

VIEWS

Not For the Faint-Hearted

SEG provides tremendous support to students to become educated and trained in mining-related geological disciplines. At the same time, as we all know, periodic and rapid scaling-up and scaling-down of exploration expenditure and effort have characterized the mining industry over the past 50 years. During a scaling-down period, when there is a sudden and sharp industry downturn, budgets are cut and many geologists and related geosciences professionals who have a job become unemployed or underemployed, and many new graduates cannot find work in their chosen career. There is nothing new in this. It is an unpleasant fact of life in the mining industry; however, this knowledge is cold comfort to those SEG members who are, or will become, casualties of the present downturn.

Corporate memory is fleeting; otherwise, it would guide the present crop of mining industry leaders towards taking a more enlightened and self-interested approach, given the frequency with which the present situation re-occurs. In an ideal world, the corporate management of mining companies would realize and address the potentially negative future effects of the personnel actions they are presently taking in their exploration teams to accommodate the most recent downturn, both for their company and the industry as a whole. Because of their actions, it is the young (and not so young) exploration geologist, in the main, who pays the price with a career interrupted, ended, or, possibly worse, never even started.

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The companies will pay the price of missed opportunity to sustain the crucial human resources that are necessary to create wealth for shareholders. As shown by their actions, many mining company managements appear oblivious to this obvious truth.

I was recently posed a question: how does an international scientific society like the SEG, with over 1,000 student members around the world, address career opportunities in mineral exploration, given the increasingly wide swings in what is known to be a cyclic industry?

I really don't know how to answer this question. As I come from the old school that tells it like it is, I don't see any alternative other than to state the obvious—which is that there will be a lot of underemployment and unemployment among exploration professionals until the inevitable cyclic upswing begins the next—regrettably unsustainable—boom part of the cycle. Having said that, however, there are observations that can be made that may and should encourage more dedicated students—and now-unemployed geologists who entered the mineral industry in the past few years—to seek to stay the course and ride out the present downturn.

I recently gave talks to SEG student chapters in Southampton and Leicester in England where, over a beer with the students after the talks, the question of what to do when their studies were completed came up. I'm loath to offer advice, but I did suggest that if they truly believe their destiny lies with applied geology and exploration, in particular, they should consider the following.

First, it is crucially important to establish and maintain a link with the mining industry, for the very simple and practical reasons that (a) the present downturn almost certainly will be temporary and (b) there inevitably will be a shortage of applied geologists in exploration, mining, and related disciplines after the cycle turns. Barring a dramatic and unanticipated reduction in demand for mineral commodities, this shortage has to develop over the coming decade as the demographic

cluster of geologists in the 50 to 60+ years age bracket retire from the industry. I don't have the numbers on this to quote, but I'm certain that there are not enough younger geologists available to adequately replace these seniors as they retire.

As regards how many exploration geologists will become unemployed or underemployed, the market inevitably will determine this. Figures I have seen for Australia suggest unemployment with exploration geologists is now at least 15%, but unemployment plus underemployment is affecting more than 30% of those who were previously in the workforce. Many of these geologists, if they have the necessary skills to change career, almost certainly will do so and quite likely will be lost to the mining industry forever. As for the geologists who are retiring, they will also retire the knowledge and experience gained over decades, which the industry can sorely afford to lose, given the increasing difficulty of discovering an orebody.

Second, it doesn't matter how this link to the mining industry is established. Establishing a link is important because it will provide evidence to a future possible employer of commitment to the industry; in addition, the geologist will have incentive to retain knowledge, which easily can be lost if one is out of the industry for an extended period. Unfortunately, it is unlikely the link will be established as an exploration geologist because these are the first people to be laid off in every cyclic downturn, due to exploration dollars being seen as discretionary spending by management. However, since most mines will continue to operate and new mines will open, there will be some employment opportunities in mining; someone who sees their future in exploration should seek to find work as a mine geologist, as a form of transitional employment. If employment can't be found as a mine geologist, then



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seek employment as a field or technical assistant in a mine—even if it is only as a sampler.

In the mid-1980s, when there was one of the periodic downturns in exploration, I took on young geologists as field assistants so as to provide them with this link. They weren't expected to work as geologists, but the experience they gained working as samplers provided a useful skill and the company benefited from having samplers with geological training; some we took on as geologists when the industry picked up. Gaining mining experience for a few years is a distinct advantage to an exploration geologist, even if it is only as a sampler in a mine. Exploration is about discovering orebodies and part of the knowledge required to do this has to do with knowing what is required for mineralization to become ore. The only real place to learn this is in a mine.

Third, and finally, two of the attributes of a successful exploration geologist are resourcefulness and the ability to overcome what are often demoralizing challenges. Hard as it may sound, the apparent hopelessness of the present employment situation could and should be viewed as an opportunity to rise above this by demonstrating these qualities. To do so requires great optimism and the ability to persist when all seems lost, again admirable traits for an exploration geologist.

While these are nothing more than a whole lot of words that are easy to write when it is someone else with the problem, I hope this note is of some use and may encourage some of you who are contemplating a change of career to try to stay the course. Having said that, I think it is important to understand that exploration is not a career for the faint-hearted or for those who cannot

survive hardship; it challenges the best of us and it is worthwhile seriously questioning your commitment at the start, rather than part way through your career. If this causes you to abandon your dream of a career in exploration, you may find later on that the present downturn was a blessing in disguise.

My closing words are for those exploration geologists in leadership and management roles. Where possible, I would strongly encourage you to try to provide young geologists with some sort of link into the industry, either within your exploration team or elsewhere within your company. Eventually, conditions will improve and exploration geologists will be in demand once more. The geologist you provide with work as a field assistant, or in some other role, may be your next ore finder. 