

Cross Curriculum Priorities ... 2019



Semester 1 whole school STEM project “Our Bush Trail”, including a focus on ladybirds in Term 2.



Welcome to the August 2019 edition of news from the Cross Curriculum Leader. The WA Curriculum identifies Cross Curriculum Priorities (CCPs):

- ✚ Sustainability
- ✚ Aboriginal and Torres Strait Islander Cultures and Histories
- ✚ Australia’s Engagement with Asia

These priorities are embedded across a wide range of learning areas, from English to Science, Technologies, Engineering, Arts and Mathematics (STEAM), Geography, Health and Physical Education.

Innovative Bushland STEAM project

The whole school bushland STEAM (Science, Technologies, Engineering, Arts, Mathematics)

project will be officially opened on Friday 30 August. Neville Collard, esteemed Noongar Elder, will conduct a Welcome to Country and Smoking Ceremony in the area of the cubby-building playground. After the formalities, senior students will guide special guests, parents and friends along the trail, viewing interpretative signage and many different artworks.

Numerous incursions related to the bushland project were conducted during Terms 1 and 2 to support classroom literacy and investigative skills. This work was used to create the interpretive signage for the bushland. Here are examples of the students' art work, showing Native Wisteria and the Jarrah Tree, that went on the signs.



Wandjoo
Welcome to Coolbinia's Bush Trail

Koorla (Native Wisteria)

Along our bush track you will sometimes see a trail of purple, the 'happy wanderer', meandering through the bush. These purple pea flowers belong to *Hardenbergia comptoniana*, also known as Koorla or Native Wisteria. Flowering occurs from Makuru to Kambarang (July to October). When the seeds are mature the dry, pea-like pods open explosively with a loud crack, throwing the seeds many metres away. You can hear these exploding pods on hot summer days. You will find Native Wisteria growing in nearly every bushland around Perth on the Swan Coastal Plain. It grows near to the coast anywhere between Geraldton and Albany. It likes open Jarrah forest and sandy or gravelly soils and it needs part to full sun to flower well. Noongar people used the strong flexible stems of the Koorla to build shelters and make twine or rope.

Research conducted by Year 6, Rm 11, Art in Year 4, Room 8 (2019).

Minga (Insect - Native Ladybird)

Ladybirds are insects. There are over 100 ladybird species native to Australia. Many different species of ladybirds were found in our school grounds and bushland, such as *Harmonia conformis*. The photos taken with our digital microscope show some of the ladybirds we found. The spots on the back of ladybirds act as a defense mechanism to avoid predators. The spots come in different shapes and numbers. Other markings and spots help to identify the species of ladybird. Some species have no spots at all, as illustrated in the photos.

A ladybird undergoes a complete metamorphosis through its life cycle: egg-larva-pupa-young ladybird-adult ladybird, as shown in the photos of specimens collected by the children. Ladybirds are carnivorous and eat up to 60 aphids per day and will also eat a variety of other harmful insects and larvae. For example, ladybirds eat scales, mealy bugs, leaf hoppers, and mites, as well as pollen and nectar. Ladybirds are an excellent biological alternative to chemical pesticides.

Research conducted by Pre-Primary in ELCA, Year 2 Room 4 and Year 3 Room 5 (2019).

QR code Koorla QR code Minga



Year 6 Rm 11 students prepared bushland quiz questions to be included on the interpretative signage. The quiz questions employed augmented reality and can be accessed through QR codes on the signs. Year 4 Rm 8 students worked on brochures describing bushland flora and fauna, distributed at the Opening.

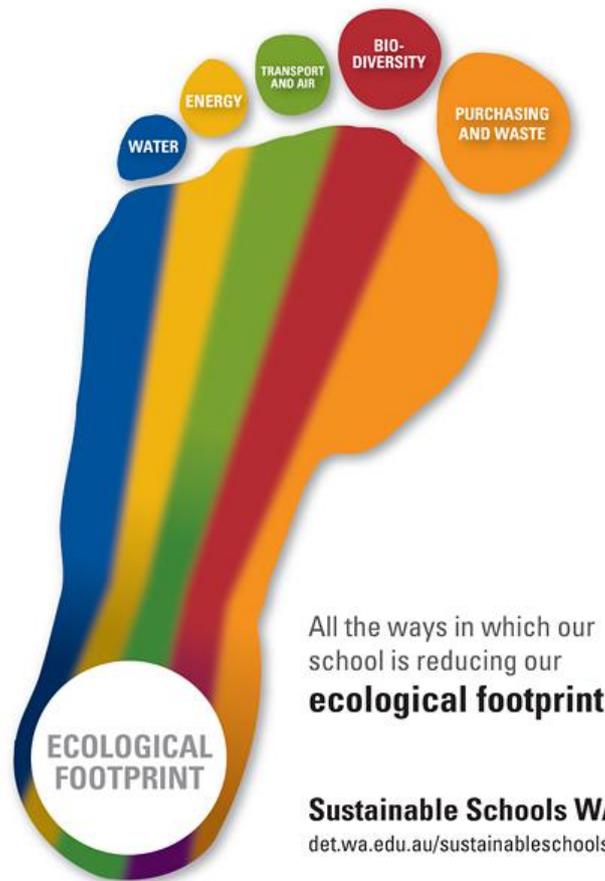


Catrina Aniere, CEO of Millennium Kids, also led our Room 11 and 12 students on a guided walk through our bushland. Catrina challenged the students to think critically about the evidence they collected when investigating Inquiry questions. For example, there are contradictory points of view about how Zamia seeds were processed by Noongar people - detoxification or fermentation? The latest archaeological evidence argues Noongar people used fermentation, one of the earliest examples of this process recorded in the world!



Ladybird Delight

Excited children, from Kindy to Year 6, were thrilled to have live ladybird beetles and ladybird eggs in their classrooms during Term 2. This formed part of their Biological Science studies that linked in with the bushland project.



Sustainability

100 Tonne Plan

The school is on track to achieve our most recent 100 Tonne Carbon Emissions Reduction target this year. On average, our various tree planting, waste management, water saving, solar power production and transport actions reduce carbon emissions by 8 tonnes per month. In total, since starting to monitor our carbon emission reductions in 2011, we have reduced our emissions by a total of 560 tonnes!

Our emissions reduction target for 2019 is to achieve the 200 Tonne Carbon Emissions Reduction Plan by the end of 2019, our 2017-2019 Business Plan target.

Eco Footprint

1. Biodiversity Action:

Green Thumbs Galore for National Schools Tree Day

National Schools Tree Day was on Friday 26 July. Coolbinia Primary celebrated this special day by planting nearly 300 trees and seedlings in the school grounds and bushland, during July.

We are very grateful for the plants that were provided by the South East Regional Centre for

Urban Landcare, the City of Stirling and the school.

For most classes, the senior students worked with their junior buddy classes to plant the seedlings. Congratulations to all our tree guardians! You have contributed to the conservation of our native flora! Thank you to all our 'green thumb' staff and students across the school who demonstrated care for their environment by these actions.



Hens as 'Day boarders'

We had chickens, Rosie and Chookie, as our day boarders during Term 2. Sincere thanks to the Ager family, Alice T. and the Hallam and Tanner family, for enabling this opportunity to be available at Coolbinia Primary to enhance our Biological Science studies.



Olive Processing

Our school olive tree was harvested during Term 2. These olives went through the curing process and were bottled. Students from Room 10, Year 4/5, engaged in these processing activities. The students plan on eating the olives on their own pizza baked at school. Well done Room 10 students.



Class Garden Beds

Enjoying the sun and rain

Potatoes, peas, beans and many other vegetables and herbs are thriving in our class garden beds. Look how our plants are growing ...



Harvesting School Produce

Lilly Pilly Tree

Many thanks to Dino for harvesting Lilly Pilly fruit from the big tree near the Undercover Area. Children from Room 2, Year 2/3, worked on the initial processing of the fruit. They removed leaves, sticks, cockroaches etc from the harvest, then washed and de-pipped the fruit. We started with ~ 6.5kg of fruit and this produced ~ 3kg Lilly Pilly Jam. All bottles of the jam were sold at the Climate Action Bake Sale, raising \$35 towards the purchase of the solar lantern kits. Many thanks to the students who helped process the Lilly Pilly berries.



River Rangers

Our Students at Uni!

At the start of Term 3 Year 4, 5 and 6 River Ranger students (Rooms 7 and 10-12) studied at Murdoch University! They started the day with an interactive lecture, in the Kim Beazley Lecture Theatre, about the dolphins of the Swan River. Fascinating workshops continued throughout the day, from Fingerprinting in a forensic science lab, designing a garden to grow in the International Space Station, Algorithms - Thinking like a machine, taking a guided walk through wetlands, and finishing with a Live and Explosive Science Show (Chemistry). All students also participated in a Gamelan Workshop, as part of their Music studies.





Kids Teaching Kids Conference

During this term each year, our Year 6 students prepare to present environmental education workshops at the *Kids Teaching Kids Conference*. The KTK Conference will be held in Mandurah on 12 September 2019. Participation in the event is funded by KTK and River Rangers. Our Year 6s will be conducting two workshops with students from primary and high schools across the south-west of WA. Their workshop topics will address water quality and tree survival.



School yard safari

The highly successful school yard safari program, which was conducted by Roots & Shoots members during Terms 1 and 2, has been the cause of great excitement during Wednesday lunchtimes. Over 50 students attended the weekly sessions, collecting as many Arthropods as they could find across the school grounds. The students classified their discoveries each session and used digital microscopy to examine their 'finds' in detail, then release them.

The most common insect found was ... surprise! ... ladybirds, showing all the stages of their life cycle. This demonstrated the students' high level of engagement with their biological science focus on ladybirds. This term the raw data is being collated in Digital Technology lessons and a report prepared. These results will be included in the bushland project book to be compiled during Term 4.





Creative in the Bushland

Each week this term Roots & Shoots members have been collecting leaves, nuts, sticks and so on, from the bushland to create their own ephemeral artworks. These artworks will be on display at the official opening of the bush trail on Friday 30 August. All collected bush items will be returned to the bushland afterwards. See above an example of bush art the students used as a model.

2. WasteWise:

Our recycling initiatives include:

- ♻️ batteries
- ♻️ old toothbrushes & oral care packaging
- ♻️ mobile phones
- ♻️ plastic bread bag clips
- ♻️ old pairs of glasses
- ♻️ ink cartridges
- ♻️ paper and cardboard
- ♻️ coffee pods

All these bins may be found at the Kwobadarn (student kitchen).

Our school also recycles:

- ♻️ food waste by worm farming and composting

Different Year 4 classes manage the WasteWise program each term.

Students learn about the benefits of worm farming and care of worms ...



Nude Food Tuesdays is a whole school initiative to reduce waste. Nude Food refers to student lunchboxes containing food without wrapping. Information about healthy, nude food lunches may be found at:

<https://www.kitchengardenfoundation.org.au/content/pick-mix-1-6-lunchbox-poster>

Please continue our focus on Nude Food this term and use all our recycling bins.



Thank you for contributing to our Wastewise initiatives throughout 2019!

3. WaterWise:



Proud to be a
**Waterwise
School**

Perth Catchment Model

Year 3 students are our Water Warriors. They use rainwater for watering the gardens and hanging baskets, as well as topping up the bird baths and frog habitat pond. They also monitor taps for leaks.

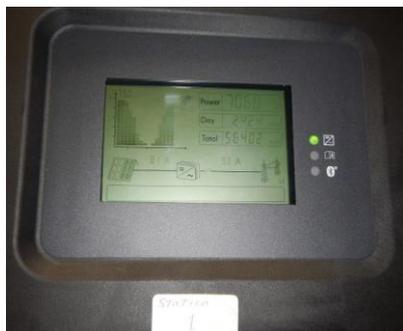
In 2019 we continue our commitment to being Waterwise and this will include Water Corporation Education officer incursions being conducted throughout the year.

As an active Waterwise School we have representation on the Water Corporation's Teachers Reference Group. Education is the key for water saving at home. Visit watercorporation.com.au/save-water and watercorporation.com.au/whatsyourwaterstory to find out how you can save water.

4. EnergySmart:

Since September 2012 the school has been recording how much power has been generated by our solar power system, as well as how many tonnes of CO2 have been saved from being released into the atmosphere. Please see Dr Lewis if you would like further information.

We continue to monitor our electricity usage and implement actions to reduce our school electricity costs. Students learn how they can contribute to this aim.



5. Your Move:

Coolbinia PS is a Platinum level school in Your Move (TravelSmart). Congratulations to all Your Move (YM) supporters!

Year 5 students have organised a YM events each term. They prepare posters and promoted our special YM events. Raffle tickets, stickers and other prizes were distributed to children coming to school in a YM way.

Please continue to support YM for the rest of this year. Every Friday is a Fume Free Friday!

Social Handprint

1. Student Wellbeing:

The Positive Behaviour Support (PBS) program is our school-wide approach to creating a safe, positive learning environment.

Our core values are:

- Character
- Respect
- Responsibility
- Strive

PBS therefore contributes to the wellbeing of our children.

Cathy Smith, our Music Teacher as well as our Wellbeing Coordinator, conducts Wellbeing Mondays – activities for children to participate in on Mondays at recess.

Both these initiatives seek to enhance student wellbeing at Coolbinia Primary.



2. Aboriginal Cultures:

An aspect of our engagement with the Aboriginal and Torres Strait Islander Cultures and Histories Cross Curriculum Priority is being demonstrated throughout 2019 by Noongar artists and educators working in our school. Please see details below.

3. Cultural & Social Diversity:

Free Dress Day

Year 6 students organised a whole school fundraiser for special needs students in Sri Lanka. After the distress in Sri Lanka in recent times, this free dress day aimed to raise money to support a school, *Padeniya Sri Sunanda M.V.*, in Sri Lanka. This school is one of the few schools that caters for special needs children. Students from across our school, K-6, wore free dress on Friday 28 June in the following colours: red, orange, yellow & green – as these are the colours of the Sri Lankan flag.



4. Community Partnerships:

Mechanoid Robbie Interviews Students

Earlier this year two Year 6 students represented our school at a United Nations International Women's Day event. At this event they learnt about issues impacting upon women across the world, such as gender inequality. The students wanted to share their social justice message by presenting an item at a school assembly. So, Robbie the Mechanoid, programmed by our students, interviewed them about what they had learnt. This innovative item not only provided information about working towards justice for all girls and women but also entertained the audience, with Robbie eliciting some hearty laughs! Many thanks to the students and staff involved, as well as technical support from community CSIRO partners.



5. Economics & Built Environment:

A Shady Deal from our Year 6s!

New Shadehouse Installed

At the beginning of this year, the Year 6 River Rangers expressed concern about the state of our aging shadehouse, that had served us so well for many years. They decided to set a target to raise funds at their fete to provide a new shadehouse as their gift to the school. The new shadehouse was installed during the school holidays so the Year 6s could have some enjoyment working in the shadehouse before they left for high school.



Aboriginal Cultures and Histories

Looking to the Stars

Yirra Yaakin Performance

A new dimension to our Earth and Space Science studies was provided by the Yirra Yaakin Theatre Company performance of *Djinda Kaatijin*. The show told the story of the constellations from an Aboriginal perspective. Our children were highly engaged.



PALS Grant

Each year our school applies to be awarded a Partnerships Acceptance Learning and Sharing (PALS) grant. This grant aims to promote reconciliation and outstanding learning opportunities for aboriginal and non-aboriginal children. Coolbinia Primary has won many awards for our PALS projects.

In 2019 we were successful in being awarded this grant again, with a focus on 'student engagement and community participation'. The grant enabled the students to work with Esther Mc Dowell.

The Arts in our Bushland STEAM project

Esther Mc Dowell, our Artist-in-Residence for the bushland project, worked with five classes in Term 2 to create paintings of flora and fauna in our bushland. Here are some of the stunning art works created by our students:



NAIDOC Week Grant

The school was successful in being awarded a NAIDOC Week grant again this year. This enabled Neville Collard to be our esteemed guest and conduct the Welcome to Country and Smoking Ceremony at the official opening of the bush trail.



Australia's Engagement with Asia

Sustainable Development Goals

The key context for the Asian Cross Curriculum Priority has been based on the United Nation's Sustainable Development Goals (SDGs):

THE GLOBAL GOALS

For Sustainable Development



Coolbinia Primary School supports the achievement of these goals by having active membership with the One World Centre and the United Nations Association of Australia WA Global Schools Project, as well as the actions we take to address the various sustainability issues outlined in the SDGs.

Throughout 2018, and continuing into 2019, our school will work to contribute to:

- 🚩 Global Goal 13 (Climate action) through our work on our carbon emissions reduction plan.

Further actions based on other goals include for example:

- 🚩 Global Goal 3 (Good health and wellbeing) through participation in the Yolanda Frank Art Award and school based 'wellbeing' programs.
- 🚩 Global Goal 5 (Gender equality) by participating in the *Tomorrow's Citizen Leaders – Local to Global*, conference at Parliament House and taking subsequent action to address this student concern.
- 🚩 Global Goal 6 (Clean water and sanitation) by fundraising for wells overseas.
- 🚩 Global Goal 13 (Climate Action) see Sensational Bake Sale article below.
- 🚩 Global Goal 15 (Life on land) through our planting and care of wildlife programs.
- 🚩 Global Goal 16 (Peace, justice and strong institutions) by participating in NAIDOC Week, a Red Cross incursion called "In search of safety" and other fundraising projects.

Sensational Bake Sale

The Year 5 United Nations Climate Action group conducted a bake sale to raise funds to purchase solar lantern kits. These kits will be constructed by Year 5 students later this year and sent overseas to countries in need. The solar lanterns will replace polluting kerosene lanterns. This will not only reduce carbon emissions, but also improve the health of the people using the solar lanterns as they will be able to breathe clean air inside their homes.

As you can see from the photos, the children produced an awesome spread, from fruit kebabs, to cakes, biscuits and jam. The school community strongly supported this initiative as indicated by the queues to purchase. All items were sold and this raised \$242.70. Sincere thanks to the students involved in organising the stall and their parents for supporting this climate action project.



Sincerely
Dr Elaine Lewis
Cross Curriculum Leader
River Rangers Coordinator
Roots and Shoots Coordinator

Part time role: located in the Kwobadarn on Wednesdays

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22 August 2019

P.S. Please check out the *Sunday Times* article about our school biodiversity initiatives on the next page.

Sunday Times Recognition

Coolbinia Primary was requested to contribute to the *Sunday Times Urban Wildlife: Backyard Buddies* education section. Our half page article discussed students work in the frog habitat and butterfly gardens:

