

Our Member Spotlight is defying all covid restrictions and travelling up the eastern coast of Australia to Maitland where we meet **Steph Hawkins**, a graduate at the Geological Survey of New South Wales.



Photo: Out in the field - Steph Hawkins collecting ground magnetics over dykes near Oberon, NSW.

1. **What is your current role?**

I am a graduate geoscientist with the Geological Survey of New South Wales in their Maitland office. As a grad, I get to rotate through all of the sections and do a bit of everything. In the geophysics sphere, I've participated in the AusLAMP data collection with Geoscience Australia. I spent a week and a half travelling from Newcastle to Canberra to Cobar, Tilpa, Bourke, Nynga, Coonamble and back to Maitland, collecting and deploying the magnetotellurics equipment. I've also been assisting with the interpretation of the AEM survey flown over the Cobar MinEx CRC area.

2. If you weren't a geophysicist what would you be?

An archaeologist. I also have an ancient history degree that I completed alongside my science degree. I've been fascinated by science and history for as long as I can remember, so was one of the ways I could have combined the two passions. I watched a lot of Time Team (hosted by Tony Robinson) as I was growing up and finding what was buried underground from thousands of years ago sounds like so much fun. You can also apply a lot of science, especially geoscience, to archaeology too! Including age dating and material provenance.

3. What reaction do you mostly get when you tell someone that you are a geophysicist?

A what? / What's that? / Oh, so you're really good at maths? / You must be really smart then / Rocks? You work with rocks? / Do you work in a mine?

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

No. It may change parts of my job quite significantly. We'll always need the human side, to quantify the results that AI generates for us. We will need people to fix and maintain the AI and teach it all the things we want it to find.

5. What's your most treasured textbook?

Geophysics for the Mineral Exploration Geoscientist by Dentith and Mudge. It just covers everything that I've ever needed.

6. Your funniest or worst field memory?

Whilst doing fieldwork for my Masters, there were times where it was a hilarious, constant battle to stop the sheep on the farm from eating the tape measures we were using. I remember turning around and just being completely surrounded by sheep. Avoiding cow pats was another funny part of the fieldwork, you could be guaranteed the only place they'd be was exactly where I needed to take a magnetic reading.

7. What aspect of geophysics do you enjoy most?

I enjoy that I am always learning and that there is so much to learn about geophysics. There is always something new and technologies are always changing. We are getting better resolution data or more computer power to process previously collected data. It's exciting seeing machine learning and more data science being worked in all geoscience.

8. Where was your best sunrise/sunset location?

Best sunset on the London Eye in the middle of summer, after a classic English rainy day. The sun had come out for the evening and setting amongst the clouds was spectacular and the view from the top of the London Eye meant all the buildings didn't affect the view of the horizon.

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

Continue to embrace social media - it's the way many people get information these days. Short videos, memes, gifs, all the "millennial" thing, this is a key way to spread information these days. It allows people to relate to without feeling like they need to invest half a day to understand the content.

10. Tell us about your best field meal?

Not an entire meal, but I will never go into the field without a thermos ever again. The first time I took a thermos full of hot tea out on a field trip was life-changing. From tea or coffee, to soup or instant noodles, it is one of those home comforts when in whatever weather conditions field work chucks at you.