Bert De Waele

[AEGC 2023]

1. Do you want to share some interesting stories behind what you will present in AEGC 2023?

I'll be presenting on Sediment Hosted Copper, which is a mineralisation style I got exposed to very early in my career working in Zambia. Most of my work at that time was concentrated on mapping the basement to the Central African Copperbelt, but I remember vividly visiting some of the World Class mines and deposits during that time. After leaving Zambia in the early 2000s and working on a variety of other terranes, I seem to have come full circle now, working on developing projects in the Central African Copperbelt and one of the other SHC terranes, the Zhezkazgan Basin in Kazakhstan.

2. Is this your first in-person conference since covid? What are your expectations for this conference?

No, I co-organised AIG's Structural Geology and Resources conference in Kalgoorlie in 2022, which was one of the first face-to-face conferences in Earth Sciences in Australia. AEGC promises to be a great conference to catch up with colleagues again and learn what's been going on in the past several years.

[General questions]

3. For how long have you been a geoscientist/geophysicist? What do you enjoy most about being a geophysicist?

I started as a Structural Mapping Geologist in 1992 getting my teeth cut in Central Africa. Since then, I've continued on the path of Structural Geology and Tectonics, in the last 15 years or so applying those skills more directly to finding mineral deposits. I love the field work and working with team members in other jurisdictions, especially in Africa.

Bert is measuring structure in adits in the Philippines

4. What is a challenge you have overcome and how did you do so?

When I made the shift from a more academic, structural geology/tectonics career to the field of Applied Earth Sciences and, in particular, the Minerals Industry, I had to quickly recalibrate my thought processes to be an effective explorer. I do believe that my regional tectonic background gives me an edge when it comes to Project Generation work, but I find myself reading a lot more pure mineral economic studies and thinking how they may give me insights into the regional aspects of exploration, which often is a challenge.

5. What is your most memorable field trip experience? (e.g., best field meal? Your best sunrise/sunset location? Funniest or worst field memory?).

So may field trips to choose from. So far, my mapping work across Madagascar with the British Geological Survey has been a highlight. It involved working with a great team of Malagasy geologists and support staff, doing multiple-week long traverses across the most inaccessible country imaginable. Great memories.

6. Do you have any presentation tips? This may help our presenters at AEGC 2023

I think everyone has their own style. Mine is to know the presentation material well enough that when presenting it, it feels natural. My slides often don't have much text in it, as I prefer presenting ideas in diagrams or maps. All I then need to do is take a look at the slide and talk around it. Simple!

Bert in Mongolia on a tungsten project

7. What is a challenge that you recognise the geoscience community faces today, and how do you see us overcoming it??

The most pressing issue is the lack of geoscience graduates coming out of Universities, not only in Australia, but globally (apart from China).

Compounding the problem is the decline of quality undergrad education, leaving a lot of gaps to be filled by employers to ensure their new staff gets the skills need to do the work.

I think that Governments will need to wake up and recognise the pressing need of the skills that will be needed to feed the changing and growing economy – and geosciences most definitely form part of that.

8. How can geoscience communities such as AIG, PESA, ASEG etc, better communicate how their fields can benefit the wider community?

There are good programs to promote a Geoscience pathway in Primary and Secondary Schools, which can always use more funding.
I also think that a more proactive attitude towards Climate Change Mitigation would help the sector, as public opinion (and science) most definitely demands a more proactive approach. This means publicly acknowledging the culpability of our dependence on fossil fuels over all that time, and our support for a quick and effective move away from fossil fuels.

9. Given the opportunity to receive extra mentoring, would you choose to be mentored in your chosen career, technical science or how to communicate the benefits of exploration geoscience to wider community?

Probably the latter. I completed the Geologize course, which helped a bit, but it's always good to improve on my communication skills with regards to my profession.

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

ML and AI will have a role to play, but it will be quite some time before human input will no longer be required (if at all). I do think that Geoscience

is lagging behind in AI/ML, and that it is time to import some of these tools into our sector.