

HFNC Excursion to Grange Creek fossil sites on 26 Nov. 1960 & 11 Feb. 1961

Lionel Elmore

26 November 1960: Only 5 members attended this excursion but it proved just as interesting, perhaps more fruitful, than the better attended ones which have been held in the past

It was noted that some erosion had taken place during the heavy winter rains. This was particularly noticeable where the stream breaks through the lava. At this point, beneath the fossilised wood, large pieces of what appeared to be marine-deposited limestone (to be confirmed), were found.

At Locality 6 (on Gill's map of the Grange area) the party unearthed quite a good collection of Balcombian shells, including giant cowries and worm tubes, with a number of shells yet to be identified.

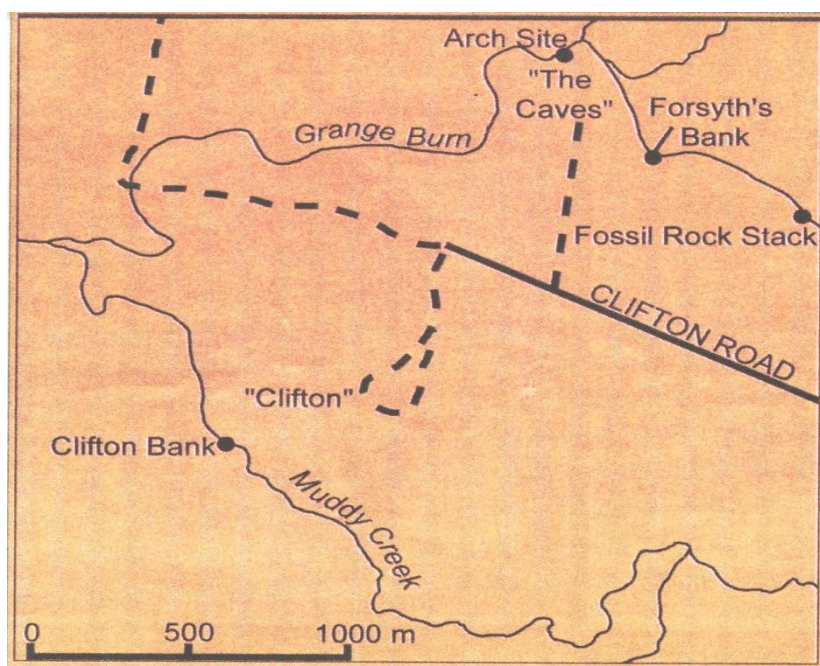
A shark's tooth was not found until the party started to climb the bank, when a tooth (probably *Isurus hastalis*), was dislodged from the Kalimnian bed which is a few feet above the water level.

[Note – Lionel gave a report at the club meeting on 15 Dec. that fossils were collected from Locality 7 on Muddy Creek – it is not clear whether that refers to the fossils collected at Locality 6 on Edmund Gill's map (no map or reference provided).

As a brief background, this area is part of the Otway Basin and about 4.6 mya a flow of basaltic lava covered the mid-Miocene sedimentary plain. A local volcano also contributed ash. The Grange Burn and Muddy Creek cut through the basalt into the sediments below. This occurred at the shoreline of the former ocean, thereby revealing specimens of sharks teeth, whale bones and marine shellfish. Over 150 species of molluscs have been identified at these sites. At slightly higher points on the banks, Celery-top Pine (*Phyllocladus aspleniifolius*) pollen has been found – this species still occurs in Tasmania but not on mainland Australia. These sites are of international significance but they are on private property].

11 February 1961: 18 members and visitors attended this excursion, which was led by Mr Edmond Gill, Curator of Fossils, National Museum of Victoria.

Mr Gill was able to explain some of the features of this area, and described some of the methods used to determine the climate and other conditions which had prevailed during the life-times of the fossils which are to be found in the Grange district.



He also described some work in which he and two assistants had been engaged on the three days prior to the excursion. This had included the finding of remains of giant kangaroo, wombat, echidna, birds and jaws of several native rats.

As much research remained to be done before the results of this work could be published, Mr Gill asked that the matter should not be given publicity, and that members refrain from excavating in the area concerned.