

## Welcome to Term 2

Can you believe that we are already into the second term of the year?! By now your classes should have well and truly settled in and be ready to immerse themselves in to some environmental education!

I am constantly asked by teachers about what environmental education resources are available to assist them in fulfilling their curriculum requirements. There are plenty of providers out there.... you just need to know where to look! To this end, each term I will endeavour to showcase as many environmental opportunities as I can so that all of the hard work in finding out about these providers is already done for you!

This term we outline the educational opportunities offered by Perth NRM, Waste Wise Schools, Sustainable Schools and Fisheries. We also showcase SERCUL's fantastic new Aquatic Weeds and Dragonfly Lifecycle Incursions.

As 2019 is the International Year of Indigenous Languages, we highlight this topic and showcase the great new Noongar Symbols and Language Posters SERCUL has available. Happy reading!!

Natasha Bowden

Phosphorus Awareness Project

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/](http://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!



Captain Clean Up, who was at his very best!! Positive feedback from teachers who attended included:

*"Learning outdoors at its best"*

*"It shows how we can make an impact on the environment, in our own backyard"*

This event is held every year. If you would like to find out how your school can be involved in next years event, visit <http://www.aaeewa.org.au/events.html#ede>.

## Earth Day Expo

Wrap Up  
2019

Earth Day occurs on the 22nd April each year and marks the birth of the modern environmental movement in 1970. For the last 11 years, the Australian Association for Environmental Education WA (AAEE WA) has marked the occasion with an Earth Day Expo held at Canning River Eco Education Centre (CREEC). School groups are invited to experience a whole day excursion filled with fun, interactive activities that educate and raise awareness of the diversity of life on earth and get them thinking about how to solve the myriad of environmental challenges we face! This years event was held on Friday 5th April and involved 11 schools who were kept entertained by representatives from a range of government, private sector and community groups who manned a total of 21 different activities, with an introduction provided by

## What's Happening in Term 2?

### Waste Wise Schools Workshops

Waste Wise Schools have three FREE introductory workshops (one online and two in-person) this term that will outline how schools can become an accredited Waste Wise school and set up waste wise projects. *Teacher relief payments are available for two staff from each school that wants to attend the in-person workshops on the 14th and 21st May.*

**Introductory Online Webinar:** Tuesday 14th May, 1 - 2pm. Register at <https://attendee.gotowebinar.com/register/5196109830262742786>

**How to be Waste Wise and Litter Free Workshop:** Includes a tour of the Redhill Waste Management Facility. Tuesday 14th May, 9am - 3pm. Red Hill Waste Management Facility, 1094 Toodyay Rd, Red Hill, WA 6065. Register at <https://www.eventbrite.com/e/how-to-be-waste-wise-and-litter-free-red-hill-waste-management-facility-tickets-60040152713>

**Waste Wise Introductory Workshop:** Includes a tour of Tamala Park landfill site and education centre. Tuesday 21st May, 9am - 3pm. Prime House, 8 Davidson Terrace, Joondalup, WA 6027. Register at <https://www.eventbrite.com/e/waste-wise-schools-introductory-workshop-and-tour-of-tamala-park-tickets-59752204452>



### Sustainable Schools WA

Sustainable Schools is a whole-school planning framework for Education for Sustainability. There are a number of Regional Network Groups that meet each term to discuss sustainability in the classroom and any one who is interested is welcome to attend. Go to <http://det.wa.edu.au/curriculum-support/sustainable-schools/detcms/navigation/about-the-initiative/professional-learning/> to find a group near you.

The next South Metro Regional Network Group meeting will be held on Tuesday 21st May 2019 from 3:45pm - 5:30pm at Hammond Park Primary School (10 Eucalyptus Drive, Hammond Park) and will include presentations by Life Cykel and Waste Wise Schools as well as a tour of the Fabulous Food Factory canteen and other sustainability initiatives at Hammond Park Primary School. Please RSVP to [joselyn.juraszek@dbca.wa.gov.au](mailto:joselyn.juraszek@dbca.wa.gov.au).



## Phosphorus Awareness Project Resources for Schools

The Phosphorus Awareness Project (PAP) is concerned about the high levels of nutrients that are causing algal blooms in the Swan and Canning Rivers and associated wetlands. PAP offers incursions, excursions and resources to school and community groups concerning this issue and how we can look after our waterways and the animals and plants that live there, 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 are 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.

• **Turtle-ology!** teaches students about the life cycle of the Long-Necked Turtle and the various impacts humans have on them at each stage.

• **Macroinvertebrates and Minibeasts** gives students the opportunity to observe the little creatures that live in our waterways or on land up close and personal.

• **Bush Tucker** allows students to learn about the Noongar seasons and how the traditional owners used a range of native plants at different times of the year.

• **Life Cycles: Frogs, Mistletoe or Dragonflies** gives students the opportunity to learn about the life processes of these plants and animals.

• **Aquatic Weeds** informs students about the environmental problems that occur when plants from ponds and aquariums are released into drains and waterways to become weeds!

Depending on your school location one day of incursions may be free! To find out visit <http://www.sercul.org.au/wp-content/uploads/2018/12/SERCUL-PAPSchoolChargeMap.pdf>

For further information or to book an incursion to your school please contact: **Natasha Bowden** on 9458 5664 or email [natashabowden@sercul.org.au](mailto:natashabowden@sercul.org.au)

## International Year of Indigenous Languages

The United Nations General Assembly has declared 2019 the International Year of Indigenous Languages (IY2019) to raise awareness of the many languages around the world, to ensure their survival and to appreciate the contribution they make to our world's rich cultural diversity.

In Australia, the main language spoken is English...but did you know that there were originally 250 Aboriginal and Torres Strait Islander languages spoken in this country, of which only 120 are still spoken, 90% are endangered and only 13 are still acquired by children. IY2019 is an opportunity to take further actions to improve the preservation and promotion of Australia's Aboriginal and Torres Strait Islander languages.

For more information about 2019 International Year of Languages visit <https://en.iyil2019.org/> for an international perspective or [www.arts.gov.au/what-we-do/indigenous-arts-and-languages/2019-international-year-indigenous-languages](http://www.arts.gov.au/what-we-do/indigenous-arts-and-languages/2019-international-year-indigenous-languages) or <https://aiatsis.gov.au/explore/articles/indigenous-australian-languages> for an Australian perspective. See below for some of the resources SERCUL has relating to the language, symbols, seasons and plant use of the indigenous Noongar peoples of the South-West of Australia.



### Noongar Symbols and Language Posters

SERCUL has worked with Marie Taylor from Yelakitj Moort Nyungar Association to develop a set of six A2 sized Noongar Symbol and Language Posters based around the themes of the Sky, Land, Tools, Tracks, Plant & Animals and People. The posters showcase some of the words (in both English and Noongar) and symbols associated with these themes and would be a valuable teaching resource in any classroom.

The posters are available now from the SERCUL website [www.sercul.org.au/noongarposters/](http://www.sercul.org.au/noongarposters/) and can be purchased for \$5 each (incl GST) or as a set of 6 for \$26 (incl GST) plus postage, or alternatively they can be picked up from SERCUL's offices which are located at 1 Horley Road, Beckenham - just off the Kenwick Link.



### Noongar Seasons Poster

SERCUL also have a Noongar Seasons Poster that complements our Bush Tucker incursion (see below).

The A2 sized Noongar Seasons poster showcases the six Noongar seasons and some of the local plant species used during those seasons. The poster costs \$5 inc GST plus postage or can be picked up from SERCUL's offices.

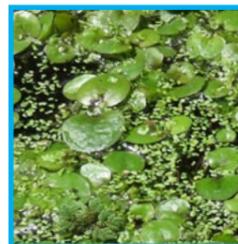
Go to the SERCUL website [www.sercul.org.au/noongarposters/](http://www.sercul.org.au/noongarposters/) or pop into SERCUL's offices to get your copy!

### Bush Tucker Incursion

SERCUL's Bush Tucker incursion is a curriculum linked, hands-on program suitable for all year groups from Kindergarten to Year 12 that teaches students about the growth, features and traditional uses - whether it is for medicine, tools or food - of a range of local native plants. Students also learn about the Noongar seasons and how the traditional landowners used the various plants at different times of the year.

To learn more or book an incursion, contact Natasha at [natashabowden@sercul.org.au](mailto:natashabowden@sercul.org.au).

## Aquatic Weeds in Perth



Aquatic weeds are plants that grow in a waterbody in such a way that hinders the usefulness, enjoyment or health of that ecosystem. They can impact upon the economic, environmental and recreational values of rivers, estuaries, lakes and wetlands and in Perth aquatic weeds have become a problem!

Most aquatic weeds have been brought into Australia as aquarium or pond plants and have been introduced into the natural environment due to people inappropriately disposing of their aquarium or pond contents into stormwater drains or directly into waterways. Like all weeds, aquatic weeds then threaten the natural ecosystem as they often grow rapidly causing reduced light penetration, decreased water quality, displacement of native plants and waterbirds, reduced habitat for native aquatic animals and increased habitat for undesirable species such as mosquitoes. In the past, we have had outbreaks of Water Hyacinth in Bannister Creek, Salvinia in Lake Marmion and Sagittaria and Hydrocotyl in the Canning River. More recently another aquatic weed, known as Amazon Frogbit, has become a popular aquarium plant and has been discovered in drains and wetlands around Perth.

For more information about Aquatic Weeds visit [www.sercul.org.au/our-projects/weed-management/](http://www.sercul.org.au/our-projects/weed-management/) or to report a suspected aquatic weed sighting go to the MyPestGuide app or visit [www.agric.wa.gov.au/apps/mypestguide-reporter](http://www.agric.wa.gov.au/apps/mypestguide-reporter).



### Aquatic Weeds Incursion

SERCUL's Phosphorus Awareness Program (PAP) has developed an Aquatic Weeds Incursion that aims to educate students about the environmental problems that occur when plants from ponds and aquariums are released into drains and waterways to become weeds. A number of Perth's aquatic weeds are discussed, but the focus is on Amazon Frogbit, a lily-pod-like plant that can completely cover a wetland! Students learn about why these plants are considered weeds, the problems they cause, how to identify them and what to do when they spot them. The incursions are suited to Years 3 - 12. If you would like to book an incursion email Natasha at [natashabowden@sercul.org.au](mailto:natashabowden@sercul.org.au).

### Lifecycle of the Dragonfly Incursion

SERCUL's PAP has added to its series of incursions covering lifecycles by developing one that focuses on the weird and wonderful lifecycle of the dragonfly! Did you know:

- These incredible insects start their life in the water and will in most cases live a greater portion of their life as an aquatic insect than as a flying one?!
- Dragonfly nymphs breathe through their butts?!
- Dragonfly species are one of the oldest species of insects in the world...and are, in fact, older than the dinosaurs?!



These and many more interesting facts about the life processes of the dragonfly will be covered and students will get to participate in activities and a discussion about key stages in the dragonfly lifecycle and the reasons behind it's success. The incursions are suitable for Years 3 - 12 and can be booked by emailing Natasha at [natashabowden@sercul.org.au](mailto:natashabowden@sercul.org.au).



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.

### Early Childhood

#### Bush Detective

Many of our native animals are very secretive and can be difficult to find. Students use puzzles and examples of animal evidence such as skulls, feathers and nests to investigate what lives in and around the Canning River Regional Park. Students apply their detective skills on a nature walk and record their observations by making a model of their own to take home.

\$7 per student (1.5 hours)

### Middle Childhood

#### Weir-1 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)

### 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)

Contact CREEC on 9461 7160 or [creec@canning.wa.gov.au](mailto:creec@canning.wa.gov.au) to book your excursion now!

# SERCUL

South East Regional Centre for Urban Landcare

ALGAE BUSTER



PHOSPHORUS  
AWARENESS  
PROJECT

The SERCUL Educators wish to thank our major sponsor.



Department of Biodiversity,  
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SERCUL is a proud member of:



SUSTAINABLE  
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AUSTRALIAN ASSOCIATION  
FOR ENVIRONMENTAL EDUCATION  
(VIA CHAPTER)

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## Important Dates – Term 2, 2019

29 April	First Day of Term 2
6-12 May	International Composting Awareness Week <a href="https://www.compostweek.com.au/">https://www.compostweek.com.au/</a>
11 May	World Migratory Bird Day 2019 <a href="http://www.worldmigratorybirdday.org/">http://www.worldmigratorybirdday.org/</a>
20-26 May	National Volunteer Week <a href="https://www.volunteeringaustralia.org/get-involved/nvw/">https://www.volunteeringaustralia.org/get-involved/nvw/</a>
22 May	International Day for Biological Diversity <a href="https://www.cbd.int/idb/">https://www.cbd.int/idb/</a>
23 May	World Turtle Day <a href="https://www.worldturtleday.org/">https://www.worldturtleday.org/</a>
5 June	World Environment Day <a href="http://worldenvironmentday.global/en/about/air-pollution">http://worldenvironmentday.global/en/about/air-pollution</a>
8 June	World Oceans Day <a href="https://www.worldoceansday.org/">https://www.worldoceansday.org/</a>
15 June	Global Wind Day <a href="https://globalwindday.org/">https://globalwindday.org/</a>
17 June	World Day to Combat Desertification and Drought <a href="https://www.un.org/en/events/desertificationday/">https://www.un.org/en/events/desertificationday/</a>
5 July	Last Day of Term 2
7-14 July	NAIDOC Week <a href="https://www.naidoc.org.au/">https://www.naidoc.org.au/</a>
11 July	World Population Day <a href="https://www.unfpa.org/events/world-population-day">https://www.unfpa.org/events/world-population-day</a>



## Marine WATERS

Western Australian Teacher Education Resources

**M**arine WATERS (<http://marinewaters.fish.wa.gov.au/>) connects WA students and teachers with a plethora of resources linked to the Western Australian curriculum that are specific to Western Australia's unique marine ecosystems and explore the challenges facing the sustainability of our aquatic resources.

The website allows you to filter resources based on the year group, WA or Australian curriculum subject, topic and the type of resources you require, which can include lessons, PowerPoint presentations, articles, games, videos, fact sheets and student worksheets. You can also use this website to book an excursion to visit Fisheries at Hillaries for a hands-on education experience full of fun activities focusing on fisheries science and the aquatic environment.

## Swan Canning River Recovery Education Program

**P**erth NRM offers three FREE education programs to help educate students about the Swan-Canning River Recovery Project. The programs are presented by an Environmental Scientist and can be scaffolded or tailored to suit your class or curriculum requirements and are available for Years 3-6 and Years 7-12. Each program goes for around 45 minutes and you can choose from:

**Life in the Catchment:** Students learn about the Swan and Canning River catchment, the species that live there, how our actions at school and home can affect the river ecosystem and how we can lessen our impact on it's species habitat.

**Catchments and Stewardship:** Students will learn about the services the river's ecosystem provides - food, recreation, urban cooling, tourism - and how we can help improve upon them.

**Future of the Rivers:** Students will learn how our rivers can change over time as they envision the type of river they want for the future.

If you would like to know more, or to book a class talk call 9374 3302, email [jason.pitman@perthnrm.com](mailto:jason.pitman@perthnrm.com) or visit <https://www.perthnrm.com/education>

## Did You Know?



The Australian Mint has released new 50 cent coins which feature 14 Indigenous words for money to commemorate the 2019 International Year of Indigenous Languages. The CEO of the Australian Mint, Ross MacDiarmid, said the 'coins are a celebration of Australia's unique and diverse indigenous languages'. The words often have multiple meanings, such as stone, coin, piece or grey, as the word for money is a relatively recent addition to indigenous languages. Prior to colonisation by European settlers there was no word for "money" because items such as pearl shells, quartz or food were used for trade. The Noongar/Nyungar word "boya" means stone, granite, rock or money and is one of the words featured on the coin. To view the coin and find out the origin and meaning of each word go to <https://www.ramint.gov.au/2019-50c-international-year-indigenous-languages>.