

EDIACARAN FOSSILS AND NORTHERN FLINDERS RANGES GEOLOGICAL TRAIL EXPEDITION

Monday 22 to Thursday 25 August 2022



24 club members and two South Australian Museum Scientists, Associate Professor Victor Gostin and Associate Professor Diego Garcia-Bellido, met in Parachilna.

The goals of this expedition were to introduce the expeditioners to the Flinders Ranges Geological trail, including the stromatolites and the Golden Spike, and the Nilpena Fossil site, which is an area of international significance.

The WHC expeditioners started arriving from about 2 PM on Monday and at about 5:30 PM, pre-dinner drinks were enjoyed in typical WHC style, with fellow expeditioners mixing and getting to know each other as they spilled outside to enjoy the sunset.

Following dinner that evening, Diego gave a very interesting and informative introduction of how the geological processes over the past many millions of years had developed what we could see over the next two days. He also told us how the various fossil areas had been nominated for World Heritage Classification, and how that had been instrumental in the SA Government allocating funding for construction and development of better facilities in the area, anticipating the world-wide attention that a successful nomination would attract to it, and would see increased numbers of people visiting the area.

We all travelled in convoy to the Brachina Gorge area. Due to other vehicles parked with many people looking for the wallabies, there were none to be seen and so we continued on our way east.

The new car park just above the Stromatolites, gives good access to the them. Our next stop was on the track leading to the Trezona campsite, but because we were here later than we had planned, the consensus of the expeditioners (via 2-way radio) was that we should leave lunch until after the GSSP stop. We proceeded along the track marked as being for emergency vehicles only, to the car park being developed for the GSSP access.

The Trezona campsite car parking area was ideal for the lunch break with the packed lunches that had been prepared for us by the hotel staff and the hot drinks people had bought with them. We saw the brown treecreepers and many rock wallabies. We recommended, by radio, that people stop and take any photos from within the vehicles as we moved slowly past giving everyone a good view.

The trip to the Bunyeroo Car Park and Trail-head and walk along the creek bed to the Acraman ejecta remnant went without a problem, and when walking back to the cars, Andrew Black spotted a Peregrine Falcon in a dead tree at a distance. This took some finding and delayed our drive to the Brachina road. Cars were parked just off the road to see the evidence of worm burrows in the strata before continuing to the Teamsters Campsite where we had afternoon tea.

That night after dinner, we outlined what was planned for the following day and who was allocated to which vehicles for visiting the fossil sites. Vic then took the microphone and very cleverly sharing his knowledge, revisited all we had seen and learnt that day.

On Wednesday morning, Alan Harbour and his son, Anakin, joined us at the Prairie Hotel for a coffee as we finished our breakfast. We then set out in the four-wheel-drive vehicles, and drove to the car park at the Nilpena Ediacara National Park entrance gates for group photos. We all then went with our two allocated groups, with one group boarding the bus for the tour of the Nilpena Park led by Diego and Ross, the other group going off with Alan and Vic through the Ediacaran fossil park. Anakin has found many fossils in the rocks used to build the houses in the Ediacaran mine town and in the general area.

We had lunch that had been prepared at the Prairie Hotel to the Community Hall at the old town of Beltana, and the Beltana Community Organisation had opened the bar for us. Both expedition groups met in the community hall for lunch before swapping to tour the fossil areas the other team had done that morning. Both groups were able to experience the newly completed audio-visual presentation of the formation of the Nilpena and Ediacaran fossils, an unanticipated bonus.

The final evenings scientific talk took the form of an enthusiastic question and answer session with Vic and Diego sharing the microphone to give their answers. Vic described his involvement in the discovery of the Acraman ejector in the Flinders area, and how it came to be that dust and rock fragments ejected from the meteor impact could travel the distance from west of Lake Torrens to the Flinders Ranges. We also sent a book voucher to Alan Harbour on our return home.

As leaders, we valued the expeditioners' enthusiastic participation and sharing of their own areas of expertise, and willingness to help in any way. We also appreciate all the help so willingly given to plan the trip from Tim Tolley, Margie Heylen and Natalie Rollinson.

Gary Sjoberg and Gill Sneddon

9 September 2022