



Prize Winner

Citizen Science Primary

Class Project

Coromandel Valley Primary School



Bringing Back the Bandicoots to Frank Smith

Background information on the citizen science project, including what questions are being asked and why you thought citizen science could help answer the question.

Ten Year 6 students from Coromandel Valley Primary School are passionate about the environment and want to make a change. These students are a part of a bigger Youth Environmental Leadership Program, run by Green Adelaide, of whom meet termly to discuss their project and build on their leadership skills.



Some of the students from the group.

The students participating in a session run by Green Adelaide.

The questions asked for this project was “Are their bandicoots in Frank Smith, and what can we do about it?”. These students needed to know what a bandicoot was, what its habitat looked like, what is its diet, how do we know if they are around and how can we collect data to support our questions.

The group thought by using citizen science, we could find out the answers and share our information with other interested individuals.

Why you chose that particular project

This project was chosen because one of the students was walking his dog through Frank Smith Park and saw a bandicoot scamper past. He then found out that they were endangered, which sent of signals, encouraging him to tell something about it. The sighting was so close to the school, which meant that it was easy to get there and meet up, look for clues and move forward with finding out if there were more.

This particular project involves many stakeholders, school students, parents, teachers, community members, local residents, scientists and external organisations.

What steps you followed to participate in the project. For example, did you contact any science professionals to help?

The first step of this project was to meet with an education officer from Green Adelaide, Alex Lea. She encouraged us to join the YELP program and meet with other schools interested in environmental projects.

Alex encouraged us to apply for a Green Adelaide Grassroots Grant to take the project further. If we wanted data, we needed to purchase some motion sensor cameras and educate local people of the bandicoot’s

existence and get their help to protect them. Alex helped motivate the students to prepare a puppet show to educate the junior primary students at school on what a bandicoot was and how the “YELP” group is going to stop them from becoming extinct.

Students also presented their project at the “Nature by Night Festival” in October, leading kids and their parents around Frank Smith Park and encouraging others to look out for the critically endangered southern brown bandicoot.

We then spoke with Dr Elisa Sparrow, an Urban Ecologist, who helped us learn about the Southern Brown bandicoot and what it likes. She also wrote a supporting statement for the Grassroots Grant and supported us to set up the first camera.



1. Setting up the camera for the first time with Dr Elisa Sparrow.
2. Constructing a “Bandicoot Bungalow” with groundskeeper Keith.

The project had a segment on Adelaide news show Behind the News (BTN), sharing the students project and educating all viewers on the southern brown bandicoot and why they were so important.

<https://www.abc.net.au/btn/classroom/bandicoot-tracking/102302636>

The group also hosted Rhys from the Bandicoot Superhighway Project. He has visited us on two occasions, to help us construct a bandicoot bungalow (artificial home) and to suggest vegetation species to plant to encourage more bandicoots to visit the local area.

What type(s) of data you were collecting and how they will help answer the research questions being asked. (Include data summary)

We purchased motion sensor cameras to place strategically within the park to collect some photographic footage of the bandicoot. The first thing we needed to know was did the Southern Brown Bandicoot live in Frank Smith Park?

Our first camera was out for 5 days before we collected 6,000 images. Mrs Todd sifted through and found a good, clear image (that didn't look like a rat) and sent it through to ecologist, Dr Elisa Sparrow. She confirmed that it was in fact a bandicoot. We were so excited, our school posted it on the Facebook page and within two days there was 300+ likes and 30 shares. Lots of other community members had also seen bandicoots in the local area and they wanted to know how they could let people know about it.

Some data we have collected was, how many bandicoots we've noticed, how far they travel out of the area we first saw number one bandicoot, what location they are in. We are also interested in what other animals are visiting our "peanut butter sticks" and having their photos taken, how many feral cats, local dogs and foxes we're seeing.

The bandicoot seems to be diurnal, the foxes are nocturnal, individuals walk their dogs during the day and the time stamp suggests a half hour after the camera takes a photo of a bandicoot a pet dog walks by and has their photo taken.

We've since logged our sightings on the Bandicoot Superhighway project page and iNaturalist.



Our first bandicoot sighting.

Anything interesting you saw in the data you were collecting

When we were putting out the cameras, we saw that the bandicoots were in one side of frank smith which we did not put cameras up. We had to expand our radius and explore how far out these bandicoots are travelling (future plans).

The foxes come out at night not in the day and the bandicoots come out during the day, so they are not nocturnal, as we first expected.

People have been clearing the backberry bushes that the bandicoots eat and we're concerned about their habitat. We need to explore this further.

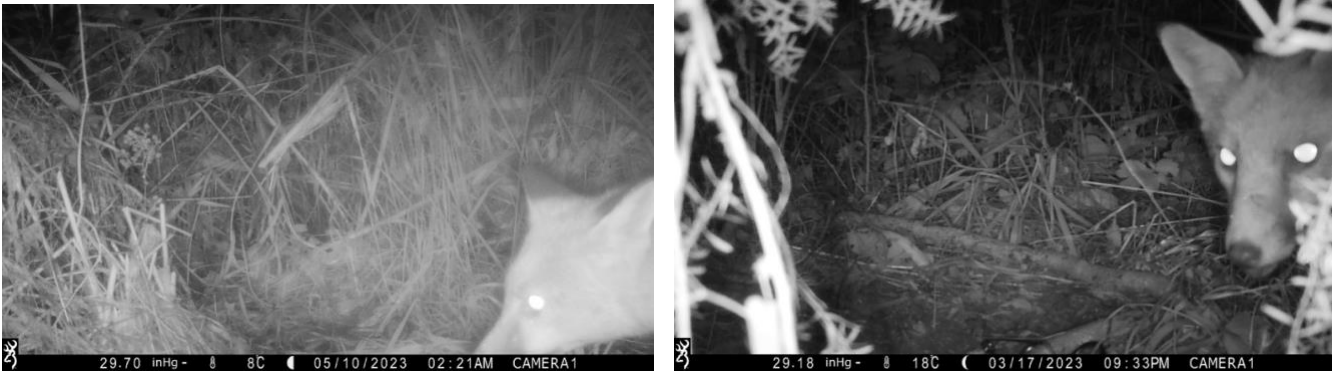
Your findings/conclusions from participating in a citizen science project

The findings from participating in a citizen science project is that bandicoots live in our local area.

After speaking to the local pest control contractor, they have lived here for at least 6 years.

They don't just like blackberries and they need coverage up to 4m, to protect them from predators .

We still aren't sure how many bandicoots live in this local area, but we know that they are critically endangered and we're doing our best job to stop them from becoming extinct.



First sightings of the European Red Fox.

Discuss relevance and impact of the results or project (e.g. for existing policy)

The local council has taken our project into consideration. Since being televised on BTN and having an article published in the Blackwood Times (our local paper), the community engagement officers have been in contact. Mrs Todd met a handful of people associated with the local council at Frank Smith. The officers were shown the site and some planting of local vegetation has been granted, as well as the placement of three bandicoot bungalows, to provide coverage from local fox species and other predators.

Future directions and potential of this area of research?

We could tell other people in the community, and they could search for other animals that are not just bandicoots in Frank Smith Park.

We could find more animals that are also in Frank Smith, perhaps some of these could be endangered.

It's going to help future generations protect Frank Smith more.

We could invite community members or kindergarten children to come on a nature walk with the group, teach them about bandicoots and what to look for.

Tell people to keep their cats inside.

This information can continue to be entered onto iNaturalist, the information can continue to be given to local and state ecologists, interested in saving the Southern Brown Bandicoot from extinction.

This project will continue.

Students work to bring bandicoots back to park



• Photo - Ecologist Dr Elisa Sparrow with one of the Bandicoot Buddies placing a camera in an attempt to take photos of shy bandicoots in Frank Smith Park bushland

A GROUP of Year 5 students from Coromandel Valley Primary School, with a passion for the environment, started working together with a desire to bring bandicoots back to Frank Smith Park.

They attended the Southern YELP (Youth Environmental Leadership Program), facilitated by Green Adelaide, City of Marion and City of Onkaparinga.

Through YELP, Green Adelaide Educators support primary schools to plan and implement hands-on environmental projects that improve the sustainability of their campuses and communities. They learn valuable team skills, access resources and are linked to experts.

"The students chose Frank Smith Park as their project location, because it was close by and somewhere they wanted to make a change," explained Sarah Todd, Coromandel Valley Primary School's science teacher.

A Green Adelaide 'Grassroots' grant application was submitted and won by Sarah, with the intention to use the money to purchase motion sensor cameras, provide information brochures to local community centres, construct bandicoot bungalows (artificial homes) and to revegetate.

Green Adelaide ecologist Dr Elisa Sparrow, visited the group several times to speak about how the bandicoot is vital for a healthy ecosystem and to initially set up the cameras.

Currently, the group has cameras out in Frank Smith Park capturing visits from the Southern Brown Bandicoot (critically endangered species) as well as local pest and pet species.

"We had our first sighting, two days after setting up the first camera. There have been several other sightings which have been registered on the Bandicoot Superhighway project webpage.



to map the location of this species.

"For bandicoots to really have a go at making the Frank Smith Park reserve their home, the whole community will need to get behind the project as dogs, feral cats and litter can be a big problem for their safety," added Sarah. □

Article in the Blackwood Times



Preparing for our BTN episode recording.