

## Vale Marion Elizabeth Rose (1947–2017)



Marion Rose (*nee* Tom), a pioneering female geophysicist, passed away in July this year after a difficult few months of ill health. Marion was born in 1947 into a family with a strong rural background. She grew up on a farm in country Victoria near the town of Romsey, north of Melbourne, where she had a happy childhood with three sisters and a brother and an extended family of cousins. Marion's mother, Jean Marion Tom, was a scientist in her own right, having graduated with a MSc in physiology from Melbourne University in 1944. She was a great inspiration and role model in Marion's life, an exceptional woman who for 23 years of service to the CWA and women in the community, was recognised with an Order of Australia in 1993. Sadly, Marion's beloved mother passed away during the time of Marion's own health challenges.

Marion attended the PLC boarding school in East Burwood, Melbourne from the age of 11. She completed her matriculation in 1965 with a focus on mathematics and science, perhaps somewhat unusual for a woman of her generation. She went on to attend the University of Melbourne where she studied science and majored in geophysics and mathematics, studying under Colin Kerr-Grant, Lindsay Thomas and Garry Gibson.

One of Marion's ancestors from the Gold Rush days was William Tom who pioneered and gave his name to the original Australian version of the gold cradle (Tom's cradle). Many also claim that William Tom and J. H. A. Lister made the original discovery on the Ophir goldfield for which John Hargreaves

took credit. Not surprisingly then, over a century later, Marion chose mineral exploration for her career in science.

In 1969 Marion joined BHP as a geophysicist in the Exploration Department, based in Melbourne. This was a time during the 60s 'nickel boom' when geophysics was flavour of the month and geophysicists were a somewhat rare breed, to say nothing of a female geophysicist. It was in the 'analogue' days before PCs, mobile phones and advanced communication. Nevertheless, Marion was undeterred and enjoyed rolling up her sleeves and going into the field in a day when the only contact with the outside world was on daily radio skeds. In those days it was a rare thing to see women in the exploration group participating in the male dominated world of field work, nevertheless, Marion and one or two of her other female colleagues in the exploration group, pioneered the way for the many women who joined the minerals exploration world in later years.

Marion was trained in classical geophysics, in the days before coloured images. She was comfortable with profiles and contour maps and developed a real skill interpreting magnetics and gravity maps and making observations about significant relationships in them. She was also excellent at compiling geophysical data sets and turning them into an exploration story.

When the Olympic Dam deposit was discovered in the early 1970s it caused a great flurry of geological head scratching throughout the BHP exploration group about what sort of deposit it was. Marion

ignored the geological musings about 'the model'. She assembled and interpreted the relevant regional aeromagnetic and gravity data and made several observations about the setting of deposit that led to the identification of new targets on open ground.

In the early 1970s Marion met and married her husband Howard, a financial manager with BHP Melbourne.

After 10 years with the BHP Minerals Exploration group, Marion moved into BHP Petroleum where she was able to bring her potential field interpretation skills to a group dominated by seismic geophysicists. It is testament to her that she became a valued member of the team.

In 1992 Marion re-joined the BHP Minerals group when she moved to the San Francisco based head office along with her husband Howard. On her return to Melbourne, at the end of the overseas posting, Marion joined the Falcon airborne gravity gradiometer deployment group as an interpreter. Her well-honed skills in the interpretation of potential field data was a valuable asset and she was a mentor to the younger geophysicists working in the Falcon team at that time. The Falcon team was nominated and awarded the ASEG Graham Sands Award in 2001.

Marion retired from BHP and geophysics about 10 years ago to enjoy the next stage of her life with her husband Howard, their daughter Christine and son Alistair and their grandchildren. Even so, as a longtime member of the ASEG, she still attended the occasional local Melbourne branch meetings and served the ASEG as a reviewer for *Exploration Geophysics*.

In retirement Marion enjoyed a wide range of interests including catching up with her friends, photography and compiling her family history. She developed a passion for international travel as a young woman when she travelled to South East Asia, and she and Howard travelled extensively throughout their life together. During their travels they visited north Africa, England, South America (the highlight trip for her) and other places. They were both looking forward to further travelling in the future.

Marion was a highly competent geophysicist, however those who knew her and worked with her know that she

was much more than that. She was very kind, compassionate and friendly and always had time to help out her work colleagues. She valued her family and friends and was looking forward to seeing her grandchildren grow up. She loved to watch Essendon play a good game of footy and was an avid reader with wide interests.

Marion was quiet and determined and managed to get her message through in the nicest possible way, a consummate quiet achiever. In a world that, in her early days in exploration, was dominated by men, she never apologised for being a woman. She would probably be embarrassed to hear herself referred to as a pioneer. She was just doing what she loved both professionally and personally. She will remain an inspiration for women in mining and exploration and will be fondly remembered by all whose lives she touched.

*Phil Harman, Geoff Pettifer, Terry Lee, Lindsay Thomas, Asmita Mahanta and Cory Williams*

## AGU Medal for Brian Kennett



Brian Kennett, Emeritus Professor of Seismology at the Research School of Earth Sciences at the ANU, will be presented with the Inge Lehmann Medal at the December (Fall) meeting of American Geophysical Union. The Inge Lehmann Medal recognises 'outstanding contributions to the understanding of the structure, composition, and dynamics of the Earth's mantle and core'.

Congratulations Brian!

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## Ceremony to celebrate ASEG Gold Medal award to Richard Lane



The ACT Branch of the ASEG celebrated Richard Lane's ASEG Gold Medal award in September 2017.

The ASEG Gold Medal is awarded from time to time for exceptional and highly distinguished contributions to the science and practice of geophysics by a Member, resulting in wide recognition within the geoscientific community. In June the ASEG announced the 2017 awardee was Richard Lane from Geoscience Australia. The award recognises Richard's significant and distinguished contributions to the profession of geophysics in Australia and overseas through his practical research and contributions to the understanding and application of geophysical methods in both mining and petroleum, for his frequent contributions at conferences both in Australia and overseas, and through his outstanding professional work in applied geophysics for over 30 years.

The President of the ASEG, Andrea Rutley, the current Geoscience Australia CEO; Dr James Johnson, past Geoscience Australia CEOs; Dr Neil Williams and Dr Chris Pigram, Bob Smith from

Greenfields Geophysics and Dr Ted Tyne were some of the many distinguished guests to attend the award ceremony.

ASEG President Elect, Marina Costelloe, local Branch President, James Goodwin, Dr James Johnson and Bob Smith gave wonderful speeches. Thank you to all

Members and friends of Richard and Leigha Lane who sent well wishes, they were included in a PowerPoint presentation that ran throughout the ceremony.

Congratulations Richard – from us, and from them!



**CONGRATULATIONS RICHARD LANE, ASEG GOLD MEDALLIST!**  
(Melbourne Geophysical G.O.L.F.ers group)