





James McGregor Mathew Flinders Anglican College University of the Sunshine Coast Lake Baroon Catchment Care Group



The Industry Placement Camp

Arriving at the University of the Sunshine Coast on the first day of the Industry Placement camp and being met by twenty-one unfamiliar faces was quite daunting at first, but little did I know these strangers would become my close friends for rest of the week and beyond. The Industry Placement camp involved visiting a large variety of scientific orientated workplaces, ranging from microbiology laboratories to UnderWater World! Visiting these workplaces opened my eyes to many interesting professions, some of which I never knew existed. From these industry visits, I have discovered my passion for the ocean, and that my line of work I choose to follow must have something to do with water at least.

I found the visit to the Bribie Island Research Centre (BIRC) particularly interesting. The staff at BIRC are currently conducting research of the saltwater fish called Cobia, which is a fast growing and a terrific eating fish. Their goal is to grow the fish in current prawn dams during the off season or even as an alternative crop altogether. They are also looking into ways of using bloodworms as a kind of filter for prawn farmers' discharged water, instead of using previous methods such as holding ponds. Bloodworms are a very expensive fishing bait and can even be turned into prawn feed.

The camp itself, situated across the road from the beach at Alexandra Headlands, was extremely enjoyable. We participated in various group/team building activities, some more enjoyable than others, with the raft building team challenge and surfing being the most enjoyable while public speaking being one of the least, for me anyway! The camp was a great experience and with the very busy schedule, we managed to visit or learn about fourteen different scientific areas from experts in their field. I found this to be extremely beneficial and influential when deciding what I will study when I leave school at the

conclusion of year 12.



My Industry Placement Mark Amos

I began my Industry Placement with Mark Amos on the 17th of December. Mark Amos' title is the "Catchment Coordinator" at the Lake Baroon Catchment Care Group located in Maleny. My initial belief of Mark's job was that he visits different locations in the catchment area and collects water samples to test the PH, salinity and that sort of thing, but I was deeply wrong.

Mark's primary focus is to select and repair locations in the catchment area that may be causing adverse effects on the local waterway, which in turn, leads to decreased water quality in the stream or creek. This then leads to the deterioration the water quality of Baroon Pocket Dam, one of the most reliable water sources on the Sunshine Coast, but also essential for other areas such as Brisbane. Some common causes for the decrease water quality include erosion caused either by livestock or the removal of native riparian vegetation, the access of livestock to a stream or creek just to mention a few factors.

During the week we visited various potential and current projects around the Baroon Catchment area. This was to evaluate the current situation and then come up with solutions on how the water quality of the tributary could be improved, or to assess the impact the works previously done on an area have had on water quality. A common way of achieving this is by macro invertebrate sampling, which is the collection of a sample of the benthic organisms to assess water quality from the chosen location before and after works have been completed. Once the sample is collected, it is then sifted through manually to collect any macroscopic bugs found in the sample. Once all the bugs are identified, each species has a rating, and by putting the total of ratings into a formula, the quality of the water can be found. I was fortunate enough to complete one of these samplings which were very interesting and a lot of fun!

How My Placement has Influenced Me

My industry placement at the Lake Baroon Catchment Care Group with Mark Amos has really opened my eyes to how much effort and resources are put into local waterways in order to create a sustainable resource in the most environmentally friendly ways possible. My placement has provided me with knowledge of what is involved in becoming a Catchment Coordinator such as Mark, and in other water careers such as working for Seqwater.

My industry placement has also given me a greater understanding on how delicate our local ecosystems and environment actually

are. It is interesting to see how small changes and restorations can have substantial, positive impacts on the health and wellbeing of the habitats that surround us. Mark has inspired me to strive to do something I enjoy, as there is no point in choosing a career that doesn't interest you or that you have no passion for. Mark demonstrates this well, as he is clearly very fond of what he does and has a strong passion for the environment.

Thanks

First and formally, I would like to thank those who organised the residential camp. Sue, Marina, Kristin, from PICSE at the University of the Sunshine Coast and the volunteers Josh, Delia and Noel. Without their help, the camp wouldn't have been possible or as much fun! I would like to thank my mentor, Mark Amos for his hospitality and insight into his career; I found it extremely interesting and enjoyed it thoroughly. I would also like to thank the University of the Sunshine Coast-School of Science and Education for this amazing opportunity it has given us, I feel very honoured to have been selected in this Scholarship. Last but not least, I would like to extend my gratitude to the other funders Grains Research Development Corporation and PICSE National for their funding into this program, which gives young people like me an incredible insight into a huge variety of different careers in the science faculty.