SCHOOL'S ENVIRONMENTAL EDUCATION PLAN 2021

CAMPBELLTOWN

Campbelltown is fortunate to boast a diverse and wondrous array of environmental features and assets. In recognition of these unique environmental values, we offer a range of environmental education programs to promote sustainability, biodiversity and awareness among the local community and within schools.

We have developed a number of environmentally focused excursions, programs and workshops for 2021, and this Environmental Education Plan (EEP) aims to help schools participate in these activities. The plan allows teachers to integrate these activities into their work programming and incorporate sustainability throughout classroom learning. We will provide supporting educational and promotional material to participating schools where required.

The activities and workshops in the EEP are designed so that they can be incorporated into the NSW Syllabus for the Australian Curriculum for each primary school stage, encourage students to engage in critical thinking, project based learning and enhance their stewardship of the local community. The plan identifies what curriculum outcomes each environmental education program is linked, to assist teachers in programming their teaching year, enabling schools to plan for the delivery of syllabus content and improve student learning outcomes.

The program schedule on page 32 shows when each of the activities are scheduled to occur throughout the year, so you can start to plan now and book workshops where required. We also provide additional resources for many of the activities outlined in the plan. Schools can find and download these resources along with an electronic copy of this plan, on our website: campbelltown.nsw.gov.au/environmentaleducation

If you have any questions or feedback, please contact our Environmental Officer on 4645 4283 or open.space@campbelltown.nsw.gov.au

You can also like our Facebook page to keep up to date on news and events at facebook.com/campbelltowncity

Kevin Lynch
Director City Delivery

STORMWATER EDUCATION

Waterwise Waterways: Drain Artwork Program

The Waterwise Waterways Drain Artwork Program encourages schools to explore and learn about their own stormwater catchment, in their school and surrounds. The program includes the following components:

- Students will learn what a drain is for and how it connects to the waterways and environment through an interactive stormwater catchment model.
- Students will identify the purpose of the stormwater system and common elements that make up that system through an interactive stormwater catchment model.
- Students will explore their school environment to identify stormwater drain locations and possible pollutant sources.
- Students will discuss the problems common pollutants cause in the environment.
- Students will identify actions to improve their local catchment.
- Students will design a drain artwork to communicate to local residents the need to keep our stormwater drains free of pollution.

Please note: The timing for this workshop will depend on the availability of the interactive catchment model. If this is something your school would be interested in participating in, please notify the Environmental Education officer as soon as possible.

How to get involved

- Download Waterwise Waterways: Drain Artwork Activity booklet from our website.
- Contact us to book a Waterwise Waterways workshop.

Resources we provide

- Waterwise Waterways: Drain artwork activity booklet.
- Interactive water catchment model.

Curriculum Outcome Links

Early Stage 1				
Science	Ste-2VA	Ste-4WS		
PDHPE	INES1.3	V3, V4, V5		
Visual Arts	VAES1.1	VAES1.4		
Stage 1				
Science	ST1-1VA	ST1-9ES	ST1-14BE	
PDHPE	INS 1.3	ALS 1.6	SLS 1.13	V3, V4, V5
Geography	GE1-2			
Visual Arts	VAS 1.1	VAS 1.2	VAS 1.4	
Stage 2				
Science	ST2-2VA	ST2-11LW	ST2-14BE	
PDHPE	DMS 2.2	INS 2.3	SLS 2.13	V3, V4, V5
Geography	GE2-1	GE2-2	GE2-3	
Visual Arts	VAS 2.2	VAS 2.3	VAS 2.4	
Stage 3				
Science	ST3-2VA	ST3-14BE		
PDHPE	INS 3.3	SLS 3.13		
Geography	GE3-2			
Visual Arts	VAS 3.1	VAS 3.2	VAS 3.3	VAS 3.4

For more information visit campbelltown.nsw.gov.au and search Waterwise Waterways

EARTH HOUR

Schools Day Friday 26 March

On 31 March 2007, the World Wildlife Fund (WWF) Australia inspired more than 2.2 million individuals and 2,000 businesses to turn their lights out for one hour in the first Earth Hour event kicking off the world's largest voluntary action for the environment. Earth Hour highlights the effect of energy consumption on the health of our planet and how we can make a difference by becoming aware of the energy we use and how we can use less while still having everything we need in life.

How to get involved

By undertaking simple actions like turning off electrical supplies at the power point or flicking off the light when you leave the room, schools can save not only energy, but money.

Teachers can download free, curriculum-aligned lessons to teach students about environmental sustainability. You can also get students involved in Earth Hour Solar Lights Program to learn invaluable lessons about renewable energy, and get some hands-on experience in assembling solar lights for school children living in remote areas of Papua New Guinea. Inspire the future generation on Earth Hour schools day.

- To show your support register your school for Earth Hour schools day.
- Spread the word with posters, social media kits and more included in the online package.
- Get students involved with the Earth Hour Solar Lights Program.
- Download the free Earth Hour curriculum toolkit to create a range of classroom-ready resources to enhance student learning and engagement.

Resources we provide

- Resources on climate change, biodiversity and the environment aligned with the Australian Curriculum.

Earth Hour Schools Day is on Friday 27 March, while Earth Hour will be on Saturday 28 March at 8.30pm local time.

Curriculum Outcome Links

Early Stage 1					
Science	STe-1VA	STe-2VA	STe-3VA	STe-4WS	STe-7NE STe-8NE
English	ENe-10C				
Visual Arts	VAES1.1				
Stage 1					
Science	ST1-2VA	ST1-4WS	ST2-5WT	ST1-9ES	ST1-12MW
English	EN1-10C				
Visual Arts	VAS 1.1				
Geography	GE1-1	GE1-2			
Stage 2					
Science	ST2-1VA	ST2-2VA	ST2-3VA	ST2-4WS	ST2-5WT ST2-11LW
English	EN2-1A	EN2-3A	EN2-7B		
Visual Arts	VAS 2.4				
Geography	GE2-1	GE2-2	GE2-3		
Stage 3					
Science	ST3-1VA	ST3-2VA	ST2-4WS	ST2-3WT	
English	EN3-1A	EN3-7C			
Visual Arts	VA 3.1				
Geography	GE3-2	GE3-3			

To download the activities above, visit earthhour.org.au/Get-Involved/schools

60+
EARTH
HOUR

NATIONAL SCHOOL TREE PLANTING DAY

Friday 30 July

National Tree Planting Day is more than just planting trees. It's about inspiring our communities to get into nature and grow, whether it's planting at your local park, growing vegies in your backyard or school, or greening your workspace. We hold a National Tree Planting Day event to encourage the local community and families to plant trees and connect with their local environment, and we also encourage schools to host their own event.

How to get involved

National Tree Planting Day is an opportunity to get your school involved in planting trees, improving the natural environment and the biodiversity of school grounds.

We provide and deliver up to 50 native tree seedlings to participating schools. If your school has been planning or wanting to do a tree planting session for a while, but has either not had the time or resources to make it happen, this day is a great opportunity.

Schools can register their tree planting event on Planet Ark's website, as well as accessing Planet Ark's Schools Activity Guide and Schools Getting Started Guide.

Resources we provide

- We will provide up to 50 native seedlings for your school's planting day.

More information
treeday.planetark.org/schools/index.cfm

Curriculum Outcome Links

Early Stage 1				
Science	STe-2VA	STe-4WS	STE-8NE	
PDHPE	INES1.3	PHES1.12	PHES1.13	V3, V4
Stage 1				
Science	ST1-2VA	ST1-9ES	ST1-12MV	ST0-1VA
PDHPE	INS 1.3	ALS 1.6	PHS 1.12	V3, V4
Geography	GE1.2			
Stage 2				
Science	ST2-1VA	ST2-2VA	ST2-11LW	ST2-13MW
PDHPE	INS 2.3	PHS 2.12	V3, V4	
Geography	GE2-2	GE2-3		
Stage 3				
Science	ST3-1VA	ST3-2VA	ST3-11LW	
PDHPE	INS 3.3	PHS 3.12	V3, V4	
Geography	GE3-2	GE3-3		

THREATENED SPECIES ART AND CREATIVE WRITING COMPETITION

Late July to early September

The Threatened Species Art and Writing Competition (TSAWC) is a regional environmental education program, involving Campbelltown City, Camden and Wollondilly councils. The competition targets children aged 5 to 12, encouraging them to learn about a local threatened plant or animal and represent it in a piece of artwork or creative writing piece with the purpose of celebrating Biodiversity Month (September) and Threatened Species Day on 7 September. There are prizes to be won for both artworks and creative writing pieces and individuals for schools. The artwork travels across the Macarthur region as part of a regional tour.

How to get involved

The Threatened Species Art and Writing Competition is a great chance for schools to run an environmental/art creative writing classroom activity that allows students to create artworks that can be combined with other class artworks and entered under the banner of the school.

Check out our website to download a copy of the Threatened Species Art and Writing Competition Storybook and the 2021 Threatened Species Artwork calendar.

Resources we provide

- Teacher Resource Kit, including:
  - Rules of the competition
  - Lesson material
  - School entry form closer to the date of the competition
- Promotional posters including information on local threatened species
- Prizes for both individuals and schools
- Display of artwork in libraries across the Macarthur region

These resources will also be made available on our website.

For more information visit campbelltown.nsw.gov.au/TSAC

Curriculum Outcome Links

Early Stage 1				
Science	STE-2VA	STE-4WS	STE-8NE	
Visual Arts	VAES 1.1	VAES 1.2	VAES 1.3	VAES 1.4
Geography	GE1.1	GE1.2		
Stage 1				
Science	ST1.2VA	ST1-9ES	ST1-11LW	ST1-14BE
Visual Arts	VAS 1.1	VAS 1.2	VAS 1.4	
Geography	GE1.1	GE1.2		
Stage 2				
Science	ST2-2VA	ST2-8ES	ST2-11LW	
Visual Arts	VAS 2.1	VAS 2.4		
Geography	GE2.1	GE2.2	GE2.3	
Stage 3				
Science	ST3-2VA	ST3-10LW	ST3-11LW	
Visual Arts	VAS 3.1	VAS 3.2	VAS 3.3	VAS 3.4
Geography	GE3.1	GE3.2	GE3.3	
English	EN3-1A	EN3-2A	EN3-7C	EN3-8D

MACARTHUR NATURE PHOTOGRAPHY COMPETITION

September to October

Launches on Threatened Species Day and runs through the September-October School holiday period.

The Macarthur Nature Photography competition is a high profile regional environmental education initiative, generating significant interest from residents and schools of the Macarthur region.

The competition aims to engage students and the community with their local environment, raise awareness and enhance appreciation of Macarthur's unique natural surrounds, and in turn foster residents' increased stewardship of their natural heritage. The competition launches at Riverfest each year and runs through the September/October school holiday period. However, participants can take photos at any time throughout the year. The competition culminates in an award night in October/November where prizes are awarded to category winners.

The competition is fantastic for creative students, as well as students who take an appreciation in the natural environment, as it allows them to showcase their talent and passion in photography and serves as an opportunity for students to gain a higher understanding of the environment.

The competition now allows for students to not only win themselves a prize, but to win their school a prize as well.

By being a part of the Macarthur Nature Photography Competition, schools can incorporate the cross-curricula priority of sustainability into their classroom learning.

Students can develop positive and balanced attitudes towards the environment, becoming equipped with the skills required for active and informed participation in managing the environment.

How to get involved

Students are invited to take photos across a number of themes of the competition:

- Landscapes of Macarthur
- Waterways
- Native Flora
- Native Fauna
- Experience Nature

Each students can enter up to five images in either one of these themes, or split them up amongst the themes.

Images can be entered online or printed and mounted by the students and handed to us.

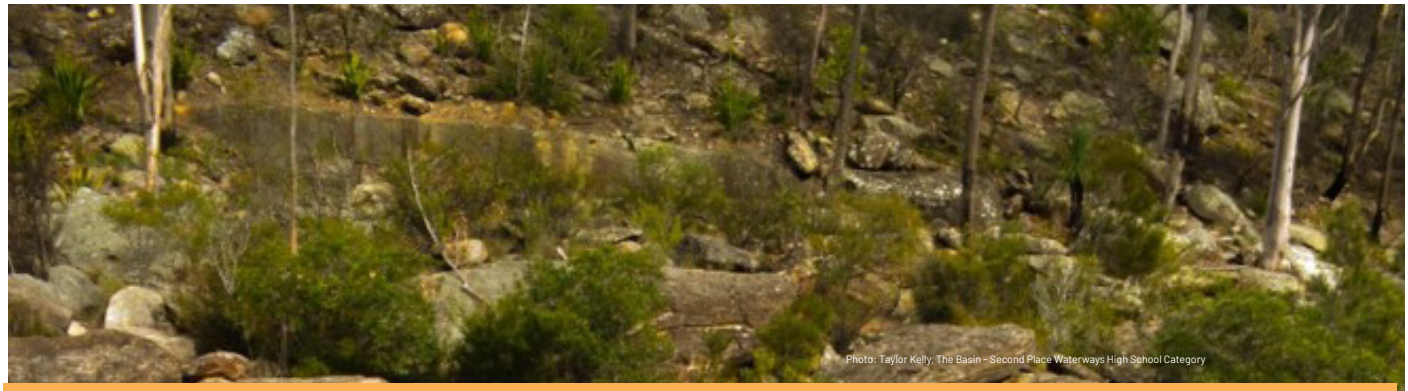
Resources we provide

- Teacher resource kit
- Promotional posters
- Awards night, including professional display of entries
- Award prizes to be handed out at the award night
- Winning images displayed on our website

More information
campbelltown.nsw.gov.au/MNPC

Curriculum Outcome Links

Early Stage 1					
Science	STE-2VA	STE-4WS	STE-7NE	STE-8NR	
Visual Arts	VAES 1.2	VAES 1.4			
PDHPE	SCES 1.13	V4			
Geography	GE1.1	GE1.2			
Stage 1					
Science	ST1-1VA	ST1-2VA	ST1-9ES	ST1-10LW	ST1-11LW
Visual Arts	VAS 1.1	VAS 1.2	VAS 1.4		
PDHPE	ALS 1.6	V4			
Geography	GE1.1	GE1.2			
Stage 2					
HSIE	CCS 2.2	ENS 2.5	ENS 2.6		
Science	ST2-1VA	ST2-2VA	ST2-8ES	ST2-11LW	
Visual Arts	VAS 2.1	VAS 2.2	VAS 2.3	VAS 2.4	
PDHPE	V4				
Geography	GE2.1				
Stage 3					
Science	ST3-1VA	ST3-2VA	ST3-11LW		
Visual Arts	VAS 3.2	VAS 3.3	VAS 3.4		
PDHPE	V4				
Geography	GE2.1	GE2.2	GE2.3		



WILD ABOUT WILDLIFE

Wild About Wildlife is an environmental education program that aims to increase students' awareness of threats to wildlife habitat and populations, in addition to the measures required to ensure long term sustainable management of these existing populations.

The workshop aims to engage students with their local environment, raise awareness, enhance appreciation and increase stewardship of Campbelltown's wildlife.

This program can be adapted to a range of different native species.

The program includes the following components for students to:

- Research the history of their chosen wildlife in Campbelltown.
- Identify threats to wildlife, including human and natural threats.
- Explore their local environment to identify wildlife habitat and food sources.
- Identify actions to help look after our wildlife.
- Have the opportunity to monitor wildlife populations with access to cameras either on school grounds or at a local reserve.
- Explore the visions, aims and objectives of the Koala Plan of Management.
- Design their own information brochure aimed at visitors to our Local Government Area to communicate the need to keep our wildlife safe.

How to get involved

Contact us to book your free Wild for Wildlife Excursion.

Resources we provide

- A free incursion/excursion
- Access to cameras to monitor wildlife populations

For more information contact our Environmental Education Officer
open.space@campbelltown.nsw.gov.au
02 4645 4283

Curriculum Outcome Links

Early Stage 1

Mathematics	MAe-1WM	MAe-2NA	Mae-3WM		
PDHPE	INES 1.3	V3, V4, V5			
Science	STe-1VA	STe-2VA	STe-3VA	STe-4WS	STe-5WT
Geography	Gee-2				

Stage 1

Mathematics	MA1-2VM	MA1-3WM			
PDHPE	INS 1.3	ALS 1.6	SLS 1.13	V3, V4, V5	
Science	ST1-1VA	ST1-2VA	ST1-3VA	ST1-4WS	ST2-5WT
Geography	GE1-2	GE1-3			

Stage 2

Mathematics	MA2-2WM				
PDHPE	DMS 2.2	INS 2.3	SLS 2.13	V3, V4, V5	
Science	ST2-1VA	ST2-2VA	ST2-3VA	ST2-4WS	ST2-5WT
Geography	GE2-3	GE2-4			

Stage 3

Mathematics	MA3-3WM				
PDHPE	INS 3.3	SLS 3.13			
Science	ST3-1VA	ST3-2VA	ST3-3VA	ST3-4WS	ST3-5WT
Geography	GE3-3	GE3-4			

MENANGLE FOX CAMPAIGN

Foxes have contributed to the decline and extinction of a number of native animals in Australia and the cost to managers of livestock and wildlife is estimated at $227 million annually. The Menangle Fox Campaign's mission is to reduce the impacts that feral foxes have on our livestock and wildlife and teach the wider community (including schools) the best way to reduce fox numbers from rising.

Under this campaign, the Menangle Fox Control Group (MFCG) has been formed to develop the best approach to managing foxes. The MFCG is made up of the Greater Sydney Local Land Services (GSLLS) in partnership with Campbelltown City, the Barragal Landcare Group, the NSW Department of Primary Industries and Camden and Wollondilly Shire Councils.

The MFCG want to get as many landholders (including schools) to participate in the Menangle Fox Campaign as possible. Groups participating in this program are encouraged to commit to the program for five years. This ongoing approach aims to have the largest impact on the fox population.

To further your involvement with this campaign, Invasive Animals Cooperative Research Centre along with a range of other stakeholders, has developed Pest Tales, an education platform specifically for primary teachers with a complete and up to date resource which highlights pest animal species in Australia, their impact and current ways of managing the damage they inflict on the environment, economy and people. A list of lesson plans, activities and interactive scenarios present teachers with strong links to curriculum profiles.

How to get involved
Your school has a large area of land that foxes may move through to get from one bushland area to the next. Schools can therefore play a big role in helping us understand where and how many foxes are moving through our community.

Take part in the Menangle Fox Campaign citizen science program and your school could:

Be the eyes of the community
Borrow remote cameras from the MFCG to see and report what animals are roaming around your school yard. You will receive training on how to set up and use the equipment.

Be the ears of the community
Listen to wildlife recordings to learn what native animals you have in your area and how they are in danger from the fox.

Be the nose of the community
Your school will be supplied with a number of fox scat collection kits. By smelling fox scats (poo) smell, we can tell what the foxes are eating in our area.

The scats that you collect in your school will be collected and sent off to Western Sydney University to be analysed. The results will be sent back to you, so you can see what the fox is eating. The data you collect will help the Menangle Fox Care Group develop the best approach to managing foxes in our area.

Curriculum Outcome Links

Early Stage 1

Mathematics	MAe-1WM	MAe-2NA	Mae-3WM		
PDHPE	INES 1.3	V3, V4, V5			
Science	STe-1VA	STe-2VA	STe-3VA	STe-4WS	STe-5WT
Geography	Gee-2				

Stage 1

Mathematics	MA1-2VM	MA1-3WM			
PDHPE	INS 1.3	ALS 1.6	SLS 1.13	V3, V4, V5	
Science	ST1-1VA	ST1-2VA	ST1-3VA	ST1-4WS	ST2-5WT
Geography	GE1-2	GE1-3			

Stage 2

Mathematics	MA2-2WM				
PDHPE	DMS 2.2	INS 2.3	SLS 2.13	V3, V4, V5	
Science	ST2-1VA	ST2-2VA	ST2-3VA	ST2-4WS	ST2-5WT
Geography	GE2-3	GE2-4			

Stage 3

Mathematics	MA3-3WM				
PDHPE	INS 3.3	SLS 3.13			
Science	ST3-1VA	ST3-2VA	ST3-3VA	ST3-4WS	ST3-5WT
Geography	GE3-3	GE3-4			

Resources we provide

- School visit to help set-up technical equipment such as remote camera.
- Intermediary between school and the Greater Sydney Local Land Services.
- Assist the school in analysing data collected through the program.

If you would like to participate, contact our Environmental Education Officer
open.space@campbelltown.nsw.gov.au
02 4645 4283.

For more information visit campbelltown.nsw.gov.au and search invasive pests or get started on the curriculum linked lesson plans, activities and interactive scenarios pestales.org.au

HOLLOWS AS HOMES

Hollows as Homes is the first large-scale citizen science project of its kind. Its purpose is to better understand and demonstrate the importance of hollows as habitat for wildlife within our cities and rural areas across the Sydney region.

Many of our species rely on tree hollows for habitat, including at least 46 mammals, 81 birds, 31 reptiles and 16 frogs. So important are tree hollows to our native wildlife, that their loss has been classed as a key threatening process to biodiversity in NSW.

The Hollows as Homes team need your help to identify as many hollows or artificial nest boxes as possible that are being used by our wildlife throughout our urban and agricultural areas.

Your school potentially houses a number of trees that have hollows, or you may have some artificial nest boxes that have been installed onto your trees. Together with our staff, we want to find these hollows and/or nest boxes in your school and monitor them to understand what, if any, native animals are using them and how they are using them.

The Hollows as Homes project is coordinated by the Royal Botanic Garden, University of Sydney, and the Australian Museum, with Campbelltown City Council one of 30 councils getting behind the project and encouraging its community to take part.

How to get involved

To get started in the Hollows as Homes program, it is as simple as getting a committed team of eyes and ears out in the school yard to locate any trees that have hollows or nest boxes.

If you do locate a tree with a hollow or nest boxes, the next step is to get some recording equipment out and start monitoring the tree hollow over a period of time.

The equipment that you need is:

- Compass (If you have a smart phone, a compass is available through the app store)
- Tailors tape (flexible measuring tape or string)
- Binoculars (if possible),
- Calculator
- A piece of square paper
- Initial observations sheet.

You will record this data straight into the Hollows as Homes website, which will then be used to build a picture of the location, type and number of hollows and nest boxes available in your local area, as well as the wildlife using them.

Our Open Space team will be available to visit your school and provide a lesson to teachers and students on how to record the relevant information and how to enter the data straight into the Hollows as Homes website.

The information you collect will help us and other relevant organisations understand where these hollow bearing trees are and therefore better protect them. It will also give us a better understanding of how our native animals are using artificial nest boxes.

Curriculum Outcome Links

Early Stage 1

Mathematics	MAe-1WM	Mae-2NA	Mae-3WM		
PDHPE	INES1.3	V3, V4, V5			
Science	STe-1VA	STe-2VA	STe-3VA	STe-4VA	STe-5VA
Geography	GEe-2				

Stage 1

Mathematics	MA1-2VM	MA1-3WM			
PDHPE	INS 1.3	ALS 1.6	SLS 1.13	V3, V4, V5	
Science	ST1-1VA	ST1-2VA	ST1-3VA	ST1-4WS	ST1-5WT
Geography	GE1-2	GE1-3			

Stage 2

Mathematics	MA2-2WM				
PDHPE	DMS 2.2	INS 2.3	SLS 2.13	V3, V4, V5	
Science	ST2-1VA	ST2-2VA	ST2-3VA	ST2-4WS	ST2-5WT
Geography	GE2-3	GE2-4			

Stage 3

Mathematics	MA3-3WM				
PDHPE	INS 3.3	SLS 3.13			
Science	ST3-1VA	ST3-2VA	ST3-3VA	ST3-4WS	ST3-5WT
Geography	GE3-3	GE3-4			

Resources we provide

- School visit to advise on how to record and enter data into the Hollow as Homes website.
- Intermediary between school and external organisations, such as the Royal Botanic Gardens.
- Assist the school in analysing data collected through the program.

Rbgsyd.nsw.gov.au/Hollows-as-Homes

For more information contact our Environmental Education Officer
open.space@campbelltown.ns.gov.au
02 4645 4283.

AUSTRALIAN MUSEUM

BUSH EXPLORERS

Bush Explorers is an environmental education program covering biodiversity, threatened species, flora and fauna that care home to the Campbelltown area and issues facing our local bushlands.

The workshop aims to engage students with their local bushland reserve or park. Learning about the vegetation onsite, getting hands-on, engaging them with useful information and practical ideas that will help them to facilitate positive change in Campbelltown's natural areas.

The program includes the following components for students to:

- Research the history of local native bushland in Campbelltown.
- Identify threats to native vegetation in their local area.
- Explore a local reserve and discover flora and fauna found within the area.
- Identify sensory features of touch, sight, sounds and smells of different flora and fauna along walking tracks in local reserves.
- Develop fun facts about flora and fauna that are found within the area.
- Create a hand drawn map of the walking tracks within the area
- Design their own educational guide aimed at visitors to their local reserve promote Campbelltown's natural areas as a place of intrinsic natural and cultural importance to tourists and the Campbelltown community.

How to get involved

Contact us to book your free Bush Explorers Workshop.

Resources we provide

- Free workshop with outcomes linked to the curriculum.
- Site visit to a local reserve with our Environmental Education Officer.

For more information contact our Environmental Education Officer
open.space@campbelltown.nsw.gov.au
02 4645 4283.

Curriculum Outcome Links

Early Stage 1

Mathematics	MAe-1WM	MAe-2NA	Mae-3WM		
PDHPE	INES 1.3	V3, V4, V5			
Science	STe-1VA	STe-2VA	STe-3VA	STe-4WS	STe-5WT
Geography	Gee-2				

Stage 1

Mathematics	MA1-2VM	MA1-3WM			
PDHPE	INS 1.3	ALS 1.6	SLS 1.13	V3, V4, V5	
Science	ST1-1VA	ST1-2VA	ST1-3VA	ST1-4WS	ST2-5WT
Geography	GE1-2	GE1-3			

Stage 2

Mathematics	MA2-2WM				
PDHPE	DMS 2.2	INS 2.3	SLS 2.13	V3, V4, V5	
Science	ST2-1VA	ST2-2VA	ST2-3VA	ST2-4WS	ST2-5WT
Geography	GE2-3	GE2-4			

Stage 3

Mathematics	MA3-3WM				
PDHPE	INS 3.3	SLS 3.13			
Science	ST3-1VA	ST3-2VA	ST3-3VA	ST3-4WS	ST3-5WT
Geography	GE3-3	GE3-4			

POLLINATOR WEEK

8-15 November

Australian Pollinator Week acknowledges our important and unique insect pollinators during Spring. It is a designated week when communities, businesses and organisations can come together to raise awareness of the importance of pollinators and support their needs.

Unlike animals, plants can't move around in search of a mate, to reproduce. Therefore, plants need pollinators to transfer the male sex cells (pollen) to the female reproductive parts of flowers. This process is called pollination, and it leads to fertilization. Good fertilisation helps plants develop seeds and fruit that feed countless animals in the world, including us

Pollinators provide essential ecosystem services in the natural landscapes as well as within agricultural/horticultural and urban environments.

The ecosystem services provided by pollinators extend well beyond food provisioning. Because pollination drives biodiversity, pollinators also contribute to:

Supporting Services
- Nutrient recycling
- Soil formation
- Primary production

Provisioning services
- Food
- Fresh water
- Wood and fibre

Regulating Services
- Climate regulation
- Flood regulation
- Disease regulation
- Water purification

Cultural Services
- Aesthetic
- Spiritual
- Educational
- Recreational

To help you to run your own Australian Pollinator Week activities, various resources and activities can be downloaded for free. Visit australianpollinatorweek.org.au/about/resources

Australian Pollinator Week.

AUSTRALIAN MUSEUM FROG ID PROJECT

The Australian Museum and Bunnings have partnered together on the National Frog Pond Building Project. Together we want to engage schools across Australia by assisting them to build a 'frog-friendly' pond to help Australia's frog populations thrive.

Students can get involved by learning about their local biodiversity, monitoring the frog pond and recording frog calls using the FrogID app. The project is also supported by educational materials and digital resources to highlight the importance of frogs in the environment. Bunnings can help your school create a frog-friendly pond!

Discover more about the FrogID citizen science project and learn how you can get involved. Visit www.frogid.net.au/schools

Downloadable classroom resources include:

- Australian Frogs
- What is a Frog?
- From Habitats and Adaptation
- How to make a Frog Pond
- Introduction to Habitats
- Activities and worksheets

Australia has over 240 known species of frog, almost all of which are found nowhere else in the world. Some species are flourishing, like the Striped Marsh Frog. But others have declined dramatically since the 1980s, and four have become extinct.

FrogID is a national citizen science project that is helping us learn more about what is happening to Australia's frogs. All around the country, people are recording frog calls with nothing more than a smartphone.

With the data obtained through FrogID we are able to track the Cane Toad and identify where frogs are thriving and where they aren't. And by matching calls to weather and habitat, we are learning more about how different frog species are responding to a changing environment.

This information could be crucial in saving Australia's frogs.

For more information contact our Environmental Education Officer
open.space@campbelltown.nsw.gov.au
02 4645 4283.

FrogID

POWERFUL OWL PROJECT

We invite you to meet your owl neighbours.

Find out about our elusive residents the endangered powerful owls, and our work to create a safe home for them in Campbelltown.

Powerful by name, and powerful by nature - the powerful owl Ninox strenua is Australia's largest owl with an impressive wingspan of up to 140cm. It occurs from eastern and south-eastern Australia (east of the Great Dividing Range), from south-eastern Queensland to South Australia, mostly in large patches of forest. Despite being classified as threatened throughout its range, the powerful owl can and does, survive within cities. These owls are found in our suburbs, particularly where bushland remnants are close by. They may even be using your school or backyard.

The urban landscape is a hard place to live though. Powerful owls need big, old trees for nesting and these are in short supply. They usually rest (roost) during the day among dense leafy foliage of trees and shrubs and so protecting this habitat is crucial. These are also top order predators, so protecting their food sources – possums, birds, flying foxes and even Christmas beetles is important. And of course the urban landscape is a risky place. We know that car and glass strikes are the leading causes of mortality for these birds (with estimates in Sydney of 12% of the population dying each year this way).

About the Project

The Powerful Owl Project aims to:

- Inspire the general public, and educate them about owls, and their habitat requirements.
- Train citizen scientists to conduct surveys to find owls and track breeding success.
- Monitor the distribution and abundance of owls and uncover why owls are present in some areas and absent in others.
- Uncover habitat characteristics associated with greater breeding success in Powerful Owl.
- Develop a species distribution models of sufficient accuracy to be used as planning layers by state and council.
- Identify site-specific management recommendations for Powerful Owls.
- Understand the impact of threats such as vehicle strike, or electrocution.
- Inform, and support land management for the conservation of Powerful Owl.

Have you seen or heard a Powerful Owl?

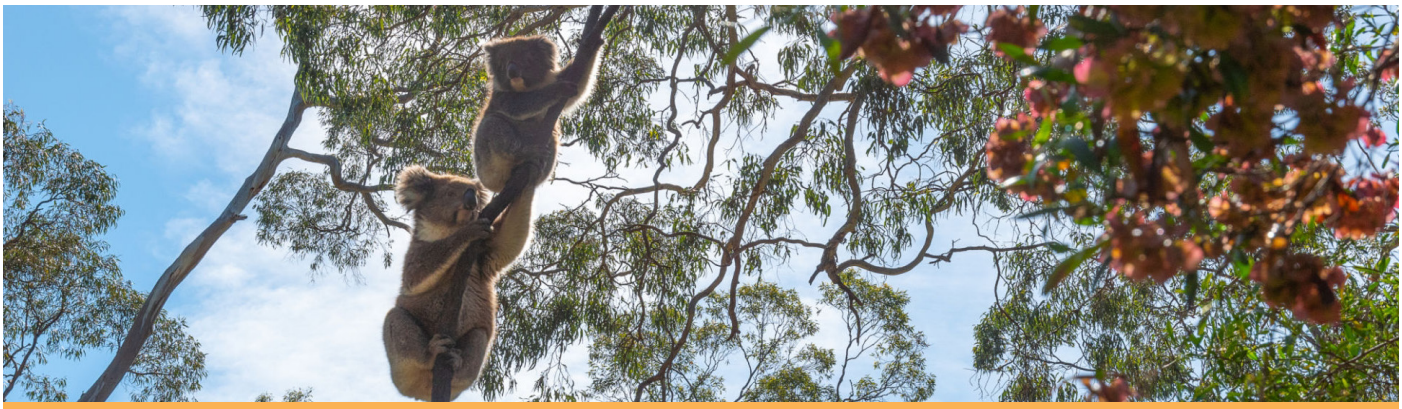
Report your sightings on BirdData. It is free to use, or you can download the free app on your android or apple device.

To get started visit birdata.birdlife.org.au/get-started

Download the Powerful Owl Education Kit
birdlife.org.au/projects/powerful-owl-project

For more information contact our Environmental Education Officer
open.space@campbelltown.nsw.gov.au
02 4645 4283.

birdlife
AUSTRALIA



KOALATOWN CERTIFIED SCHOOLS PROGRAM

Registration is now open for our 2021 Koalatown Certified Schools Program

What is Koalatown?
Koalatown aims to raise awareness and empower the community to actively support the conservation of koalas at their homes and in their neighbourhoods.

Koalatown connects with local schools, businesses, residents, expert scientists, land managers and wildlife carers and targets key issues relating to koala health such as habitat conservation, disease prevention, vehicle strikes and dog attacks.

Tackling these issues and protecting our koalas is a big job and we cannot do it alone!

For more information about Koalatown check out our webpage

What is involved?
Koala Kids s is a free education program targeted at primary and high schools in Campbelltown. Students explore koala habitat and discover the current threats and conservation measures they can take to help make Campbelltown and their school a Koala Friendly Community.

Schools that sign up for the Koalatown Certified Schools Program receive:

- A free koala conservation incursion/excursion with our Environmental Education Officer.
- Curriculum linked lesson plans relating to the koala kids program.
- Access to koala food trees to plant to enhance habitat on their school grounds or tree planting opportunities at key reserves to enhance koala habitat.
- Once completed, schools will receive a Koalatown certified school sign.

Registration
Email the below information to our Environmental Education Officer.
openspace@campbelltown.nsw.gov.au

- School name
- Key contact teacher name
- Key contact teacher number
- Approximate number of trees are you able to accommodate on your school grounds?
- Are you interested in tree planting opportunities at reserves?
- Preferred term/week you would like to book incursion/excursion
- What stage would this program be delivered to
- Approximate number of students

More information
Call us on 02 4645 4283.

We look forward to working with the next generation to help us take meaningful actions that will protect and conserve koalas.

Curriculum Outcome Links

Early Stage 1				
Science	STE-2VA	STE-4WS	STE-8NE	
Visual Arts	VAES 1.1	VAES 1.2	VAES 1.3	VAES 1.4
Geography	GE1.1	GE1.2		
Stage 1				
Science	ST1.2VA	ST1-9ES	ST1-11LW	ST1-14BE
Visual Arts	VAS 1.1	VAS 1.2	VAS 1.4	
Geography	GE1.1	GE1.2		
Stage 2				
Science	ST2-2VA	ST2-8ES	ST2-11LW	
Visual Arts	VAS 2.1	VAS 2.4		
Geography	GE2.1	GE2.2	GE2.3	
Stage 3				
Science	ST3-2VA	ST3-10LW	ST3-11LW	
Visual Arts	VAS 3.1	VAS 3.2	VAS 3.3	VAS 3.4
Geography	GE3.1	GE3.2	GE3.3	
English	EN3-1A	EN3-2A	EN3-7C	EN3-8D

STUDENT RANGERS

Our Student Rangers program is a great way to get school groups outdoors experiencing our natural wonders. You will be shown some of the most exciting parts of Campbelltown's reserves and will be able to learn about our unique plants, quirky animals and special historical sites. Students get to experience habitat surveys, water quality testing, tree planting and collect important citizen science data that contributes to protecting our threatened species.

Join us for a fun filled adventure as we discover Cumberland Plain Woodlands and Shale Sandstone Transition Forest vegetation at local reserves. We're proud knowing that the future of Campbelltown's natural environment is in such good hands.

Themes

Waterways Warriors
Learn what keeps our waterways healthy, help us monitor the water quality and discover what aquatic bugs and insects live in our waterways.

Sensory Secrets
Join us for a sensory adventure as we use our sight, hearing, taste, touch and smell to search for local plants and animals that call Campbelltown's bushlands home.

Insect Investigations
Head outdoors with us and explore the world of insects with a bug scavenger hunt throughout reserves along the Georges River in Campbelltown.

Koala Kids
Students explore koala habitat, and discover the current threats and conservation measures they can take to help make Campbelltown and their school a Koala Friendly Community.

Platypus Pals
Explore local waterways and learn about the elusive platypus, threats they face in the Georges River and how we can protect them.

Habitats and Hollows
Let's discover what animals live where, the politics of secret animal apartments, and learn the many different habitats in Campbelltown.

Locations
- Simmos Beach, Macquarie Fields
- Ingleburn Reserve, Ingleburn
- Smith's Creek, Ruse
- Frere's Crossing, Kentlyn
- Keith Longhurst Reserve, Kentlyn
- Noorumba Reserve, Rosemeadow

Resources we provide
- Free site visit to a local reserve with our Environmental Education Officer.
- Risk ID, worksheets and all equipment.

For more information contact our Environmental Education Officer
open.space@campbelltown.nsw.gov.au
02 4645 4283

Curriculum Outcome Links

Early Stage 1					
Mathematics	MAe-1WM	Mae-2NA	Mae-3WM		
PDHPE	INES1.3	V3, V4, V5			
Science	STe-1VA	STe-2VA	STe-3VA	STe-4VA	STe-5VA
Geography	GEe-2				
Stage 1					
Mathematics	MA1-2VM	MA1-3WM			
PDHPE	INS 1.3	ALS 1.6	SLS 1.13	V3, V4, V5	
Science	ST1-1VA	ST1-2VA	ST1-3VA	ST1-4WS	ST1-5WT
Geography	GE1-2	GE1-3			
Stage 2					
Mathematics	MA2-2WM				
PDHPE	DMS 2.2	INS 2.3	SLS 2.13	V3, V4, V5	
Science	ST2-1VA	ST2-2VA	ST2-3VA	ST2-4WS	ST2-5WT
Geography	GE2-3	GE2-4			
Stage 3					
Mathematics	MA3-3WM				
PDHPE	INS 3.3	SLS 3.13			
Science	ST3-1VA	ST3-2VA	ST3-3VA	ST3-4WS	ST3-5WT
Geography	GE3-3	GE3-4			

SCHOOL WASTE AUDIT PROGRAM

Available from Term 2, 2021

The school waste audit program allows students to assess the volume and types of waste produced at school, so that steps can be taken to reduce the amount of waste produced, improve separation of waste types and increase recycling at school.

The program can be run in a range of ways:

1. Schools can download the Waste Audit Guide and undertake the audit on their own by following the steps in the guide and utilising the recording tools provided.
2. Our staff can attend your school and assist you to undertake a waste audit.
3. We can provide a pre-audit session, a waste audit session (where the audit is completed), and then a follow up session to develop the implementation plan.

This program works best with a single class or small group eg. environmental club.

Allow 45 minutes for pre-audit and post-audit sessions.

Allow 1-2 hours for the waste audit. This time will depend on how much waste you are auditing on the day.

How to get involved

Download the waste audit guide and worksheets from our website or contact our Resource Recovery Education Officer to discuss the program and make a booking.
wasteservice@campbelltown.nsw.gov.au
02 4645 4999

Resources we provide

Teacher's resource kit made up of a Waste Audit Guide and worksheets provided on line for use at any time.

If we attend a kit with the following equipment will be supplied for the waste audit:

- Tarps
- Tongs
- Gloves
- Clipboards and pens
- Worksheets
- Buckets for sorting
- Category sorting signs

Curriculum Outcome Links

Waste Audits and the development of a School Waste Reduction Plan provide opportunities for students across a range of subject areas. The following are some of those links:

Stage 2					
ST2-1 WS-S	ST2-2DP-T	EN2-1A	GE2-3	MA2-2WM	MA2-3WM
MA2-11MG	MA2-18SP				
Stage 3					
ST3-1WS-S	ST3-2DPT	EN3-1A	GE3-3	MA3-2WM	MA3-3WM
MA3-7NA	MA311MG	MA3-18SP			
Stage 4					
SC4-4WS	SC4-7WS	GE4-3	MA4-2WM	MA-3WM	MA4-5NA
Stage 5					
SC5-4WS	SC5-7WS	GE5-3	MA5.1-2WM	MA5.1-3WM	MA5.3-4NA

2021 Environmental Program Schedule

(available on request and resources)

Term 1 Earth Hour
Term 2 Schools National Tree day
Term 3 Threatened Species Art & Writing Competition
Macarthur Nature Photography Competition
Term 4 Macarthur Nature Photography Competition
Pollinator Week

Available on request

- Waterways Warriors
- Bush Explorers
- Student Rangers
- Wild about Wildlife
- Hollows as Homes
- Menangle Fox Campaign
- Frog ID
- Powerful Owl Project
- Koalatown Certified Schools

Resources

Mount Annan Botanic Gardens
Discover science, history, geography and Indigenous heritage educational experiences for students from kindergarten through to year 12.

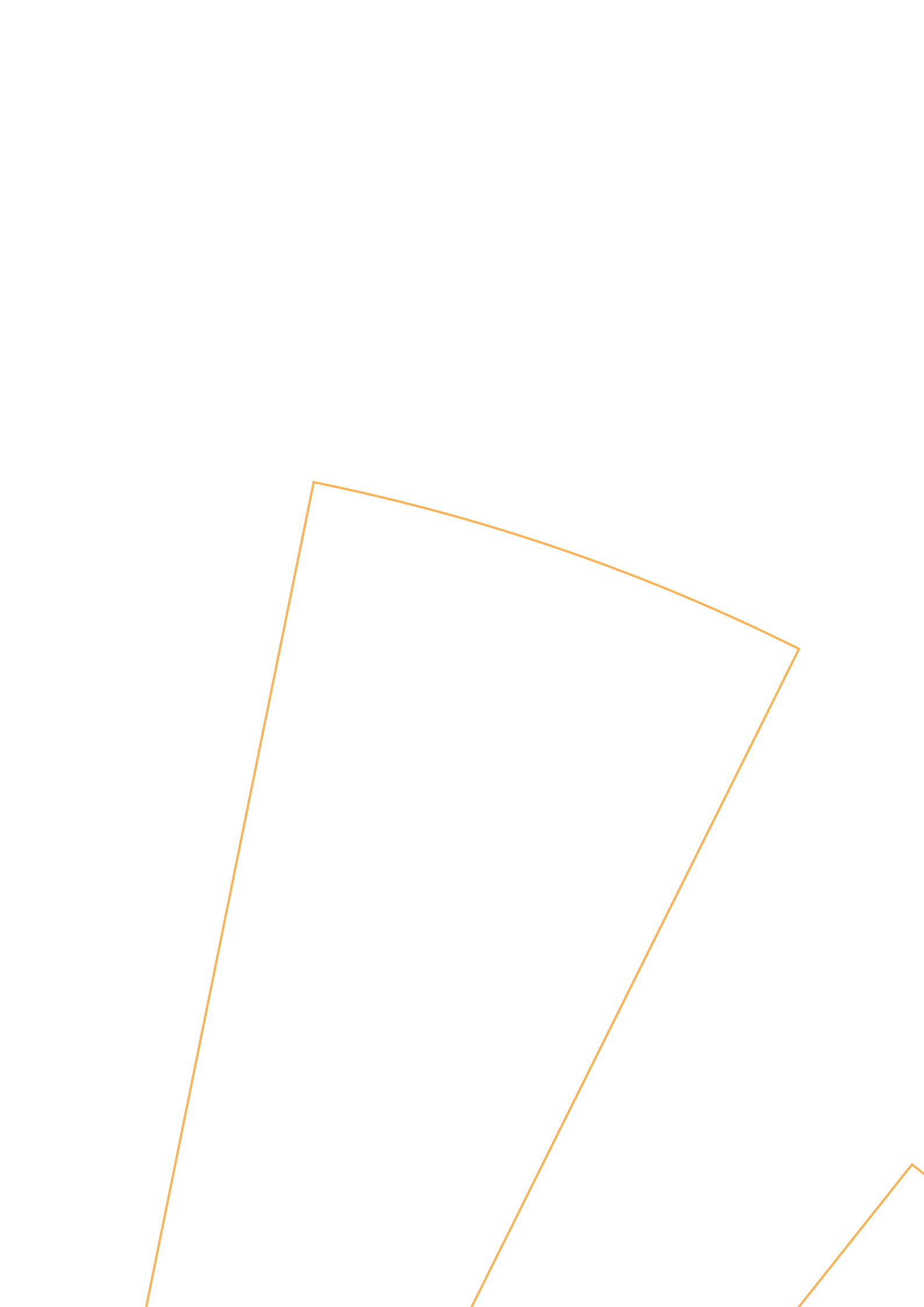
www.australianbotanicgarden.com.au

Macarthur Centre for Sustainable Living
Discover the world at The Macarthur Centre for Sustainable Living, with a range of excursions. Learn about sustainability, Chemical Free farming and recycling.

www.mcsl.org.au

Georges River Environmental Education Centre
Our centre provides sustainability and environmental education through its fieldwork and programs to support primary and secondary students.

www.georgesriv-e.schools.nsw.gov.au



CAMPBELLTOWN

CONTACT
W campbelltown.nsw.gov.au
P 4645 4000