

Welcome to Term 4

Welcome to Term 4 and to our last newsletter for this year.

This edition includes a wrap up of the Community Science Expo which was over four big days this year; a review of a new local childrens book called Daniel's Investigation; we look at WA's bird emblem, the Black Swan, in the Did You Know? section, and there are free incursions and PD for teachers and schools from the eastern suburbs of Perth. There is also a River Guardians photo competition to get your students involved in.

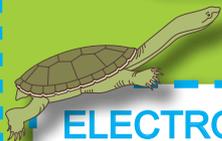
There are also a number of PD opportunities for teachers in Term 4 including SERCUL's Canoeing on the Canning and Catchments, Corridors and Coasts, co-organised by SERCUL, which is a three day PD during the summer holidays that provides a snapshot of environmental education in WA. It is not to be missed!

Amy Krupa

Phosphorus Awareness Project

Like SERCUL on Facebook and keep up-to-date with everything that is happening in landcare.

facebook 



ELECTRONIC NEWSLETTER

If you would like to receive this valuable resource straight into your Inbox early each term, please go to www.sercul.org.au/signup/ and subscribe to the Education Newsletter.

Please pass this information onto your colleagues. The more environmental educators we have, the happier our planet will be!

Community Science Expo Wrap Up Frontiers of Science



Frontiers of Science was the theme of this years expo which for the first time ran over four big days. It all started on the Thursday of National Science Week with community Soil Science talks at the Canning Town Hall. On Friday the Schools Forum was held with 130 local high school students attending sessions including Fermented Fashion where bacterial fermentation of wine and beer produced dresses and Lab on Legs where students coded and programmed lights, motors and sensors.



Robotics Workshops were held on Saturday at the Canning River Eco Education Centre (CREEC) for 200 children that had a lot of fun getting robots to pick up lollies, among many other things!

On Sunday the normal Community Expo was held with displays, presentations and interactive activities for the entire family. Over 2000 people attended which was down on normal crowds, but this was to be expected due to the construction work at the Kent Street Weir. A big congratulations to Year 5 student, Sophia Zhang who won this years 'Design a Banner' competition. Sophia not only had her winning design printed on to a banner to advertise the Expos but won an interactive world globe and many other fantastic prizes.

SERCUL is one of the co-organisers of this annual Expo along with the City of Canning, Canning River Eco Education Centre and the Australian Association for Environmental Education (WA Chapter). Sponsorship of the event is provided by Inspiring Australia and the Department of Biodiversity, Conservation and Attractions.

What's Happening in Term 4?

Department of Fire and Emergency Services Teacher PD

24 October 2017
1pm - 4pm

This PD for Primary School teachers will cover:

- * How to deliver Disaster Resilience Education
- * Home Fire Safety Education
- * Bushfire and Natural Hazard Education
- * How DFES can support you in the classroom

Afternoon tea and a tour of the Education and Heritage Centre included.

RSVP to educationandheritage@dfes.wa.gov.au with:

your name, school, year you teach and dietary requirements.

Education
Building Disaster Resilience in Young People



West Australian Sustainable Education Forum

Friday 1st December 2017
9am - 3pm

This forum is an opportunity for those in community, schools, industry, tertiary and government groups to share the work they are engaged with to educate about and support sustainability practices.

Community Capacity Building is the focus for the afternoon session with practical knowledge, skills and tools described to enhance opportunities for future projects.

Catrina Aniere from Millennium Kids will share her work with Indigenous youth in Kalgoorlie.

Venue: Greenskills Building, North Metropolitan TAFE, 140 Royal Street, East Perth

Cost: \$55 Non Member; \$33 AAEE member and students (includes refreshments)

To register contact Dr Jennifer Pearson on pearsonjo@iinet.net.au



Algae Busters Page

Phosphorus Awareness Project Resources for Schools

The Phosphorus Awareness Project is concerned about the high levels of nutrients that are causing the growth of algal blooms in the Swan and Canning Rivers and associated wetlands. The project offers opportunities to school and youth groups including:

- **Algae Buster Incursions** are interactive, fun programs where students learn about catchments, nutrients and algae through a catchment story or river food web.
- **Building a Frog Habitat** is a must have incursion if a school is considering building a frog habitat. Students learn about the frogs of the Perth Region and listen to their calls. All the essential elements in constructing a frog habitat is also covered.
- **Go Fish!** allows students to learn about the diversity of fish that live in our local waterways and what we can do to protect our native fish.
- **Clean Drains River Gains** allows students to learn about the links between drains and pollution through stencilling drains at school.
- **Planting Opportunities** allow students to plant local native species into rehabilitation sites and learn why this is important (available Jun–Oct).



- **Resource Sheets** are available based around the nutrient issue.
- **Nutrient Display** explains the problem, cause and solution to nutrients and algal blooms in our rivers in a colourful display.

For further information or to book an incursion or a display to be set up in your school please contact:
Amy Krupa on 9458 5664
or email amykrupa@sercul.org.au

Mozzie Wise - Free Incursions and PD

With the weather warming up and the mozzie season nearly upon us schools in the Towns of Bassendean and Victoria Park and the Cities of Bayswater, Belmont and Swan can access free **Being Mozzie Wise incursions and Professional Development**. SERCUL is partnering with the East Swan River Contiguous Local Authorities Group (ESR CLAG) to provide these incursions and PD free of charge to schools in the area.



MOZZIE Wise

Mozzie Wise Professional Development Workshop

During this two hour workshop teachers will learn about mosquitoes, their positive and negative role in ecosystems, mosquito-borne diseases, prevention and their control. The 'Mozzie Wise: A Teacher's Guide to Mosquito Education' booklets will be showcased and teachers will learn how to implement this curriculum linked resource into their classroom (includes one Teacher Guide per participant).

Being Mozzie Wise Incursion

This incursion involves interactive activities where students learn about mosquitoes, their lifecycle, their role in the food chain, where they breed, how to stop them breeding at home and school, mosquito borne-diseases and how to protect themselves from mosquitoes. During this one hour incursion students will also look around the school grounds to determine if mosquitoes are breeding.

For further information about the Professional Development workshops or the Being Mozzie Wise incursions or if you would like to make a booking please contact Amy on 9458 5664 or amykrupa@sercul.org.au

City of Swan Teachers - Free Incursions in Term 4

Due to an extension of the Phosphorus Awareness Project into the Bennett Brook/Saint Leonards Creek Catchment schools in the City of Swan can access free incursions in Term 4. All of the incursions are linked to the curriculum and teach students how to look after our waterways, such as Bennett Brook, or about the animals and plants that live in our waterways. To find out what incursions can be presented [click here](#). These incursions can be presented at any time suitable for your school in Term 4. There is a limit of four incursions per school so book in now to avoid disappointment by contacting Amy on 9458 5664 or amykrupa@sercul.org.au.



Canoeing on the Canning PL Opportunity

Friday, 20 October 2017

Places still available, register now!

Canoeing on the Canning is a full-day professional learning opportunity, held during National Water Week in October by SERCUL.

On the day, expect to:

- ▶ learn about the Indigenous connections to the river;
- ▶ explore the local biodiversity;
- ▶ learn about the fresh and salt water ecosystems of the area; and
- ▶ hear about the key environmental issues that threaten the Canning River ecosystem while canoeing and on foot.

Register early to avoid disappointment as the day is capped at 20 participants. See the attached flyer for further information.

Call Amy on 9458 5664 or email amykrupa@sercul.org.au to register.



New Local Children's Book About our Rivers - Daniel's Investigation

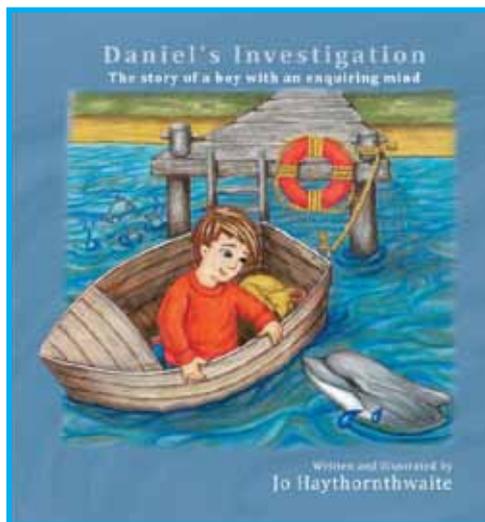
'Daniel's Investigation - The story of a boy with an enquiring mind' is written and illustrated by Jo Haythornthwaite, a Dolphin Watch volunteer, who helps monitor dolphins in the Swan Canning Riverpark.

This delightful book follows Daniel as he investigates whether dolphins are living in the river, why the river is polluted and how it can be cleaned up. The book starts off on a negative note, with the poor state of our rivers highlighted, but it turns positive when Daniel discovers that dolphins are living in the river and that the people of Perth can help with river conservation. The River Guardians program, which runs Dolphin Watch, is showcased in the book.

This is a fantastic resource for students to read as it showcases our local rivers and the problems that are occurring in them. It gives the students some valuable ideas of how we can look after our rivers and the animals and plants that call them home.

The illustrations are engaging and eye catching and really bring this story to life. There is also information provided at the back which can be used to further discuss these issues.

The book is published by the Department of Biodiversity, Conservation and Attractions and is available to purchase for \$14.95 from <https://shop.dbca.wa.gov.au/books/childrens-books>. Part proceeds from the sale of this book will be provided to the River Guardians program who support the conservation of the rivers.



17 - 19
January
2018

Catchments, Corridors and Coasts 2018

Register now for this inspiring Professional Development program!

Snorkeling in the ocean, walking in the bush, getting up close and personal with native fauna, sharing experiences with environmental educators – these are just some of the activities you can expect when you participate in the action packed Catchments, Corridors and Coasts (CCC) Program.

CCC is a three day practical program, which focuses on learning through experience and skill development, while also reflecting the synergies between the environmental education practitioners in WA. CCC provides a 'snapshot' of environmental education in WA from its enormous catchments through its narrowing corridors to the beautiful coast. It is proudly presented annually by the Australian Association for Environmental Education WA Chapter. SERCUL Education staff are on the organising committee and present a session at CCC.

Please go to www.aaeewa.org.au/cc.html for further information and to download the registration form.



Canning River Eco Education Centre

CREEC offers a number of K-Yr 12 programs which allows students to learn about the local natural environment in interactive ways.

NEW Middle Childhood *Weir-d Science*

The Kent Street Weir on the Canning River provides a unique location to compare two river ecosystems.



Students have the opportunity to investigate the role of the Weir, how it has altered the river system and how plants and animals have adapted to changes in the physical environment.

\$7 per student (1.5 hrs)

NEW Early Adolescence *Rivers at Risk*

Students are introduced to natural and ecological hazards associated with river systems within an urban catchment such as drought, introduced species and eutrophication.

\$7 per student (1.5 hrs)

A Day in the Park

27th - 29th November

Join us in the scenic Canning River Regional Park for a day of nature-based activities that will keep your students switched on to environmental learning until the end of the year.

\$7 per student
10am-2pm



Contact CREEC Centre Coordinator,
Hayley Bullimore on 9461 7160 or
creec@canning.wa.gov.au
to book your excursion now!



The SERCUL Educators wish to thank our major sponsor.



Department of Biodiversity,
Conservation and Attractions



SERCUL is a proud member of:



SUSTAINABLE
SCHOOLS WA



AUSTRALIAN ASSOCIATION
FOR ENVIRONMENTAL EDUCATION
(VIA CHAPTER)

For further information please contact:

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Important Dates – Term 4, 2017

Date	Event	Website
9 Oct	First Day of Term 4	
16 Oct	World Food Day	http://www.worldfooddayusa.org/
15-21 Oct	National Water Week	http://www.awa.asn.au/AWA_MBRR/About_AWA/National_Water_Week.aspx
23-29 Oct	Aussie Backyard Bird Count	https://aussiebirdcount.org.au/
12-19 Nov	Pollinator Week	http://beesbusiness.com.au/pollweekmain.html
13-19 Nov	National Recycling Week	http://recyclingweek.planetark.org/about/
5 Dec	International Volunteers Day	https://www.volunteeringaustralia.org/news-events/events/
5 Dec	World Soil Day	http://www.fao.org/global-soil-partnership/world-soil-day/background/en/
14 Dec	Last Day of Term 4	



River Guardians Photography Competition

Enter now for your chance to win one of \$3500 worth of prizes with the winning photograph being showcased on the cover of LANDSCOPE magazine.

All you have to do is submit an image of what you love about the Swan and Canning Riverpark - it can be anything from dolphins, to having a picnic with your family on the foreshore, watching the sunset over the river or taking a cruise on a boat.

The competition is open to any WA amateur photographers. Entries close 30 November 2017. Winners will be announced 20 December 2017.



For further details and to enter go to:
<https://www.riverguardians.com/competitions>

Did You Know?

Black Swans predominantly occur in the southeast and southwest of Australia but their range extends south to Tasmania and north to Townsville in Queensland and Port Headland in Western Australia.

The birds are entirely black except for the white outer flight feathers of the wings, with an orange to dark red beak. The white eye becomes red during the breeding season. The cygnets are covered with light grey down. Males grow about 1.3 metres long and females grow to 1.2 metres. Females also have slightly shorter necks than males. Black Swans have a trumpet-like call.

Black Swans frequent lakes, rivers, estuaries and swamps. In the Swan Canning Riverpark, Black Swans are most commonly found in areas of shallow, vegetated foreshore and are also found in close proximity to seagrass meadows in the lower estuary.

Breeding may occur throughout the year but is often limited to May-September in the south. Black Swans are ready to breed at 18 months of age and most breed before their third year. While older birds generally bond permanently with one partner, younger birds may pair up for only a short time, breed then desert the nest, leaving the other partner of either sex to care for the young.

Black Swans primarily feed on submerged aquatic vegetation, but will also consume invertebrates.

