



## Dorrroughby Environmental Education Centre

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## DORROUGHBY EEC TERM 4 2024

Please distribute this newsletter to all teachers interested in Sustainability Education/Outdoor Classrooms.



Jingelah Bloggerman! Greeting Colleagues,

Welcome to Term 4. Dorroughby EEC had a very busy and fun Term 3 with camps and day programs for students across the Northern Rivers. With the cost of living increasing more schools are taking advantage of our incursion programs to avoid bus costs to families. A sample of some K-6 incursions are in the body of this newsletter and DEEC are open to modifying further programs, K-12, to deliver at schools if possible, and if relevant to student needs. If you are interested in booking an incursion with us in Term 4 don't delay as the calendar is almost full. Bookings for 2025 are being taken. We are looking forward to another great term, supporting all our local schools.

DEEC has an updated COVID-19 Safety Plan and COVID-19 Risk Assessment to supply to visiting schools.

Program information is available from our website

[www.dorrroughby-e.schools@det.nsw.edu.au](http://www.dorrroughby-e.schools@det.nsw.edu.au)

or call our centre 66895286



Environment = Life



Students from Alstonville Highschool investigated adaptations and diversity of rocky shore species at Flat Rock pools at Ballina.

Our Birdwing Butterfly Vine has been visited this term by the endangered Richmond Birdwing Butterfly.



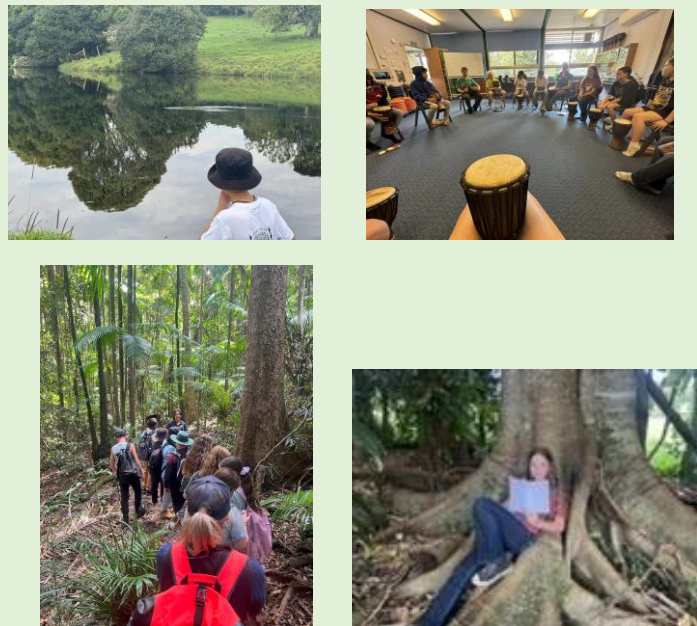
Goonellabah PS came out to DEEC for the day to learn local history



Iluka Primary school enjoyed a dairy visit to the neighbour's farm, investigating with our microscopes and going back in time on their three day camp.



Woodenbong Central School enjoyed a three day camp with mindfulness, drumming, insect studies and a day trip to Minyon.



## Sample of some incursions we can deliver at your school.

### Need for Shelter - Stage 1 (Bunya the School Forest Fairy)



Meet Bunya the School Forest Fairy as DEEC staff weave magic and wonder as we investigate animal shelters, take part in a treasure hunt, create bird nests and play games that highlight the plight of our native animals.

### Buzzy Bees - ES1-S3

Get busy with bees, with a focus on native Australian bees. Investigate bee activity and habitat outside; learn about

the fabulous diversity of bees, their biology and connections with humans; look at bee products and create a pollinator patch or bee hotel.



### GO Native! ES1-S2

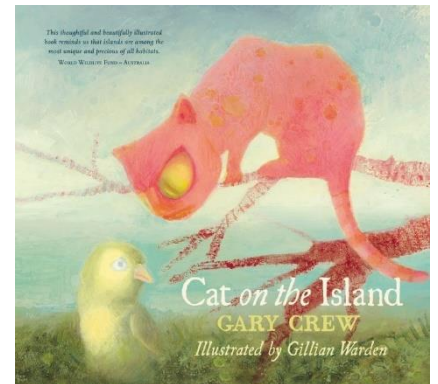
Students learn about native flora and fauna and our responsibilities as Custodians. Students investigate insects-their anatomy, habitat and survival techniques of insects using microscopes and live critters. They learn about botanical illustrations and create their own fauna artwork and learn about native animals and their threats. Older students can study our native **Invertebrates**.

**Soil Rocks Stage 2-3** Students learn about the origins, properties of, and functions of the soil beneath our feet. They learn methods of classifying soil types and take part in a scientific investigation focusing on erosion. They then create a soil crayon and use this and soil watercolours to create art.



**Cat on the Island K-6** Using as stimulus the book *Cat on the Island* (Author - Gary Crew; Illustrator - Gillian Warden) students explore human impact on the small NZ island. Students discuss

environmental literacy and the story from a conservation point of view. Students then decide on which key points of the book to dramatise, create a script based on the conservation messages of the book, create props, and present/film the play.



**Guardians of the Squirrel Glider** Students learn about the Squirrel Gliders - their habitats; diet; predators; prey; and how we can, and why we should be, guardians to all native animals. Students take part in a Biodiversity Audit of their school grounds, using camera on a stick to investigate potential hollows, and learn about nest boxes. Students then develop a student led action plan based on the learning that has taken place.



### **Environmental Workshop/ SEMP Building S3-5**

Students take part in an Environmental workshop - outlining the causes and effects of greenhouse gases on our Earth and the basis of Climate Change. Energy, Water, Biodiversity and Waste audits are conducted within the school grounds and then students create a sustainable house design or student led School Environmental Management Plan (SEMP) specific to the school's identified need for actions.



DEEC staff will come to your school and perform this incursion FREE of charge.

### **Maths in Nature S2-3**

Students take part in maths based activities in nature. Students learn about symmetry in nature - how much carbon can a tree store - teach fractions with natural objects - work out how tall a tree is using clinometers.

### **Mindfulness & Wellbeing in Nature K-6**



This program explores our connection to nature through mindfulness with guided activities that connect us to nature and regenerate our minds. Students will learn the processes of nature journaling, techniques for wellbeing, and how to be as calm, grounded and resilient as trees.



## Big Scrub Pocket Forest at your school

Interested in planting a Big Scrub Pocket Forest in your school? See flyer on last page.

## Looking for excursions in line with the Science 7-10 Syllabus?

The new Science 7-10 Syllabus covers content that explores Observing the Universe, Living Systems, Change, Energy and Environmental Sustainability. Dorrroughby EEC has the capacity to develop programs that can engage students in hands-on activities and offer opportunities to participate in a range of practical experiences. We would love to collaborate with you to create programs that encourage students to work scientifically towards the outcomes of; observing, questioning and predicting, planning investigations, conducting investigations, processing data and information, analysing data and information, problem-solving, and communicating. We could also support students to engage in depth studies if required. Please contact us to see how we can support your school to achieve the outcomes from the new content.

## Stage 6 Geography

DEEC has worked with local teaching staff and other EECs to bring the Stage 6 Geography programs in line with the new Stage 6 Geography Curriculum outcomes.

Please don't hesitate to contact the DEEC if you have an idea of how we can collaborate with you to support Education Delivery.

Our programs can be viewed via our website.

<https://dorrroughby-e.schools.nsw.gov.au/programs/primary-programs.html>

<https://dorrroughby-e.schools.nsw.gov.au/programs/secondary-programs.html>

*Team Dorrroughby*



Environment = Life



# BIG SCRUB POCKET FOREST

(Geography, History, Science, Maths, Indigenous perspectives, Sustainability)

**Aims:** To create intergenerational biodiversity hot spots within local schools that engage and foster students' knowledge and love of our endemic flora and fauna, through the planning, and creation of situationally appropriate Nyambir (Small) Muruwi (Forests). To create endangered Big Scrub pockets within our region. <https://www.youtube.com/watch?v=FA4L3dSurCk>

1. Interested schools **contact DEEC.**
2. **Preconstruction of your school's forest:**  
**Preparing- Half Day:**
  - **Site assessment** - Assessing the best site for your (Big Scrub Pocket Forest)
  - Consultation will include principal and possibly GA and other key stakeholders (1-2 hours)
  - Decide on suitable times for construction and lessons.
3. **DEEC purchase the materials:** Big Scrub species seedlings/soil enhancers/mulch etc.  
**Costings (include DEEC teachers for construction and lessons)**  
**\$7500\* - 10 m by 5 m - Approximately the size of 2 car parking spaces**  
**\$8500 - 20 m x 10 m - Approximately the size of 4 car parking spaces**  
**\*If site is very compacted, we may need to hire a backhoe/excavator to till the soil.**
4. **Implementing the creation/construction of your school's forest - 4 whole days**  
A cross curricula, scaffolding approach to the Pocket Forest process is desirable.  
**Day 1**
  - Session 1: Students first learn about the importance of forests; rotate through mini stations with experiments and info- humus/ decomposers, leaves softening rain, roots holding soil, transpiration/leaves in bag, enjoy sit spots and nature journaling.
  - Session 2: they can do abiotic measurements; temperature under trees vs in the sun, photosynthesis, and oxygen production experiment. Biodiversity survey...
  - Session 3: How do humans connect with forests and what are the impacts? Looking at Big Scrub deforestation, climate change, Aboriginal and Torres Straight Islanders connections, Indigenous forest peoples of the world.
  - Additionally: Plant propagation, save the rainforest banners, habitat games etc.  
**Day 2 and 3 (need to be consecutive):**
  - **Preparing the site-** (2 Dorroughby staff over 2 days). Can be done with students or without. Ground prep - removal of grass, tillage, addition of amendments, mulching and string line added at 1 m intervals, ready for planting.  
**Day 4:**  
Session 1: **Planting and mulching of forest** (2 DEEC staff -1 day) with DEEC staff and school community.  
Session 2: Discussion of ongoing care including access to the DEEC Pocket Forest Google Drive site. Detailed explanation of watering and care within the first year. Discuss how to conduct regular biodiversity surveys, contribute to ongoing research, interact with the forest for food, medicine, fibre. Signage for some bush tucker species.
5. **Follow up morning** - 6 months after planting. DEEC staff return, assess, and run a few activities.

