## THE WATERHOUSE CLUB

## "GRANITE AND GLACIERS EXPEDITION" Sunday 8th April 2018 – 9.30 am to 3.00pm

The Club's one-day expeditions have proven to be very popular and this expedition was no exception, having been booked out within a week of the issue of invitations.

Adjunct Professor Jim Jago (Honorary Research Associate South Australian Museum), a long standing supporter of the Waterhouse Club, led us on a geological investigation through The Bluff, Victor Harbour, and Port Elliot. Jim was supported by Club Member, Keith Yates, an exploration and mining geologist who shared his local knowledge of the area

Our day began at Glacier Rock, about half way between Yankalilla and Victor Harbor. Glacier Rock is a remarkable piece of geological history, which is estimated to be over 250 million years old. It is one of the world's largest exposed glacial pavements and features a very large granite boulder, called an erratic, lodged in the river bank carried here by ice from Granite Island (about 20km away). An impressive demonstration of the forces of nature!

After morning tea at Kent Reserve along the foreshore of Encounter bay, Jim and Keith took us back in time and space at various locations along the geological trail to almost 520 million years ago. The granites formed as molten intrusions 5-10 km below the surface of the Earth where they intruded into the ancient siltstones and sandstones of the Kanmantoo Group that later became the Fleurieu Peninsula. We heard of their journey to the surface of the land, their sculpture by glaciers 250-280 million years ago and ultimate exposure by subsequent climatic events.

Intriguing insights into the origins of the stunning landscapes of the southern Fleurieu Peninsula were revealed about the geology of the Kanmantoo Group deposited into a rapidly subsiding ocean basin as fine grained sand and silt eroded from large land masses to the west and south in the Cambrian Period about 520 million years ago.<sup>1</sup>

After our morning tutorials we left Victor Harbor for Thunderbird Vineyards *No 58 Café* just north of Pt Elliott township. A delightful lunch was served with local wines and we were well cared for by the café staff. It was clear that members also enjoyed the social interaction during lunch.

After lunch we made our way to the Pt Elliot coastline where Jim explained the evidence of several distinctly different geological processes along the foreshore. This was where our Expedition officially ended although some went on to visit *The Strand Gallery* located in the recently renovated 100 year old Port Elliot Post Office building. The works of local artists are exhibited including those of owners and club members, Ron Langman and Sonya Hender.

Expedition Leaders, Margie and Don Heylen, received very positive feedback about the format and content of the expedition and concluded that this is definitely an expedition that could feature on a future Club program.

"Speaking as one of the happy members today at Granite and Glaciers, I would like to thank all involved ever so much for that most informative and smoothly flowing day. I am now brimming with snippets on both topics to amaze my friends. I spent my summer childhood on that coast and only now, 70 years later am better informed!"

<sup>&</sup>lt;sup>1</sup> Geological Society of Australia, South Australian Division, Victor Harbor Geological Trail, 2012