Submission No 8

FOOD PRODUCTION AND SUPPLY IN NSW

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Building a Pollinator and Community Garden on the Charles Sturt University Bathurst Campus

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Background: The problem with pollinators

Birds, bees, butterflies, and various types of insects within broader ecosystems play an essential role in pollinating crops that provide our food. Food security research shows that increasing numbers and types of bees and insects have a direct impact on crop yields, making the pollinators' role in biodiversity vitally important (Baldock et al., 2016; Baldock, 2020). Yet scientists observe that pollinator numbers are declining across the globe including Australia. Part of the issue is a lack of consumer knowledge around the function of pollinators, and the importance of biodiversity in creating a sustainable ecologically balanced food system. Furthermore, there is evidence to suggest that human interaction with nature through access to green spaces is important for human health and wellbeing (Guitart et al., 2012; Frumkin et al., 2017). However, with so many people now working in sedentary office roles, and spending less time during the day outside, it can be difficult to easily access such places. Thus, a community garden in a work environment can enable people to reconnect with each other and nature on a daily basis, as well as to develop their own understanding of the importance of pollinators by learning from the peers and experiences. Therefore, we developed a social sustainability project to address both the issue of declining biodiversity and stakeholder wellbeing by building a pollinator and community garden and Charles Sturt University- Bathurst campus.

Who are we?

Our project team consisted of five people; Dr Felicity Small, Dr Lucia Wuersch, Dr Alain Neher, Rachel Cavallaro, and Heather Salmon. Financial support for the project was received through a grant from *Sustainability at* Charles Sturt.

What was the aim of the project?

The main aim of the project was to build a community garden of local native plants to enhance biodiversity by building a supportive habitat for indigenous birds, bees, butterflies, and other beneficial insects. We also wanted to raise awareness in the community around issues of biodiversity and the role pollinators play in food production. We designed an intervention that would bring people together, and provide an opportunity to education them, and encourage them to change their behaviour. To support the educational element within the project, we created a website and on-site signage that explained why pollinators are important, and what individuals can do to help support them. For example, on the signs we included easy to remember key facts such as "*one in very three bites of food are directly related to the work of pollinators*". We hosted two community events 1) to construct and 2) to showcase the emerging garden. The event days included:

Figure 1: Alain, Lucia, Felicity, Heather, and Rachel (l to

Day 1. Planting and signage; and
Day 2. Launch of the garden and link to *iNaturalist* and the B&B highway project.

Research project

Along with the building of the actual garden, the objective of the research project is to explore the experiences of the project team, community gardeners, and other stakeholders. Our research project is designed to gain an in-depth understanding of the process behind this kind of social sustainability project. We aim to disseminate our findings in relevant academic and industry journals and conferences. One key outcome of our research is to share what we have learnt about the process of grassroots actions like this and the potential impact it can have on individuals and the broader community's' understanding of and willingness to engage in small scale actions to support local biodiversity. Thus, within the research project, we are investigating key stakeholders and the broader community's engagement during the design and development of a native garden for local pollinators. Our research question is: *How do stakeholder groups co-create meaning around Charles Sturt's Pollinator and Community Garden?*

Data collection

Three phases of research design were used to collect the data. The first data set was a reflective milestone journal kept by the project team. The second data set comprised of audio-visual collections including fortnightly 2MCE radio broadcasts and videos of the event days. The third data set consisted of face-to-face semi-structured interviews with a range of stakeholders, including those who helped to physically build the garden.

Data analysis

We used a qualitative technique called collaborative ethnography as our methodology with an *assemblage* approach to investigate the data. Assemblage enables us to triangulate our data and draw conclusions based on multiple perspectives.

Outcomes

There have been several outcomes including a variety of media stories, and broad community engagement with the garden itself. The research outputs have been and will be both presented in academic conferences and published in scholarly journals.

Collaboration and communication with stakeholders

We worked closely together with our internal Charles Sturt stakeholders including Facilities Management and our First Nation Elders. We also joined forces with Planting Seeds' B&B highway and through iNaturalist to activate citizen scientists on campus and to record the ecological changes resulting from the pollinator garden. To raise our external profile and to reach the broader community in Bathurst and the surrounding regions, we collaborated with *Sustainability* at Bathurst City Council who shared our project via Sustainability's Social media Facebook page. We also promoted our project through Charles Sturt University's social media platforms, fortnightly 2MCE radio broadcasts (listen to podcasts of Community Drive program), internal Charles Sturt University newsletters, and the development of a website page devoted to our project.

Conclusions: The future of our sustainability project

At a physical level, we hope to see people enjoying the garden, using the iNaturalist system to periodically record their sightings of pollinators, and to periodically showcase changes of this evolving ecosystem. The project team continues to tend for the garden and will host 'community gardening days' in the future to maintain its health for many years ahead – and to preserve a safe space for pollinators and an enjoyable place for students, staff and the wider community.

References

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