

Newcastle Coast – Tales of Gondwana

Abstract

Newcastle's scenic rocky coastline is made of sedimentary rocks of the Newcastle Coal Measures. The layers of sandstone, conglomerate, shale, coal and tuff you can see today originated as river sands and gravels, floodplain muds, peat swamps and volcanic ash deposits respectively. The sediments accumulated from 255 to 252 million years ago, when Australia lay at the end of Gondwana, the ancient great southern continent. Newcastle was near the South Pole, the climate was cool and wet. The rocks preserve fantastic fossils of *Glossopteris* plants, which thrived in extensive peat swamps and on floodplains.