

Copper and Gold for Remote Communities

Helen Degeling is a geologist, who went to the University of Sydney for her Bachelor of Science degree and now has a strong academic background, with a PhD from the Australian National University and 3 years' research experience in geochemistry. She finished her Bachelor of Science degree in 1997 and her PhD in 2002. She was a geologist once she had finished her Bachelor of Science degree, but decided to go on and do further study because she was passionate about the science and wanted to learn more and see how far she could push herself academically.



In Year 11, her college offered geology, biology, chemistry and a few other scientific studies.

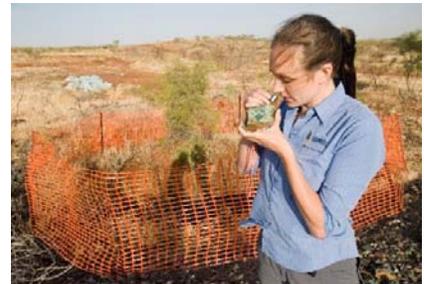
Helen chose geology and developed an interest she might never had; because before Year 11, she was very good at science, but, didn't know what she wanted to do when she was older. Helen quoted "I had enjoyed science in high school but never thought it would lead me to where I am today."

Helen Degeling has been a geologist since 1997, but she has done different types of work in geology. She did researching in geology, and then moved into industry and worked for companies such as, Range River Gold who had a small gold mine in the Pilbara in WA, then afterwards she worked for a consulting company in Melbourne, then she worked for MM Mining and CST Lady Annie in Mt Isa, both exploring for copper. In Jindabyne she works for Alt Resources who have a small gold project near Dalgety. She also has her own consulting company (HD Geological Services) with clients throughout NSW, WA, Qld and South America (Peru and Chile), all exploring for a variety of commodities including gold, copper, zinc and silver.

Helen now does this work because she loves to understand how the Earth works, and she likes having a job where she doesn't have to be in an office all the time. Geology has taken her to lots of places all over the world. These are just a few reasons why she does this work.

Her favourite aspect of her work of field is the interesting people that she has met, and the places she has been able to visit. It is also being able to look at a mountain and know that those rocks used to be at the bottom of the ocean before where they are now.

Each day Helen looks at geochemical data to understand where gold and copper might be found near Dalgety. She is understanding how rocks form and the processes that made them. That involves understanding plate tectonics at a global and planetary scale as well as, at a fine microscopic scale. It includes physics, chemistry and biology. Occasionally, she does consultancy as well, so some of her clients ask her to look at the isotopic composition of their rocks to see how old they are. She specialises in GIS, data compilation and analysis, report writing and exploration planning.



In her work she needs to be able to look at and understand large and varied data sets to make interpretations about the subvert that is going on in the ground that no one can see. She needs a lot of imagination to try and figure out what is under the ground, and then to find evidence to prove where copper and gold is found because she is saying stuff nobody can actually see.

Helen's role in her field of work is an Exploration manager for the company in Jindabyne and to be a consultant.

What Helen wants to achieve while doing her work, is that one day she can build her own consultant company to the point where her services are in demand all around the world.

Helen says that "Understanding how the natural world works is what I enjoy the most about being a scientist." She then continues to say "What I enjoy least about being a scientist is all the stuff that isn't science. In more senior roles there is a lot of bureaucracy."

Geology is an important scientific study and work because the products of mining are very important to our country and local communities. It also brings work to remote communities as they are trying to find copper and gold around the community. Helen says that "This science benefits every person in the country that uses our products of mining." This includes glass, ceramic, even plastic and everything that is made from metal. This is also the significance that it has on the world. It has allowed advancing of technology and it also brings a lot of work to remote communities.