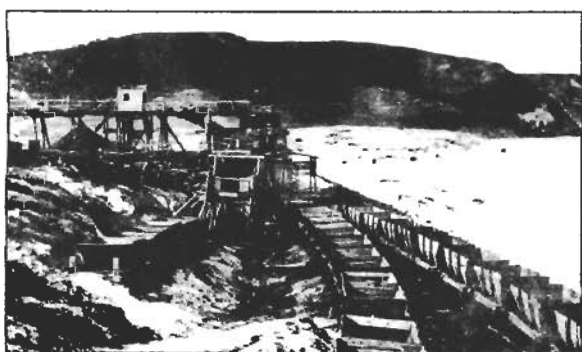


MEREWETHER to GLENROCK

Brief Early History.

Glenrock Lagoon is possibly the site of the first coal discovery in Australia. Old convict mine workings in the area were accidentally discovered during World War II. In one of the mine workings, a huge tree trunk was discovered by the miners. Attached to the trunk were chains, ball and chains and handcuffs used to secure convicts working in the so called "rat holes."

On Burwood Estate (owned by Dr. Mitchell), Burwood Colliery went into production in 1851. Dr. Mitchell soon expanded the colliery at Glenrock by constructing a railway line to the Port of Newcastle to transport its coal. Two tunnels were dug through the cliffs under the present day Merewether Heights. The tunnels were used for many years by hikers and picnickers to Glenrock Lagoon before deterioration in their condition caused them to be sealed at their entrances during World War II.



Looking North along Smelters Beach from the Glenrock Mine. No. 2 tunnel can be seen on the right.



1990's excursion to Merewether with the tunnel entrance that was next to the present day baths.

The second tunnel came out of the cliff just behind the amenity block at Merewether Baths. A small steam engine called the "Coffee Pot" was used to haul coal along the line. The "Coffee Pot" was specially modified (vertical boiler, altered chimney, cut-down cabin, driver one end and fireman the other end) so it could pass through the tunnels at Merewether.



The 'Coffee Pot' chugs past the bluff at Merewether as it travels north from Glenrock.

About 200 m from the tunnel behind Merewether Baths were located coke ovens owned by the Newcastle Coal and Copper Company. They supported another industry in the early days, a smelter works. Dr. Mitchell who owned the Burwood Estate, gave lease of some of his land to the Newcastle Coal and Copper Company. Their smelter works was situated in Murdering Gully (not far from the second tunnel exit) on the present day Hunter District Water Board property adjacent to "Smelters Beach" (once called the Long Beach) as it is known today.

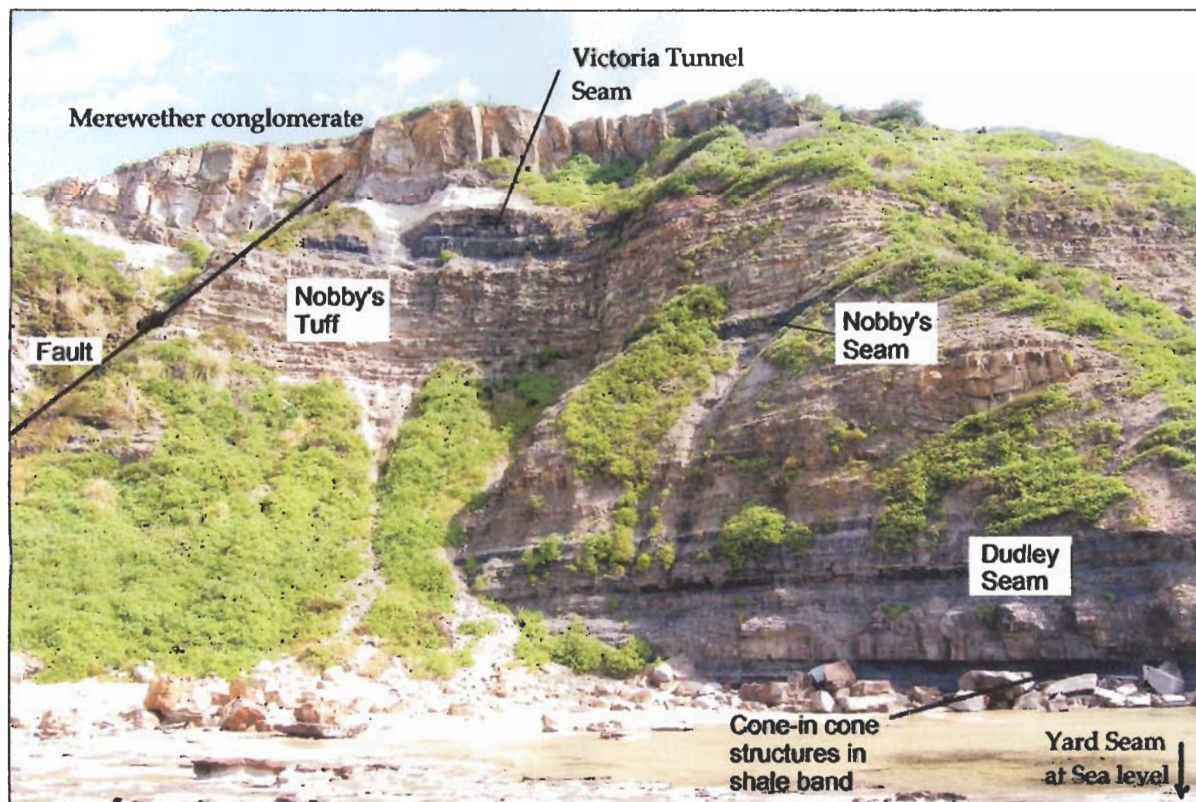
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In the 1860's the company failed (high transportation costs of the ore and poor smelter placement). As a result, the lease fell back into the hands of Dr. Mitchell and he subsequently established the Burwood and Newcastle Smelting Works. These works also quickly failed as the ore used came from the Currowang Mine at Goulburn in which Dr. Mitchell had an interest. The ore deposit only lasted from November 1866 to May 1867, a period of 6 months.

Mitchell continued to lease portions of the Burwood Estate incidentally contributing to the development of the Newcastle District. In 1866, the first tannery in Newcastle was established at Flaggy Creek as well as the Burwood Pottery and the Burwood Fire Clay and Brick Works.

Geology.



The Newcastle coastal cliff section from Nobby's to just south of Catherine Hill Bay (some 35 km) affords magnificent exposures of the Newcastle Coal measures of the Permian Period. The late Professor Edgeworth David stated the exposure is probably the finest of its kind in the world. The cliffs in places are over 60 m in height.

Just south of Merewether Baths is to be seen an excellent section going from the Yard Seam at sea level to the Dudley Seam (8 - 9 m above); then the Nobby's Seam (12 m above) overlain by about 15 m of Nobby's Tuff. Then follows the Victoria Seam overlain by coarse Merewether Conglomerate showing current bedding. Plant fossils are to be found in shales associated with the coal.

South of the rock platform can be seen a normal fault which has a throw of about 4.5 m.

Cone-in-cone structures are to be found in a shale band just below the Dudley Seam. The cones are not common and are composed usually of calcite fibres (also siderite or gypsum). Its generally believed the cones are produced by pressure which causes solution around growing nodules or concretions of limy material. The specimens to be seen at Merewether are excellent examples of Cone-in-cone structures.

Many other common sedimentary structures are to be seen in the cliffs and on the rock platforms.