

In this and the next issues, we will have the ASEG project 2022 recipients share their geophysics experience! For this issue, **Audrey Quealy**, an honour student from Monash University will be our spotlight!

1. For how long have you been studying geophysics?

I was first introduced to geophysics in the third year of my Bachelor of Science (Earth Science) and am now focussing on it as part of my Honours Degree this year.

2. Any field experiences? If so, something to share (like where it is, what you did, or interesting stories)

Despite several years of lockdowns limiting fieldwork accessibility, I was able to travel to Anglesea, Philip Island and the You Yangs as part of my bachelor's degree as well as making several extra-curricular excursions around Victoria. I am excited to be travelling to North-East Queensland in July to complete my Honours research.

3. What made you decide to study geophysics/geoscience? Anything you enjoy most?

I decided to make the move from working in horticulture to the geosciences as I have always had a love of rocks and an innate curiosity about earth processes and landforms. I enjoy the mystery of many aspects of geology and how geophysics can be used in imaging and interpreting sub-surface morphologies and structures that would be otherwise largely inaccessible. I am also passionate about sustainability and understand the importance of many geological applications in transitioning to a renewable future.

4. What do you usually do in your spare time?

I enjoy hiking and camping in Victoria's High Country - plus a bit of gold panning and fossicking on the side!



5. What are your career goals in the future?

I hope to form a career which incorporates my love of geology and geophysics with sustainability and working towards forming a climate-resilient future. I would love to amalgamate these interests with a fair dose of fieldwork by either working in exploration or for one of the geological surveys. Whilst I hope to gain some industry experience over the next couple of years, I would like to continue with research sometime in the future.

6. What is a challenge that you see in geoscience today, and how do you see the community overcoming it?

Although I believe that the representation of women in geology is increasing in Australia, there continues to be a large and very visible gender disparity in upper management and university research posts. I believe that this lack of diversity in teaching roles at universities directly influences female students' perceptions of geology (and other STEM disciplines) as an inclusive and fulfilling career. As there appears to be ample female involvement in entry-level degrees, I believe that ongoing participating could be fostered by increased visibility of women in higher level roles as well as the creation of more safe, respectful, and flexible working conditions for women in industry.

7. What is the best way that the ASEG could let the public know about geophysics and its benefit to the everyday life?

I believe that engaging and transferring knowledge to young, early career scientists is key to engaging the general public on the benefits of geophysics as both a career pathway and scientific method. This could be achieved in the form of increased exposure at career events or expos and geophysics camps or seminars aimed at students early in their Bachelor or at the end of High School studies.

8. Do you think AI will take over your job or will the human element remain vital to exploration successes?

I believe that AI has an important function in identifying and delineating mineral deposits in a cost-effective manner which may minimise the need for workers to be exposed to harsh climates and conditions. Despite this, I believe that the complex and overprinted nature of many mineral systems may continue to require equally complex geological knowledge and interpretation skills, especially as we search for more difficult to find deposits.