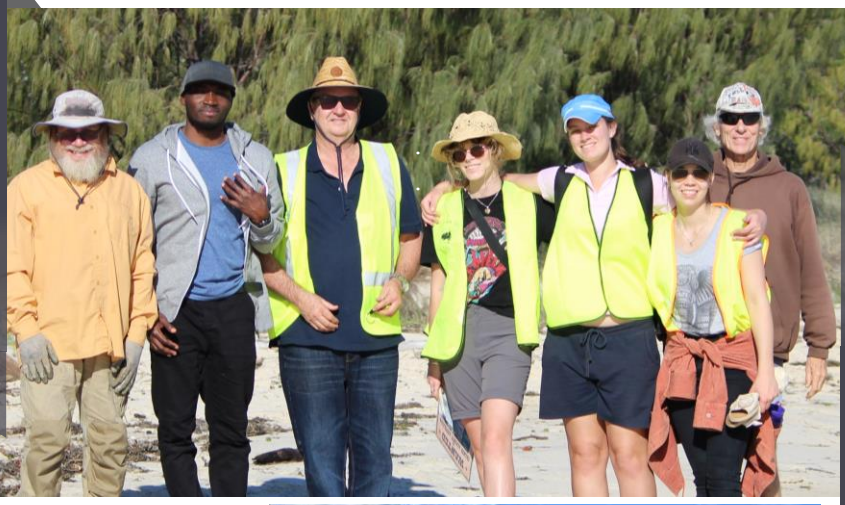
OVERVIEW OF PROJECTS

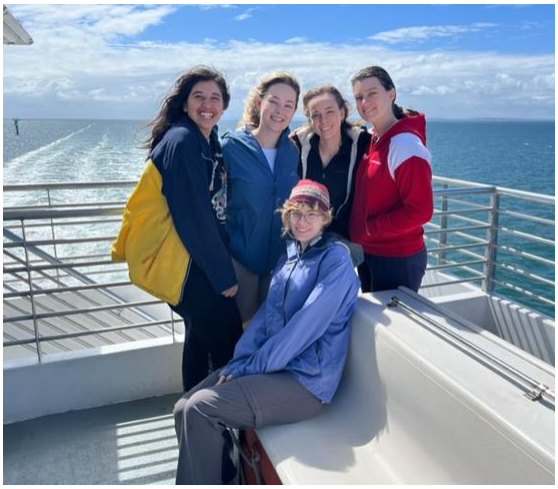


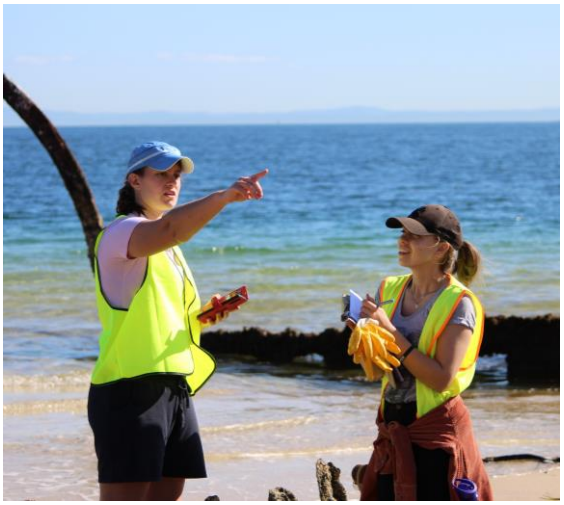
THE BULWER ENVIRONMENTAL VOLUNTEERING PROGRAM

Work Integrated Learning (WIL) Students from Griffith University's Partnership Office together with Environmental Management Coursework Students plus Alumni Graduates participated in 2 volunteer work trips (a total of 8 days of environmental volunteering) at the Township of Bulwer on Mulgumpin (Moreton Island) in August and September 2022. The Program was supervised by Greg Curtis and Dr Peter Davey.

1

Greg Curtis an Environmental Advocate, a resident of Bulwer and a Member of Bulwer Progress and Social Association hosted the local activities. Dr Peter Davey an Adjunct Associate Professor from Griffith's School of Environment and Science organised the WIL Programs and attended the 2 volunteer trips and provided project aims. 4WD transport was provided by both Greg and Peter for the activities. The MICAT Barge, Redcliffe Anglers Club sponsored the volunteer work activities with discounted barge fares and discounted local shack accommodation.





2

Students after completing a review of literature, government reports and websites progressed the following applied research projects at Bulwer: -

- Beach Litter Assessment of Bulwer Foreshores and implement a Cleanup Australia litter collection and identification after recent floods and discuss future solutions,
- Biodiversity Assessment of selected Bulwer town reserves and the edge of the adjacent national park for the impacts of asparagus fern - a noxious weed and identification and removal of weeds, nursery observations and plant selection and replanting in town reserve and future solutions,
- Assessment of Brisbane City Council Community Run Feral Cat Trapping Program and future solutions.

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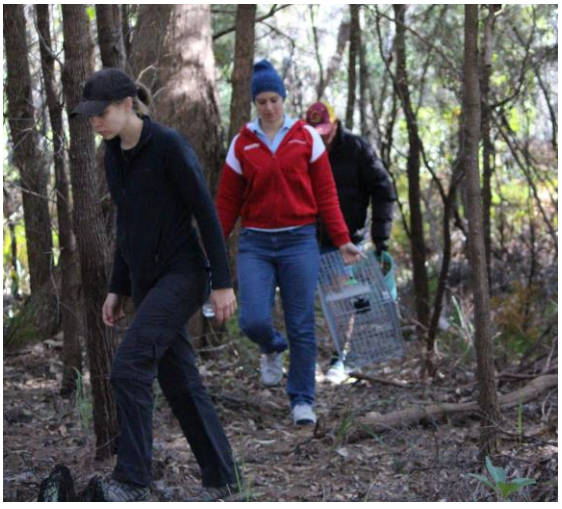
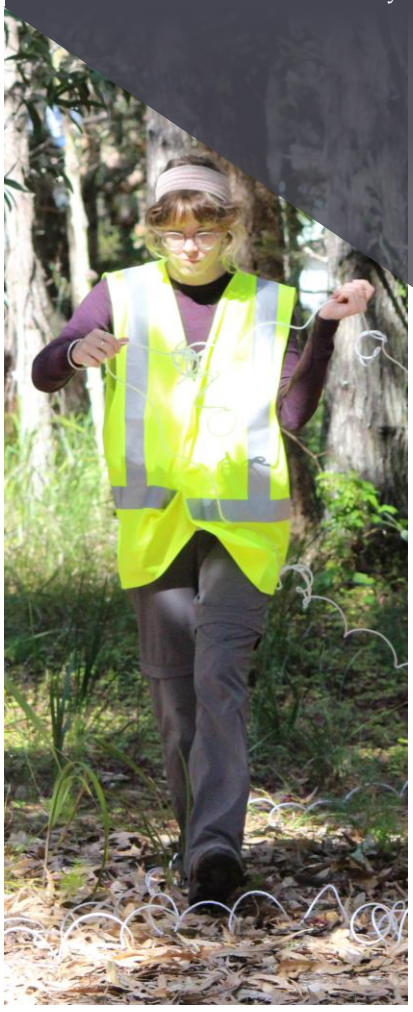
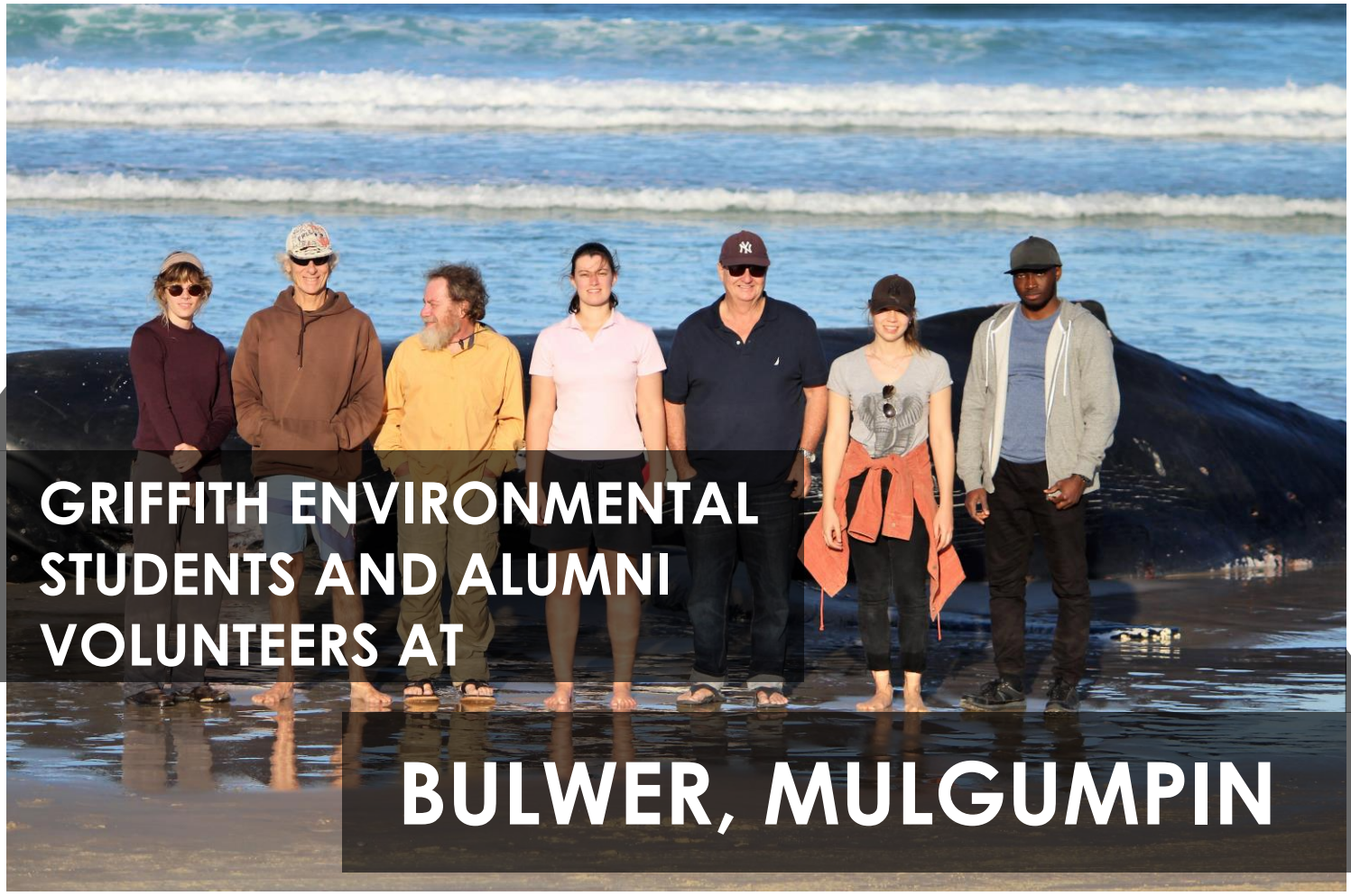
Students worked with supervisors and developed a range of WIL knowledge and skills and worked in successful teams on the various local environmental projects and had an opportunity to explore the pristine coastal sand island.



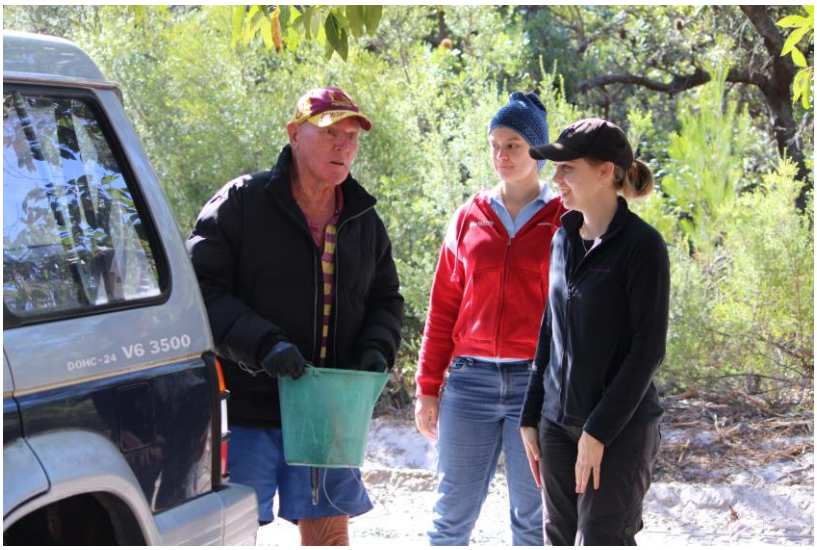




GRIFFITH ENVIRONMENTAL STUDENTS AND ALUMNI VOLUNTEERS AT BULWER, MULGUMPIN

Feral Cat Program

Hi, I'm Tamara.

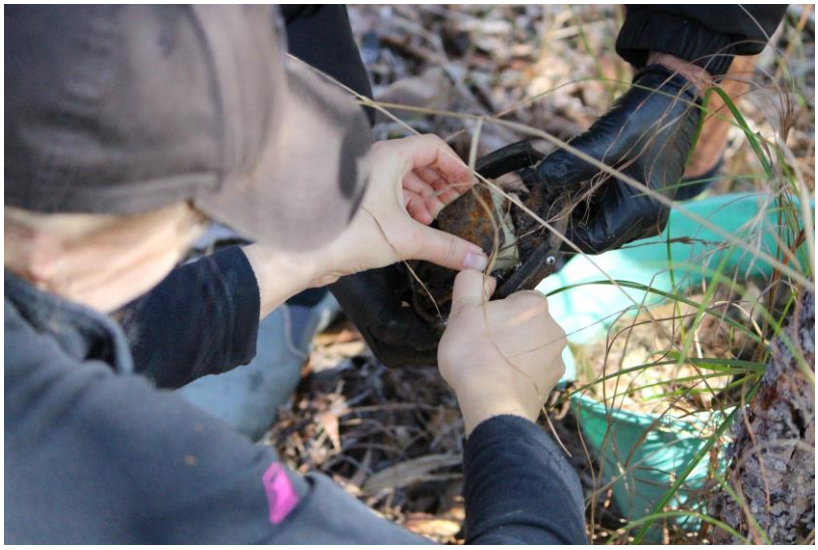


I'm currently working on a qualitative research project for the Bulwer Progress and Social Association (BPSA) reporting on the progress of the feral cat management program on Mulgumpin (Moreton Island). Mulgumpin possesses a history of successful management of invasive animals including horses, goats, dogs and pigs. Currently, feral cats are estimated to

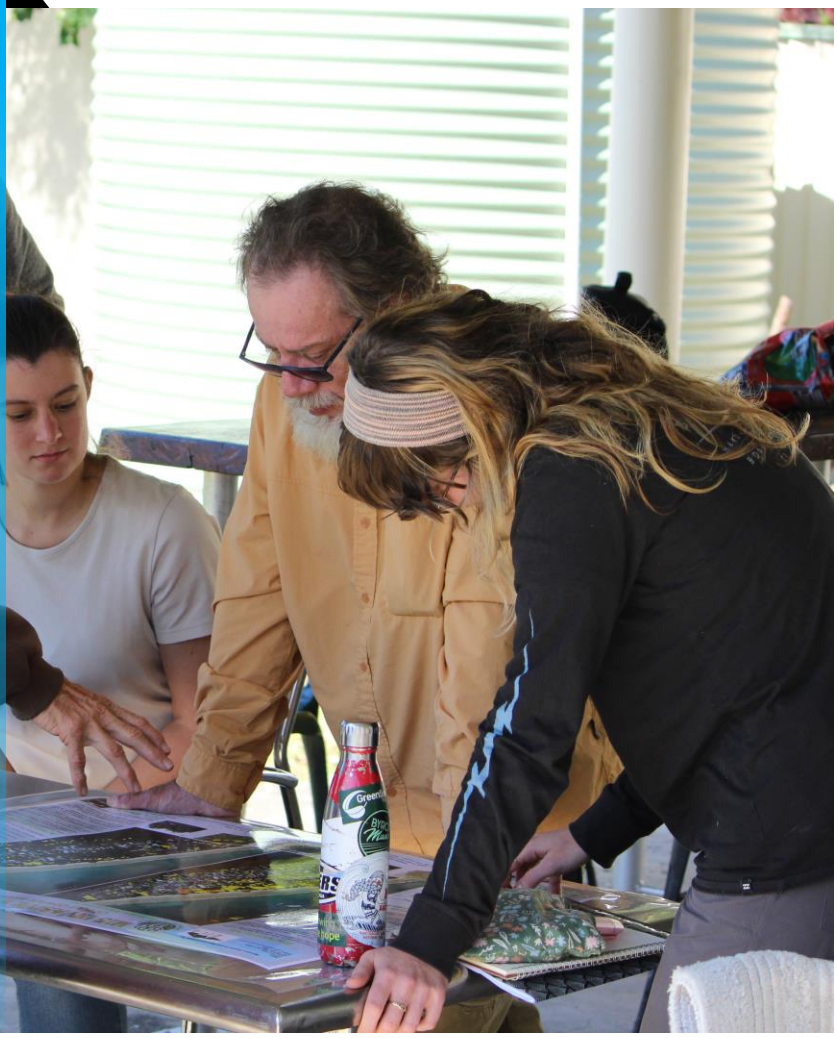
be killing between 100,000-150,000 native animals on the island per year.

Since April 2021, Brisbane City Council has been working with community volunteers from all four townships on Mulgumpin to monitor and trap cats and to educate the community for ongoing management. As well as speaking with the team of enthusiastic BPSA members, I was fortunate enough to assist Richard (Dick) Craig with his everyday routine of setting up the cage and soft jaw traps with bait and lures in the evenings and checking the traps and collecting camera footage in the mornings. It is inspiring to witness a community working together to solve problems in environmental science.

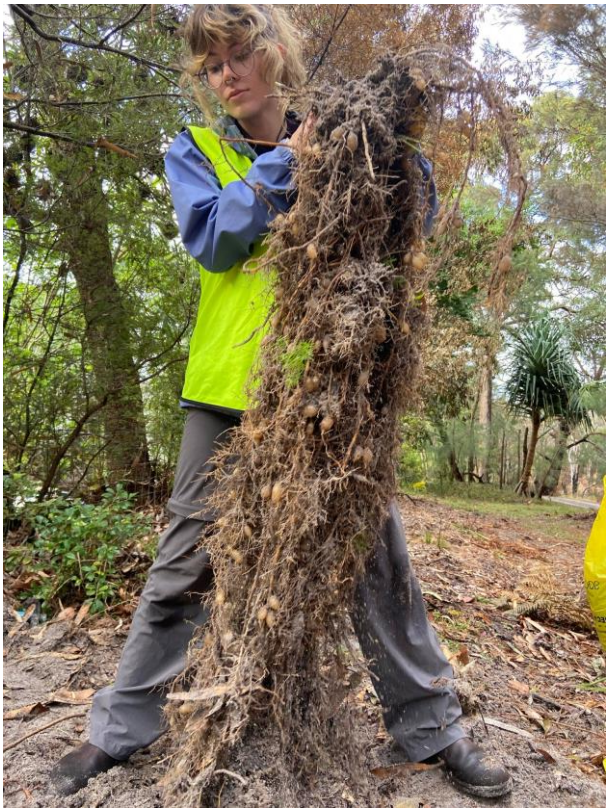
Please see further information on this project and Brisbane City Council's general feral cat management strategies on their website here.



Griffith Environmental Students and Alumni Volunteers at Bulwer, Mulgumpin



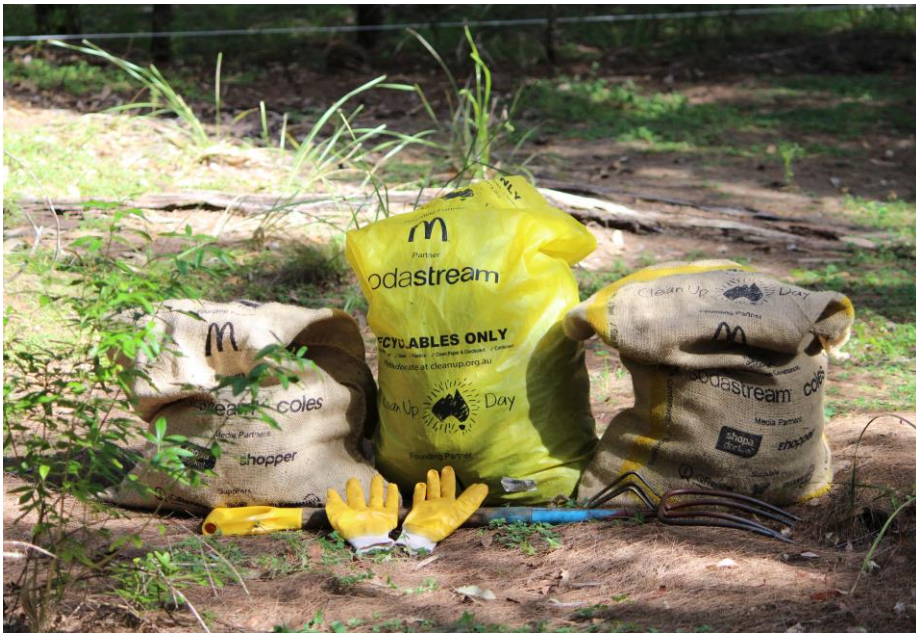
Asparagus Fern Removal

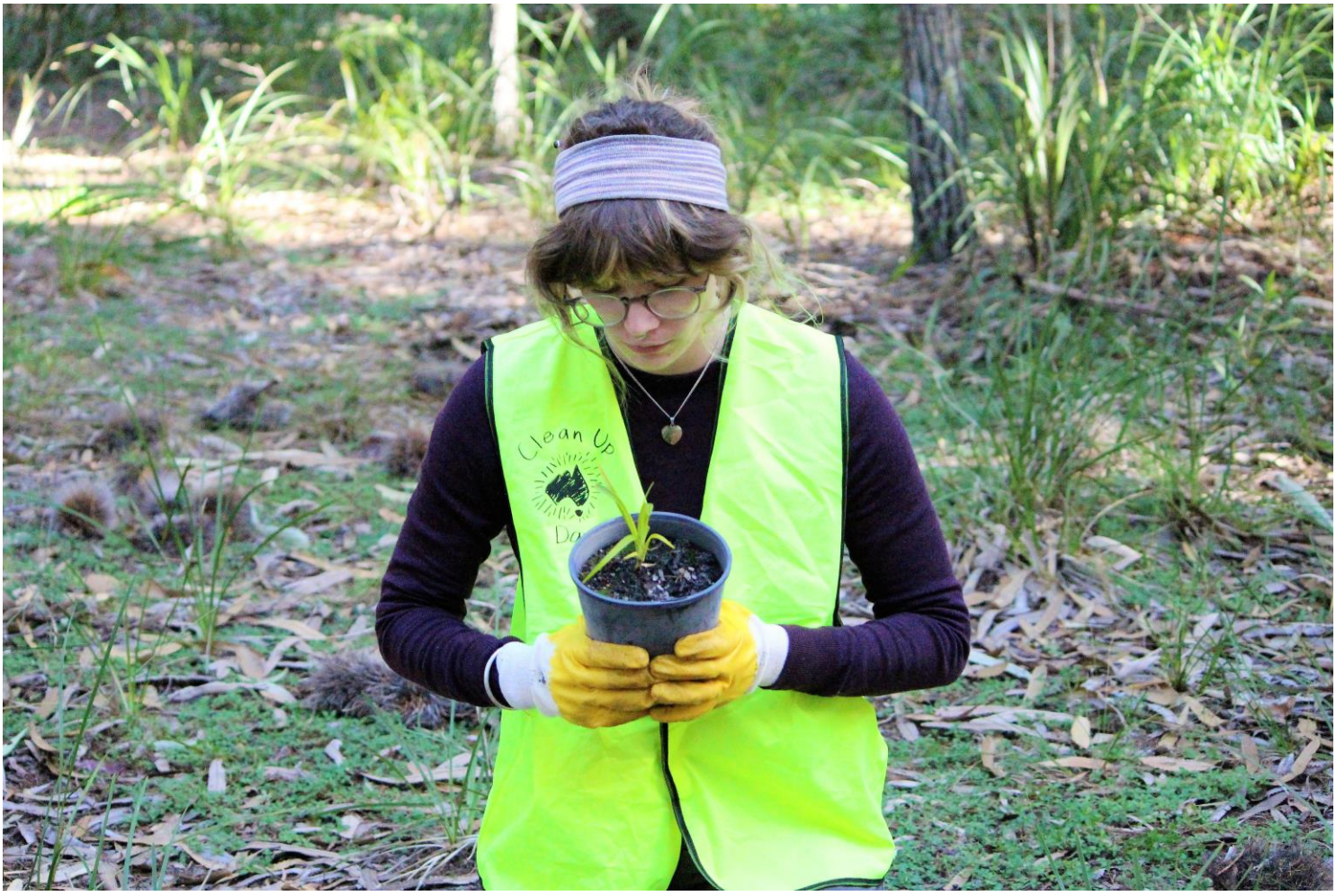


Hi, I'm Anna.

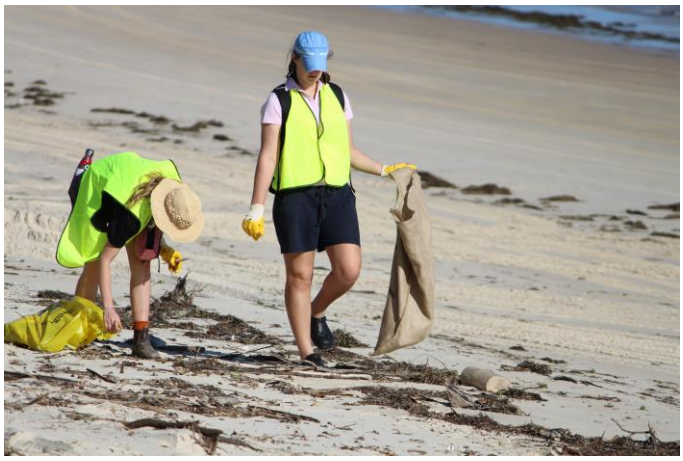
This project was part of our final year WIL - Work Integrated Learning field work with Griffith Sciences Partnership Office and is a continuation of previous students' research work on the identification and removal of noxious weeds around the Bulwer Township. I chose to focus on completing a Simpsons Biodiversity Index initially on selected town reserves to assess biodiversity and the extent and impact of noxious weeds and then in teams identify and remove Asparagus Fern which is the most abundant weed throughout the town. This noxious weed smothers native plants and therefore impacts biodiversity and destroys local habitats. In our two trips, totaling 8 days of activities myself and 7 other volunteers have managed to remove a large amount of Asparagus Fern and also replant native plants back into these areas. Collecting this data from areas inside

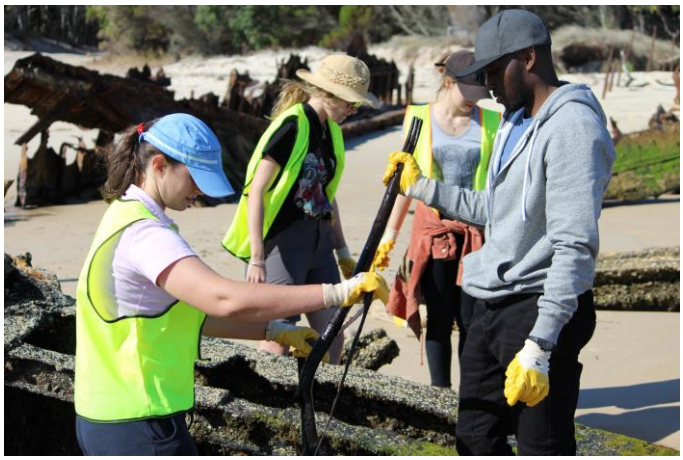
and on the edges of the township monitors the spread of this weed. We found evidence that Asparagus Fern is spreading from the township and invading the protected adjacent national park. In future trips as volunteers, we can improve the quality of the town's natural vegetation through this applied practical work and assist private landholders to rejuvenate their yards by removing all noxious weeds. I worked with the Bulwer Progress and Social Association with Greg Curtis a local resident.

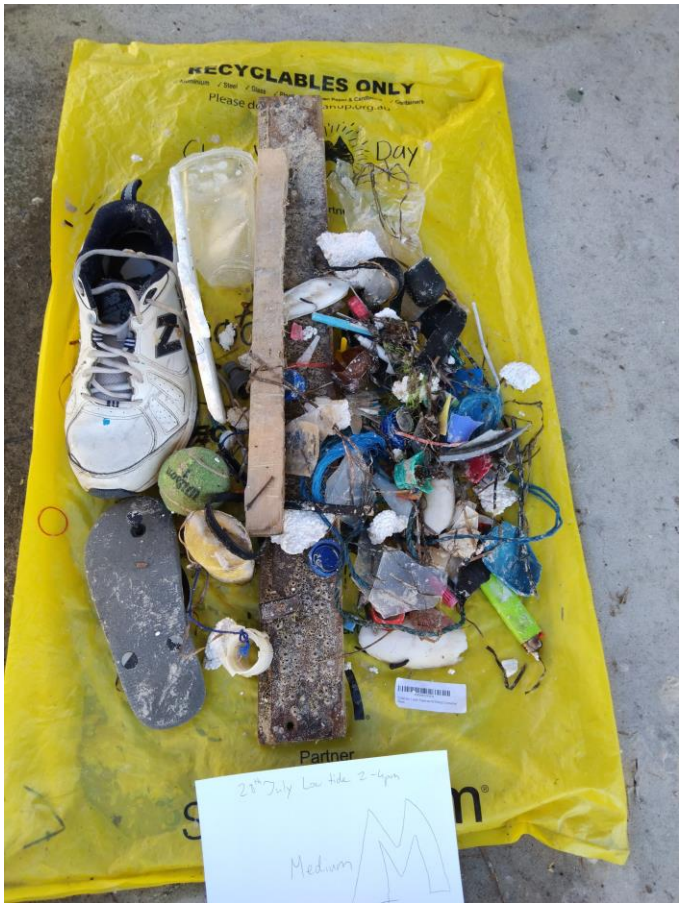




Beach Litter Assessment







Hi, I'm Nikita.

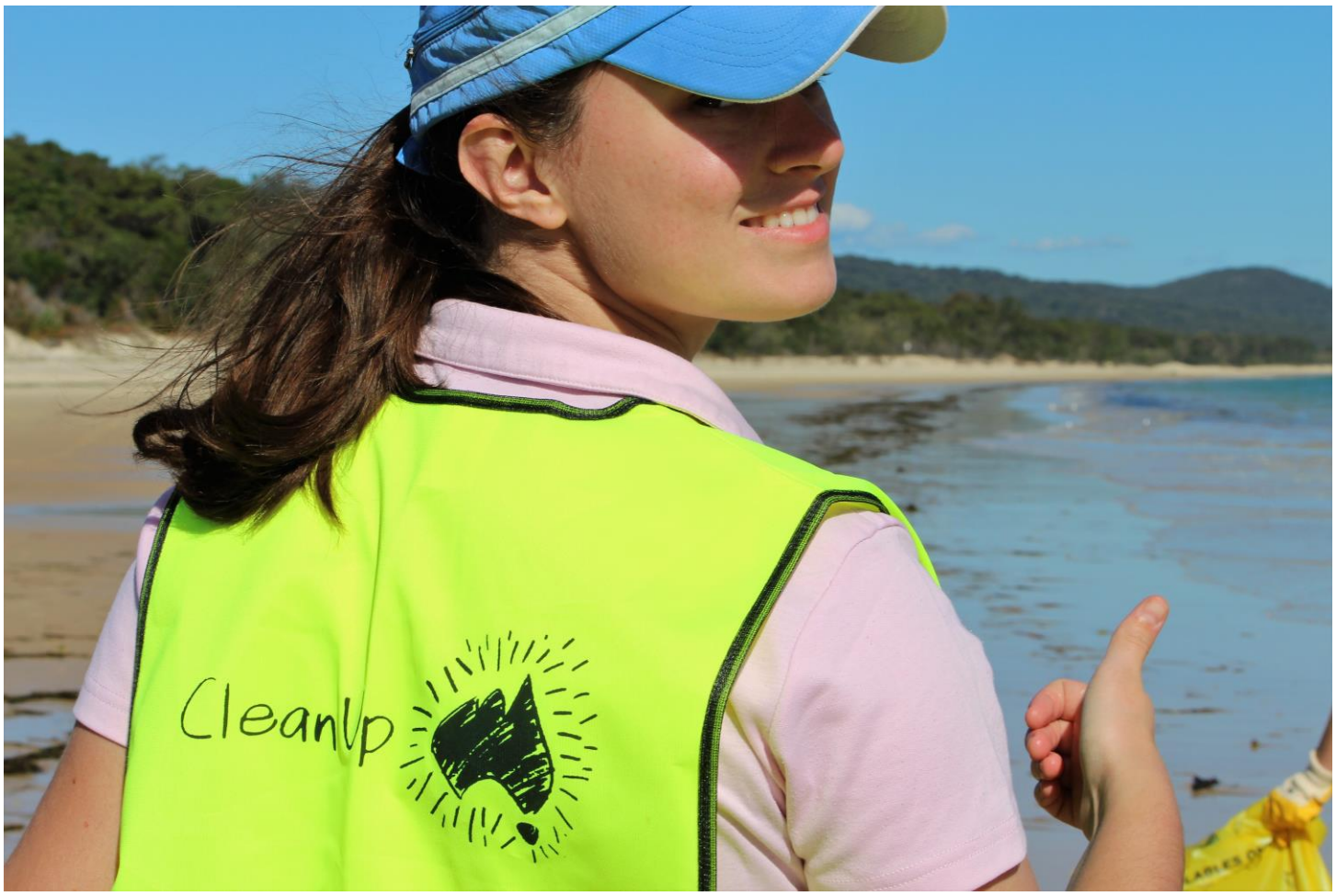
The Annual Clean-Up Australia Day activity was held again at Bulwer on Sunday 6th of March 2022 with Bulwer Progress and Social Association members, other locals and Griffith Students. This Clean-Up coincided with the major Flood Event in late February that occurred across Qld. Massive amounts of rubbish flowed into the Bay from the Brisbane River, including polystyrene from pontoons, various large plastic items and microplastics covering the island's western beaches, and particularly Bulwer Foreshore near the Wrecks.

"It was a Clean Up Australia Day the likes of which none of us ever want to see again" said Greg Curtis, the Clean-up Coordinator and a resident of Bulwer.

From the 28-31st of July and 3-6th of September 2022, a total of 8 Griffith University Environmental students and 2 supervisors travelled to Bulwer. The applied environmental work activities were organised by Dr Peter Davey an Associate Professor from Griffith University and Greg Curtis a resident of Bulwer. During this work integrated learning (WIL) placement students had the opportunity to engage with this waste initiative and maintain and preserve the foreshore.

Beach litter was collected from low, middle, and high tide zones, and then sorted and categorised to identify the waste load approximately 6 months after the flood event. Polystyrene can still be found buried underneath the sand and among dune vegetation, but decreasing amounts of ocean litter continue to be swept ashore daily on the tide. Solutions to this on-going problem need to be discussed with all local

stakeholders, and an education program is required through conversations with international shipping, commercial and recreational fishers and tourism impacting on Mulgumpin. For these environmental undergraduate and master students and past Graduates it was an educational and rewarding practical experience to observe and collect many types of beach litter. This allowed students to form partnerships with stakeholders, and build a special bond to the Island, its locals, and with their team members.



Many thanks to Dr Peter Davey, Greg Curtis and Redcliffe Anglers Club and MICAT for sponsorships.

Thanks to Elise Carsburg and Lia Ribeiro De Noronha, the Environmental Management Volunteers who completed 3 days of work assisting on projects.

Thanks to 3 volunteers, all Alumni Graduates from Griffith; Paul Brien, a Weed Expert, Mohammad Al Mahdi Hasan, a Climate Consultant and Chibuzor Henry Ojobor, an Environmental Scientist contributed as Advisors to our work, all previously completed studies at Bulwer. Graduates provided great support for students.

Thanks to QPWS - RIC (Ranger in Charge) Dean Payne and (Feral Animal Control Ranger) Peter Bull.

Further information is available via email to peter.davey@griffith.edu.au.