

Monday, July 13th, 2009

After driving to Maree and checking into the Maree Hotel, we drove out the Birdsville Track into the driest area of Australia. Average precipitation is recorded to be 100mm or 10 cm, compared to the sample sites in Arkaroola, which averages 200mm of rain per year.

Several stops were made to exam geologic aspects of the countryside, including the discovery of major gypsum deposits. Many of the thin crystals of gypsum enabled cyanobacteria to form communities.

Two samples sites were selected. The first sample site exhibited a very dark, almost black surface from a distance. Upon closer examination the site proved to be covered with small iron pieces averaging 1cmx1cmx 02mm, as well as containing many larger pieces of silcrete (silicon rock), and some gypsum outcrops.

The second site was spotted while around the first sample site and appeared to be a playa, with different dominant coloration – more red than black. The soil looked as if it had a crust or hard surface, however, the surface broke readily with disturbance, and was “cushiony”. The rock pavement consisted of approximately the same size of iron pebbles, but had a much lower concentration of the rock. There was minimal gypsum, but many silcrete rocks of approximately 4cmx6cmx3cm.

A 10x10m² square was established at both sights, then 2 sample bags were filled. The soil temperature was taken as well as dry pH.