

Sinkhole / Cenote Field Trips – Mount Gambier to the Coast

Ian Lewis

The Gambier Karst Province is more-or-less centred around the volcano and City of Mount Gambier. The better karst pavement exposures and large cenotes are to the southeast and southwest of the mountain, extending to the coastline and the region's biggest karst discharge spring at Ewens Ponds. Altogether, the limestone region forms approximately 30% of the recently UNESCO-declared Kanawinka Global Geopark which also covers the "new volcanics" region across western Victoria and the Mount Gambier and Mount Burr volcanic complexes in South Australia.

There is so much to see and we only had a day to show it! Rather than trying to cover everything, two separate day tours commenced at Mount Gambier and ended at Ewens Ponds on the coast, taking our speleo-guests via opposite paths through the karst field (see diagram) down the groundwater catchment and across these landscape components –

- stranded pleistocene dune ranges which were once former coastlines
- pine forests and irrigated farmland
- cenote locations
- remnant native vegetation and areas of clearance
- karst plain and soil stripping
- groundwater, diving and pollution sites
- quarrying and gas wells
- volcanic intrusions
- the coastal karst springs

Tour 1 – the south-western route

Moorak Quarry – Gambier limestone, extensive piping and volcanic soil cover

Burleigh and Caveton stranded dunes

Little Blue Sinkhole – cenote alignments, public access issues, blue-green algae blooms

Gouldens Hole - cut stock access ramp, wall exposures of strata and spongework

The Sisters – double cenote, rubbish dumping issues

Karst pavement - exposure, karren, and microkarst, remnant Stringybark cover

Mt Schank – volcano and crater, interpretive signs, adjacent scoria quarry

Allendale Cave – middle of the road diversion and collapse history

Earls Cave – issues of pollution and dumping directly into the water table

Ewens Ponds – renowned triple doline spring-system with drainage channel cut to the sea

Tour 2 - the south-eastern route

Circuit Sinkhole – large dry doline rehabilitated in a rubbish removal programme

Pine forests and the most westerly Snowgum remnant from past climates

Carba Well – 2500m deep CO₂ reservoir possibly linked to volcanogenic karst processes

Caroline Sinkhole – rehabilitated site with viewing platform and charcoal ledge sites

Hells Hole – giant cenote breaching stranded dune 30m into limestone and dark lake

Kitty Temples Hole – early settlers pub and horse-change site of dubious reputation large-scale pivot irrigation systems drawing from unconfined and deep confined aquifers

Earls Cave – see Tour 1 description

Ewens Ponds – see Tour 1 description

Kevin Mott and Ken Grimes took Tour 1 while Ian Lewis took Tour 2. It was a great enjoyment and privilege to show everyone our sheet karst field with its issues which contrast with eastern state mountain karst mini-regions. Our audience were engaged, appreciative, interested and provided much discussion. And personally, I was delighted to be "trapped" in my ute with Henry Shannon for 4 hours talking about all this non-stop. It was the best way for Henry and I to catch up after too many years!

ASF Gambier Karst Tours

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