

This week, the member spotlight shines on one who's ASEG membership years has nearly totaled 50 years! Welcome Doug Roberts.



Photo: Coongie Lakes Seismic scouting (Cooper Basin) 1980 L-R Jim Bowering, Danny Burns, Doug Roberts, Bill Fawcett. (Photo courtesy of Doug Roberts)

1. What is your current role?

Retired for 4 years. Last role was manager at Beach Energy responsible for seismic surveys, cultural heritage and landholder relations.

2. For how long have you been a geophysicist?

Since 1971 graduating from University of Adelaide in Geophysics. Started out in 1972 as a geological field assistant during an industry downturn.

3. What do you like most about being a geophysicist?

Problem solving and travel with community interactions.

4. What's one thing that we wouldn't know about you?

I have just started making sourdough bread.

5. Tell us about your best field meal?

At Moomba camp in 1978 I was amazed by the choice and quality of the meals in the desert.

6. Where was your best sunrise/sunset location?

Lake Tanganyika in Tanzania during transition zone seismic survey in 2014.



Photo: Lake Tanganyika Sunset (courtesy of Doug Roberts)

7. What are you reading at the moment?

The Golden Maze by Richard Fidler (About Prague)

8. What made you decide to be a geophysicist?

Had aptitude and liking for science and chose geology as a random fourth first year subject at university. Discovered geology and physics went together in

geophysics and enjoyed the people and personalities that were attracted to that profession.

9. What's one thing you wish someone had told you when you were at university?

Be prepared for ups and downs in the industry and be prepared to do interim other jobs.

10. Your funniest or worst field memory?

Maybe both - In the Flinders Ranges during a shallow refraction seismic survey reversing a vehicle over a half full box of dynamite. Luckily no consequences.

11. Your most respected geophysicist?

The late Professor David Boyd who was my supervisor and mentor at University of Adelaide. He was a great role model in working on solving problems.

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

We had a landowner who refused access due to minor damage to his carrot crop by the Vibroseis trucks. We managed to undershoot the area with minimal effect on quality by using very long extension seismic cables.

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

The biggest challenge in the petroleum exploration industry is the increasing negative perception of the industry by the community. An orderly transition to renewable energy supplies is being short cut by vocal groups. This has led to the cleaner option of natural gas (than coal) being demonised.

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

It usually takes a bit of explaining. I often start by saying I am in oil and gas exploration. Reactions are mixed but more often negative. Past this point people are usually quite interested in the profession.

15. When you are asked "What's a geophysicist??" or "What does a geophysicist do?" what is your stock answer?

My stock answer is to explain that it is based on geology which most understand and then that geophysicists use physics to detect the hidden geology below the ground and away from drill holes.

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

I think it is good to outreach to secondary students in a similar way as has been achieved at conferences. It is very difficult for industry based bodies to overcome the negative community perceptions but we should highlight the benefits and point out factual errors of opponents and extremists. It's also good to highlight other applications of geophysics in environmental, cultural and research areas.

17. Where do you think exploration geophysics will head in the next 10-15 years?

The trend is towards greater community involvement. Years ago a project was about 80% geophysics and 20% preparation and ancillary approvals. It's now the other way around i.e. 20% geophysics and 80% extras including approvals, landholder relations, cultural heritage, environmental management and rehabilitation. We will need to overcome additional resistance and even hostility especially related to fossil fuel exploration by community groups.

18. Given a choice, would you prefer extra mentoring on the science, your career or the how to handle/explain exploration geophysics and its benefits to the community?

All of those are important but it's becoming more important to be able to communicate our industry and activities to the community.

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

I am sure humans will always be needed but there will also be increasing reliance on automation of processes and also machine learning to derive the maximum information from complex data.



Pictured: Transition zone seismic on Lake Tanganyika (Tanzania) 2014 L-R BGP Party Manager, Marcus Jacob, Doug Roberts, BGP seismologist (Photo courtesy of Doug Roberts)