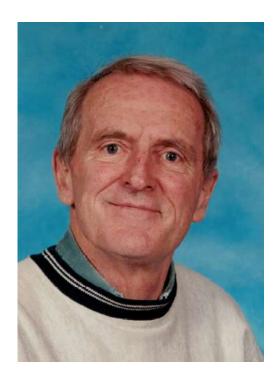
Vale Dave Roots.



Dave Roots passed away on 15th December, 2021.

Many in SMEDG will remember him as a geology lecturer at Macquarie University and part time tutor at UTS. However, this simple description does not do justice to the life of an unquestionably amazing man. Dave was a frequent attendee at SMEDG meetings and gave a SMEDG talk in 2004 on the silver mineralisation at Yerranderie, southwest of Sydney. This was undoubtedly his favourite geological environment and I believe was his study area for a Masters degree at MU.

Dave left school early, taking his dyslexia with him. He took up a trade and qualified as an electrical fitter in the early 1950's having started his apprenticeship in Sydney, and training at the then Broadway Technical College, which is now UTS. He didn't consider himself to be academic, but rather more practical. He subsequently completed an Electrical Engineering Diploma and worked in the Physics Department of UNSW alongside Professor Dan Haneman. He achieved his Diploma and continued his education until he had achieved a Bachelor of Science with Honours in Geology in 1970. He started work at Macquarie Uni shortly thereafter and progressed to senior lecturer.

For many years he indulged his passion for rock climbing and was arguably the best rock climber in Australia. In my rock climbing days I was lucky to climb a 'classic' climb known as the Mantleshelf. Basically this involved crossing the bridge onto the first of the three sisters and turn right. Dave was the first person to climb this in 1953 (https://www.thecrag.com/en/climbing/australia/blue-mountains/the-three-sisters/route/15318349).

Dave led a group of senior boy scouts (including Dick Smith) on an adventure to attempt the first ascent of Ball's Pyramid south of Lord Howe Island. Although the challenge was unsuccessful, Dave noted the shell of an "extinct" insect, the Lord Howe Phasmid. He

realised this for what it was and took the sample back with him for identification. The rediscovery of this supposedly extinct insect by Dave is well documented in the Lord Howe museum.

David's daughter Philippa adds: Regarding the Balls Pyramid expedition, he went to the Pyramid in 1964 with his best mate Rick Higgins to attempt the climb but didn't make it on the day due to the Islanders having reservations regarding safety. He returned in November 64 with the 1st Roseville Rover Scouts, including Dick Smith and Rick Higgins and others, with permission! That was the climb during which he re-discovered the Phasmid.

Excelling at his trade Dave soon was working in the physics departments of UNSW and MU. I first met him as lecturer in a MU Physics course on "Workshop Practice" in 1969. He taught me to weld, use a lathe etc. Shortly thereafter I was reintroduced to him as lifetime patron of the MU Mountaineering Society.

Dave's love of outdoor adventure and technical excellence led him to complete his schooling and pursue a career in geology. He was particularly interested in the Yerranderie / Murruin Creek / Wombeyan area, southwest of Sydney. He led many undergraduate geological field trips to this area and also many adventure trips for those of us interested in bushwalking, rock climbing and caving. For those of us interested in both geology and adventure this was a double delight.

Dave continued his academic career to PhD level with a thesis on magnetic quiet zones and their relationship to oil exploration. He was particularly interested in the similarities between Bass Strait and the Gulf of Mexico. He published many papers in geology and a few in physics.

In latter days he continued his research in geology including studies of the makeup of the volcanics of Lord Howe and Ball's Pyramid which included a re-enactment of the boy scout trip to Ball's Pyramid (on Dick Smith's yacht).

Dave was a man with a mighty ego and quite justifiably enjoyed talking about his achievements. I have only briefly touched on those parts of Dave's life in which I had a small part. I am sure that the bits I don't know about were equally fascinating and almost superhuman. I personally am in awe of his achievements and will miss the long conversations about geology, geophysics, adventure and Lord Howe Island. Good-bye Dave and thanks.

Steve Collins

Steve, although I only knew Dave fleetingly, crossing paths a few times over the years, you have captured the spirit of the man in a very thoughtful and comprehensive manner. My clear memory of him was his unbounding enthusiasm and twinkling eyes.

I had forgotten that he was on the Ball's Pyramid expedition. Also a main player on that adventure was my inspirational Senior Scouts leader at 1st Lindfield – David Kingsford Smith ("DKS"). A few years ago we had dinner at Larry and Jane Barron's house, and both Dick and DKS were there, swapping stories about the Ball's Pyramid trip.

Russell Meares

