

Article by John Hector Reid - "Walloon-Rosewood Coalfield"

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*Coal was apparently discovered in this field in the early days of the State, as A. C. Gregory, then Government Geologist refers to its presence near Walloon, Rosewood, and what is now Lanefield in 1876. In 1881 a pit was opened and worked at Walloon and the Rev. Dennison-Woods refers to the coal at Walloon Colliery in 1883. The development of coal-mining around Rosewood is of later date.*

*Recently there has been considerable drilling for coal seams but without any notable success. The old time jumper drill is still used and cores of strata are not obtained. Six small collieries were in operation at the end of 1920, four of which are situated within two miles of Rosewood, while of the remainder one is an old pit recently re-opened near Walloon, and the other is the Caledonian at Thagoona, the largest and best equipped colliery on the field.*

*The Walloon coal measures are referred to the Jurassic system since they contain an abundant flora, which has a close affinity to European Jurassic beds. They appear to rest uncomfortably on the Bundanba beds, which in turn overlie the Ipswich coal measures, although no exposures of the former beds occur in the area geologically mapped. Above the Walloon coal measures rest tertiary basaltic rocks on an uneven floor.*

*The Walloon series do not show any field relationship to other sedimentary series, so before describing them, brief mention may be made of their position in the geological sequence. From work done in the adjacent district of Ipswich they are known to overlie the Bundanba series of sandstones, which rest comfortably on the Ipswich coal series. Mr. Cameron, in maps of the Ipswich field shortly to be published in the Queensland Geological Society Survey, has shown the boundary of the Bundanba and Walloon series crossing the main south-western railway about three miles east of Walloon township and continuing up past Borallon on the Brisbane Valley line. To this point they lie vertically or dip very steeply. From Borallon to Fernvale the Bundanba conglomerates are picked up at various points, and at the latter locality are dipping at an angle of 20 deg. to the south-west, so that the boundary appears to run in proximity to the railway line between those places. In the absence of an exposure of actual unconformity in this area there are still good grounds for assuming it. The Bundanba beds have very much greater dips at many places along the junction, and there is an angle of divergence between the strike of the two series which is practically constant over a distance of about 12 miles on either side of the boundary. A few hundred yards north of Fernvale the Bundanba series lie unconformably on the highly folded Brisbane schists (Ordovician (?))*

*In structure the Walloon is very simple for the dips are very slight and many exposures show practically horizontal strata. They show evidence of having been subject to gradual vertical uplift, which extended over a large area, and which continued in the north to a greater degree or over a longer period, producing gentle terraces and involving the stretching of strata resulting in slight normal faulting only. The general strike of the beds is 100 deg. with variations between 80 deg. and 140 deg. They dip gently and persistently in a direction about 10 deg. West of south at angles which mostly range between 2 deg. and 4 deg. very rarely higher, and in some exposures appear quite horizontal. Reverse dips of any note are quite absent, but as there is sagging of the strata, especially noticeable where slight faults appear, very slight dip readings in any direction can be obtained. Probably the average dip is about 2 deg. towards 10 deg. west of south, and it has been found from the fall in certain beds and seams over distances up to one mile. or more, that the dip varies generally between 150ft and 250ft to the mile.*

*As the trend of the junction line between the Rosewood and the Marburg stages does not conform to the strike of the strata of the two stages, which is generally identical, and as there is no evidence of large fault movements to account for shales and sandstones with coal being thrown into juxtaposition with barren sandstones, it is assumed that there was a slight uplift and a period of non-sedimentation and erosion between the deposition of each. The marked lithological change of the sediments, in addition, indicates some readjustment of the land surface at the time. Notwithstanding this evidence, the strike and dip of the Rosewood stage are, as far as can be ascertained, conformable to those of the underlying Marburg beds. The latter have the same gentle dip to west of south.*

*There are no interbedded or intruded igneous rocks in the series which might produce faulting or arching of strata.*

*There is no evidence of large faulting, but there are small normal faults due to the stretching of strata during the approximately vertical uplift of the beds. Such occur in railway cuttings between Perry's Nob and Kunkala Stations (maximum throw 15ft), and another was observed in the workings of the Caledonian Colliery whereby the seam is slightly displaced, the throw amounting to 6ft. The collieries are very free from faultings, sharp folds or any disturbance of the coal. The term "fault" is so often used locally in reference to areas of dirt or, "muck" in seams that it is necessary to distinguish between these and geological faults, in which the seam and accompanying strata are displaced by a movement. Small normal faults are the only ones the writer has yet seen in the Walloon series, including several in the Oakey district collieries of the Downs.*