beyond.

Jamie Shaw ECA President



Photo story (cover): Green tree frog

By JJ Rao

At the onset of the 'Wet' in the Northern regions of the State, huge numbers of frogs come out of aestivation. This green tree frog (*Litoria caerulea*) appears to have declared herself queen of my patio chair. Taking her photo came with a price. After dozens of shots of the increasingly agitated amphibian, I realised that a gust of wind had blown my door shut with the keys still inside. I was locked out of my house. With no locksmith in town and the nearest set of keys 250km away, I settled in for an uncomfortable, sweaty and mosquito-hidden night in the car, which I had luckily forgotten to lock. Fortunately, all I got to show for it was a decent picture of the frog, and not Ross River virus. So I better win the damn award!

Photo story: Mt Magnet magic

By Haydn Davies

I think this photo exemplifies why I love being an environmental consultant. Sometimes we spend long times in the field, out in the heat, covered in flies, walking up and down waste rock landforms or looking for mythical Mallee Fowl mounds. But often we also get to see some amazing places. This Head Frame is located just out of the town of Mount Magnet. It's not the most remote or hard to find place but after finishing work for the day, I took some time to go exploring, which for me is what it's all about.



Legislative changes to note: Biodiversity Conservation Act

By Damian Grose – General Manager Tranen Revegetation Systems, Vice-Chair Revegetation Industry Association of WA

Seed collecting has been governed in the past by the Wildlife Conservation Act 1950, which was replaced when the Biodiversity Conservation Act 2016 passed through Parliament in September last year. Most would agree the old Act was outdated and didn't anticipate the values of our natural environment as we see them today. This all changes with the Biodiversity Conservation Act, which reflects the advances in our thinking and changes to our practices over the past 66 years.

Let me preface this by stating that environmental law and Act interpretation is not something with which I'm overly familiar. However, I have documented my interpretation of the key differences between the two pieces of legislation. A lack of awareness of changes may catch some off guard, so reading through the new Act, forming your own opinion and seeking clarification is a must for all seed collectors and anyone else whose actions could impact on our natural flora and fauna.

Changes to penalties

The Biodiversity Conservation Act significantly ups the ante on penalties from its legislative predecessor with increases likely to make most sit up and take notice. The fines are now \$50,000 for taking flora (defined as to gather, pluck, cut, pull up, destroy, dig up, remove, harvest or damage flora by any means) without a license and/or authorisation, \$200,000 if it is specifically listed, \$300,000 if it is a vulnerable priority species, \$400,000 if it's an endangered priority species, and \$500,000 if it's a critically endangered priority species (s171, S173). There is no distinction in the penalties either as to whether the seed is collected from Crown or private land, so you will want to make sure you have the landowners written permission if it is private land.

Changes to liability

The next most significant change is in relation to liability for breaching the Act. In the old Act, individuals were licensed and only individuals could be prosecuted. With many organisations now undertaking seed collection on a vast scale, this unfairly shifts the risk away from the company and onto the individual. It also prevented action being taken against organisations as there was simply no provisions to do so within the Act. Under the new Act, employers are now liable for an offence committed by an employee. If an employee is charged as an employee with an offence under the Act, the employer may also be charged. Additionally, an employer may be charged and not the employee. Employers do have a right to a defence to prove that the offence was committed without their consent and that they took all reasonable measures to prevent the offence from occurring (s241). There is similar application with body corporates (s237), partners (s239) and principals / agents (s240).

There are also a few new inclusions in the Act that are not as significant but are equally important:

- People dealing in flora will now need to have a license. I presume this means seed brokers or companies that trade seed commercially and have their own collectors. The penalties for people dealing in flora are as per the above (s177).
- 2. There is a provision within the Act for devices or methods to be prohibited. Using prohibited devices or methods to take flora will incur a \$50,000 fine (s175).
- 3. The regulations may impose charges for taking flora for commercial purposes on Crown land (s188). Previously there has been no cost associated with obtaining a 727 endorsement from the Department of Parks and Wildlife
- 4. A person must not give false or misleading information to a wildlife officer (penalty \$10,000) or obstruct a wildlife officer (penalty \$20,000).

One glaring omission [in the new Act] is the requirement for a commercial producer's license when taking flora from private land for commercial purposes.

One glaring omission is the requirement for a commercial producer's license when taking flora from private land for commercial purposes. This was specifically itemised in the old Act but is not mentioned in the new Act.

According to the DPaW website late last year, several parts of the new Act were proclaimed by the State Governor in the Government Gazette. Provisions that replace those existing under the Wildlife Act and Sandalwood Act (including threatened species listings and controls over the taking and keeping of native species) and their associated Regulations cannot be brought into effect until the necessary Biodiversity Conservation Regulations have been made. It is hoped the new Regulations will be completed and ready commence by late 2017.

For more information visit:

https://www.slp.wa.gov.au/legislation/statutes.nsf/mai mrtitle 13811 homepage.html

https://www.dpaw.wa.gov.au/plants-and-animals/468 conservation-act-2016

Biodiversity Conservation Act Briefing

What are the likely Implications of the new legislation for environmental consultants?

The Biodiversity Conservation Act (WA)2016 gained royal assent last year, and is a greatly anticipated 'upgrade' to the Wildlife Conservation Act (WA) 1950. The passage of the legislation through both houses of parliament gave rise to many and varied views and opinions, ranging from clear support to harsh criticism. Only parts of the legislation have been enacted, and there is much work yet to be done on drafting the enabling subsidiary regulations.

One area that has not been explored extensively to date are the considerations and implications that are likely to arise from the Biodiversity Conservation Act for practicing environmental consultants. Environmental consultants will be a key stakeholder affected by the new legislation, and will be required to work with the State Government, industry and the community to implement many aspects of it. There are also statutory obligations on environmental consultants while undertaking certain types of consultancy work.

On this basis, the Environmental Consultants Association (WA) (ECA) has arranged this briefing to explore the current status of the Biodiversity Conservation Act and the associated regulations, and the acrations a cuvironmental consu key considerations and implications and that are likely to arise for environmental consultarts.



The speakers invited to provide their views on this topic are:

- Gordon Wyre Director, Legislative and Policy Reform, Department of Environment and Conservation
- Tony van Merwyk Partner, Herbert Smith Freehills
- Declan Doherty Principal Solicitor, Environmental Defenders Office
- Garth Humphries Director, Principal Ecologist, Biota Environmental Services

The individual speakers will be followed by a panel discussion and then networking refreshments.

Event details

Date: Tuesday, 4 April 2017, from 3pm

Location: Herbert Smith Freehills, Level 36

QV1, 250 St Georges Terrace, Perth.

Cost: \$30 for members & \$45 for non-

members (incl. GST)

Register: <u>ECA Events</u> by Friday 31 March 2017

Members and non-members are welcome.

This event has been made possible through the kind support of Herbert Smith Freehills.

Meet Sue Murphy CEO, Water Corporation

Delve behind the LinkedIn profile and get to know the movers and shakers in your industry. ECA News presents "Give me 5", a regular segment that asks five slightly more personal questions of its interviewees.

Background

Sue Murphy was appointed Chief Executive Officer of Water Corporation in November 2008. She is a Member of the University of Western Australia Senate and Board Member of the University of WA Business School, Board Member of the Water Services Association of Australia, Board Member of the Fremantle Football Club and Fellow of the Australian Academy of Technological Sciences and Engineering.

 What's your favourite childhood memory of the natural world?

Rottnest Island! My family spent at least a week at Rottnest every summer. I learnt to ride a bike, snorkel, dive, windsurf and sail there. Pies and sunburn, pristine water and perfect sandy beaches, quokkas and seabirds, herring and crayfish – wonderful memories.

We have finally closed the water cycle after a 10year journey of research and community consultation, which involved more than 11,000 people touring our trial facility.

2. After 25 years working at Clough Engineering, which was first a family, then a publicly-listed company, did you find working at the Water Corporation a dramatic cultural shift?

Both Clough and the Water Corporation were values based businesses with strong engineering capability so culturally aligned It is the customer service ethos that is so strong here at the Corporation that was the bigger change.

3. Water management is critical to and has such a far-reaching influence on so many industries in this State. How do you frame water management issues in the context of environmental protection in WA?

The management of water as a natural resource is the role of the Department of Water who are great regulatory partners to the Water Corporation. I am proud of our role in influencing demand for water we have reduced per capita use by one third over last decade or so while keeping urban areas green and liveable. Our customers save energy to save money but they use water wisely because it is "the right thing to do"!

Having forged an impressive career in engineering through intelligence, hard work and passion, do you get fired of being asked questions about being a woman in a traditionally male-dominated industry? Do you think gender equality will still be an issue in the workforce 20 years from now?

I believe that our focus must be on inclusivity – making every workplace welcome to all people – diversity of gender, race, age, religion, whatever. With inclusivity comes a willingness to embrace other ways of doing things, new ideas, more creativity and better outcomes. Work is changing fast, technological disruption is accelerating, our climate is drying, our customers want more data and we cannot deal with all that by doing what we used to do. I think our issues are so much bigger than questions of gender.

Beyond being CEO of the Water Corporation, you wear many hats as Chairman, Board Member and Adjunct Professor at UWA. On reflection of your work and career thus far, what has brought you the most personal satisfaction?

My greatest achievement has been bringing up my three daughters. I so proud of the young women they have become!

ha work sense, I think our groundwater replenishment plant, which is the first of its kind in Australia, is a real achievement. Groundwater replenishment is the process where treated wastewater undergoes advanced treatment to produce recycled water, which is recharged it into our deep underground aquifers and abstracted for drinking water at a later date.

We have finally closed the water cycle after a 10-year journey of research and community consultation, which involved more than 11,000 people touring our trial facility. The survey illustrated the Perth community's support for groundwater replenishment reached an all-time high in 2016 with 79 per cent of respondents supportive of the new water source.

A water source which grows with our population in a sustainable way is very satisfying.

Honouring a leader in the WA environmental community

It was with great pleasure that the ECA announced the award of Honorary Life Membership to Ian LeProvost at the recent New Year's Breakfast, for services rendered to the Association and to the environmental profession.

lan has been a member of the ECA for an impressive 22 years. He was a committee member for eight years, Vice-President for one and President for more than five years. That lan established one of the State's first environmental consultancies is also key to his contribution to our sector.

As part of receiving this recognition, lan spoke fondly of both his time in the ECA, EPA and his involvement with many well-known projects in WA. In lan's words, his greatest achievements include:

 Being a part-time member of the EPA during which time I worked with Bernard Bowen and the OEPA to develop the Cockburn Sound SEP and the original BPPH Protection Policy No29 (Precursor to EAG 3), and introducing the production of Environmental Scoping Documents by

- consultants, which later was taken over by the OEPA.
- Mentoring many young staff members and watching them grow in confidence and take over greater responsibilities.
- Making the ECA a respected and key stakeholder within regulatory circles via the series of training workshops that we ran during my presidency.
- Obtaining environmental approvals for many well-known port development, marina and waterway projects in WA.

My toughest project was the Geraldton Port Enhancement Project, but it is also one of the projects of which I am most proud given the eventual outcome. The project team also won an ACEA Award for the project management and delivery.

The other is Ascot Waters at Belmont where the Swan River was re-introduced to beautify an old tip and waste ground to make a proposed residential development environmentally acceptable. Jim Singleton, the planning team and I won a UDIA Award for sensitive urban design for this project.



ECA Vice President Jason Hick presenting Ian LeProvost with his Honorary Life Membership Award at the New Years Breakfast.

Being a young professional working in remote areas of Australia presents unique challenges and, depending on how you approach them, potential benefits.

Myself, Jim and the BHP project team for the site selection study for the Pilbara LNG Project for Scarborough Gas also won a Golden Gecko award for an innovative approach to greenfield plant site selection and stakeholder consultation.

The projects I enjoyed most were those involving field work, particularly underwater habitat mapping on the NW shelf, Darwin and Gove Harbours in the NT, and overseas in Bali and the Gulf of Thailand. My greatest junket was a trip around the South Pacific inspecting and auditing port waste management facilities for the IMO and SPREP. My most interesting and adventurous projects were those that I undertook in eastern Myanmar, Gulf of Thailand and the Gulf of Papua.

A snapshot of lan's involvement with the ECA (WA)

- Member of the ECA from 1994 to Current (22 year
- Committee Member for eight years, including one year as Vice President and 5 ½ years as president (2007-2015)
- Represented the Committee/Association for the selection panel of the Ray Hart Scholarship (now Memorial Award)
- Represented the Association on the EPA EIA Review Planning Working Group
- Represented the Association on Dredging Science Advisory Committee (WAMSI)

Day In The Field: Why young professionals should consider working in regional areas

Bv JJ Rao

Last year, I was fortunate enough to have been given the opportunity to relocate to the little town of Derby in the Kimberley region of WA on secondment. It's now six months in and I am still loving every moment and learning something new each day. Being a young professional working in remote areas of Australia presents unique challenges and, depending on how you approach them, potential benefits, such as:

- Coping with the voracious "bities" of regional Australia (mosquitos, midges and march-flies on steroids)
- Being extorted by petrol stations and the general lack of chic small bars and hipster-esque brunch venues
- Quickly learni and domestic them for you) Quickly learning to be proficient in a wide range of technical and domestic skills (as there aren't very many others to do



Me (JJ) practicing some posing after having stopped for the night in a storm.

- Acclimatising to the rugged climate and landscape, and the even more rugged people who live in it
- 'Bridging the gap' between old-timers and young folk in professional and social settings
- Trying not to get too involved in mediating or instigating controversial discussions between people who have been locked in battle since the dawn of time
- Long distance relationships
- The abundance of native animals and beef on the roads (live and otherwise)
- The long, remote drives, quiet starry nights and beautiful scenery
- The abundance of time for self-reflection

So, as a young professional, why should you put yourselves into these often uncomfortable



A road leading to wherever you want it to go

situations? Here are some reasons I've gathered from my experience:

- Personal and professional experience that you won't get in the metro areas
- Looks good on your resume
- Something different for a change
- You learn how to stand up for yourself with minimal support

We suggest research is required to determine the success or otherwise of fauna relocation programs and the results from this research should feed into the development of appropriate guidelines.

- You realise how self-centred, egotistical and dystopic city life can be at times, which gives you a unique perspective on things
- You will soon be too old to do it
- You will see some amazing things that only a very small percentage of others would
- **YOLO**

And you can grow yourself an awesome beard*and return to 'civilisation' with tales of monster man-eating crocodiles and is that broke your weighing scales (probably a new record if I'm being honest). Sounds pretty fantastic to me!

So next time an opportunity arrives, go grab it by the (hairy) face.

Fauna relocation programs - are we really making a difference?

By Dr Scott Thompson - Principal Zoologist, Terresto Ecosystems

In 2015, my colleague Dr Graham Thompson and I published details of two fauna salvage programs he first program was for approximately 14ha on the Swan Coastal Plain where we deployed 275 20L bucket pit traps and 550 fundel traps along approximately 4km of drift fence to catch and relocate 960 small vertebrates.

The second program was on a larger scale where approximately 1,000ha of vegetation was cleared over 2.5 years in the Pilbara and we caught over 17,000 vertebrates. More than 60 per cent of all individuals seen during this vegetation clearing program were caught alive and relocated. At the same site, we also deconstructed 158 above-ground termitaria and relocated more than 90 per cent of the 4,800 vertebrates caught.

We concluded these research papers by indicating that vertebrate survivorship could be improved by altering the clearing techniques, we explained the importance of above-ground termitaria as a micro-habitat for fauna and the importance of implementing a deconstruction program to salvage animals prior to vegetation clearing. We commented on the lack of research on the success of these generic relocation programs and argued for work to be undertaken in this area.

We made two significant recommendations:

the vegetation clearing program is estimated and reported in the environmental impact assessments and in the Native The number of species and individuals likely to be lost during

^{*} Females generally exempt

Vegetation Clearing permit applications; and

2. State government environment agencies issue fauna salvage guidelines on pre- and during vegetation clearing programs.

Menkhorst et al. (2016) subsequently commented on our paper and made some very useful points which are summarised below:

- translocation programs cannot be justified without data supporting the success of such programs;
- fauna must be released into 'suitable release sites' and this is not always the case;
- individual animals placed into less than optimal habitat, or habitat that already supports a population of their species, face an uncertain future;
- animal 'rescue' programs are often indicative of a narrow perspective that focuses on the individuals being 'rescued' and does not give adequate consideration to potential impacts on the receiving ecological communities; and
- translocations that are poorly conceived and planned are usually unjustifiable from a conservation perspective.

As with all formal comments on published research, the authors of the original paper are given the opportunity to respond, which we did. We agreed with some of Menkhorst et al.'s comments and disagreed with others. In our response, we cited examples of successful relocation programs and also raised other more generic issues on relocation programs, particularly as they affect kangaroos and southern brown bandicoots, the role of animal carers in rescuing and rehabilitating fauna before they are released, and the lack of any monitoring of these programs. However, we noted that fauna salvage programs were often required by state and local government regulators because it seemed the 'right thing to do'.

We concluded our response by again reiterating the early recommendations:

- that government regulators should require that the number of species and individuals likely to be lost during the vegetation clearing program to be reported in environmental impact assessments and when submitting Native Vegetation Clearing permit applications; and
- the need for fauna salvage guidelines.

Conclusions

There are currently no guidelines for fauna relocation programs for consultants to follow in WA yet fauna management plans continue to be written saying fauna relocation needs to occur. Fauna management plans also vary enormously in content and technical detail with many written by people who have limited appreciation of what is required. This can lead to inappropriate programs being implemented and sub-optimal outcomes for fauna

We suggest research is required to determine the success or otherwise of fauna relocation programs and the results from this research should feed into the development of appropriate guidelines. It is our view that fauna management plans and fauna relocation strategies, when prepared and implemented by knowledgeable consultants, can lead to positive outcomes for the environment. However, when planned or implemented poorly, they may cause more harm than good.

If fauna relocation programs make us feel good but are resulting in high death rates of relocated animals or are disrupting ecosystems at the relocating sites, then perhaps we should cease these programs. However, we think these fauna salvage programs are of benefit if they are well-planned and managed.

As environmental consultants, we need to step back and think whether our recommendations and actions are there to make us feel better or are they there to make a difference to the environment.

For more information and references please contact Drs Graham and Scott Thompson from Terrestrial Ecosystems at

<u>graham@terrestrialecosystems.com</u> **or** <u>scott@terrestrialecosystems.com</u>

Feral fish removed from Emu Lake

By Christopher Hofmeester, Senior Environmental Consultant, Wetland Research Management

Wetland Research Management (WRM) field scientists recently completed a successful round of exotic pest fish species removal from Emu Lake in Ballajura. Using their brand new electrofisher boat as well as tried and true methods such as fyke and gill netting, the team captured and removed a large number of invasive koi-carp (Cyprinus carpio), goldfish (Carassius auratus) and yabbies (Cherax destructor), as well as jewel cichlids (Hemichromis bimaculatus), a highly aggressive ornamental aquarium species from West Africa.

The survey was conducted as part of the City of Swan's <u>loca area</u> <u>plan for Ballajura</u>, which outlines several restoration measures for the iconic Emu Lake over the next five years. These include the removal of koi-carp and goldfish from the lake, followed by ongoing restocking with native freshwater fish, such as western oxgmy perch (*Nannoperca vittata*).

Feral species such as koi-carp, goldfish, yabbies and ornamental cichlids, often released into nature by irresponsible pet owners, can have a devastating impact on wetland habitats by stirring up lake sediments and uprooting aquatic vegetation. This can lead to increased nutrient concentrations and potentially toxic algal blooms.

These introduced species are usually more aggressive and breed more frequently than our native fish species, easily out-competing

WRM's brand new electrofisher boat in action.





them for food and habitat. They also have the potential to bring exotic diseases to our native fish populations.

We hope that our studies will one day contribute to the reintroduction of native fish species to beautiful wetlands such as Emu Lake, but we face an uphill battle if populations of invasive species in urban environments are to ever be controlled. Prevention of new pest fish introductions is just as important as eradication, and requires effective public relations and education, such as the Western Australian Department of Fisheries' "Don't dump that fish" campaign.

If you spot a suspected feral fish species anywhere across WA, you can report it to the Department of Fisheries biosecurity team via the WA PestWatch portal at http://www.fish.wa.gov.au/Sustainability-and-Environment/Aquatic-Biosecurity/Identifying-Pests-And-Diseases/Pages/WA-PestWatch.aspx

YECA Update 2017

Contaminated Sites and Hazmat

The Young Environmental Consultants of Western Australia (YECA) started off 2017 on a high note with the fourth event in our series. The night was focused on work and careers in Contaminated sites and Hazmat.

We had five speakers generously give up their time to present to us a synopsis on their careers to date with each speaker covering a different angle on contaminated site assessment and contamination sources:



Environmental Consultant Simon Ward holding a large koicarp (Cyprinus carpio). Note the "whiskers" and extremely large mouth and lips, used by koi-carp to stir up sediments and uproot aquatic vegetation in search of food. It's easy to see why these fish can have such a devastating impact on our beautiful aquatic environments.

- Peter Zafiropoulos (GHD)
- Janine Barrow (JACOBS)
- Mike North (MBS Environmental)
- Garreth Walker (360 Environmental)
- Daniel Todd (GHD)



YECA Contaminated Sites and Hazmat event.

Advertise with ECA News and reach a niche, tailored audience of more than 400 industry professionals.

Coming Up: Meeting the Regulator workshop

The next event will be a workshop

Consult. consultants interact with different regulators and give tips on how to make the consultation process smoother for all parties.

Join the YECA Committee

The committee is currently seeking environmental professionals n to the industry who are interested in joining us and getting to kno the industry. If you think this might be you please email the YE committee at

yeca.committee@gmail.com

Keep in Touch

YECA has a Facebook Group where you can keep track of all our news and upcoming events, and communicate with other YECA members and the YECA Committee. To find us, search YECA' on Facebook or click on this link: https://www.facebook.com/groups/YXXA1/

You might already be aware of our Linkedin page. To find us search 'YECA' on LinkedIn Groups. You can also contact us via email at <u>veca@eca.org.au</u> or we are always happy to have a char over a drink at one of our events.

If you have any queries, comments or feedback we would love to

WATE-

ASSOCIATION

Are you a Young Water Professional?

To be held on 6 April, the WA Mentoring Program Launch is one of a range of interesting events held by the Australian Water Association. To find out more visit http://www.awa.asn.au EventsByState/WA_Events.aspx





Environmental Practitioners' Workshop

Sharing experiences in environmental practice

This full-day workshop will be of interest to all environmental practitioners including students, community conservation and landcare groups, professionals from all industries, regulators, local government and the public sector.

Presentations topics include:

- Biodiversity offsets, restoration and protection
- Waste resource without a purpose, contamination
- Community involvement in environmental initiatives
- Policy and planning regulatory reform, tools and technologies
- Bushfire recovery and management
- Solutions to environmental problems simple to technological advancement
- Industry initiative

Event details

When: 26 May 2017

Where: Leederville Oval (Medibank

Stadium), 246 Vincent St, Leederville

Cost: Non-members \$150, EIANZ

members \$130, EIANZ student members \$100, NGOs and

students \$110 (please contact EIANZ

Central Office to register)

Availabiility: 250 places

To register please visit workshop-sharing-experiences-in-environmental-practice

For registration enquiries please contact EIANZ Central office on 03 8593 4140 or office@eianz.org. For event enquiries please contact epnwaworkshop@gmail.com

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