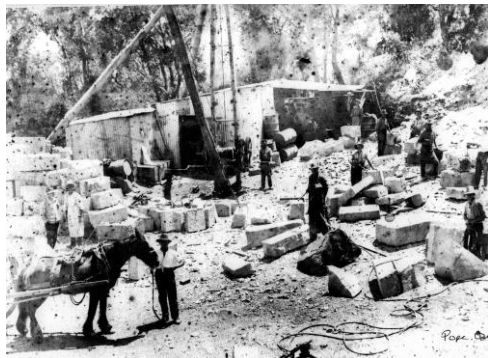


MOUNT GIBRALTAR HERITAGE QUARRIES COMPLEX (2015 Supplement)

The NSW Heritage Council listed Mount Gibraltar Reserve, including the Quarries Complex on the Significant Heritage Register on 3 December 2013.

The Mount Gibraltar Forest, within which the quarrying is located, is significant due to its rarity, being identified as an endangered ecological community under the NSW Threatened Species Conservation Act and a threatened ecological community under the national Environment Protection and Biodiversity Conservation Act. The unique geology of the area supports a collection of flora and fauna that, as an assemblage, does not exist outside of the Reserve. Bush regeneration has been carried out since 1993 to remove invasive weeds and allow the forest community to recover.



F.J. Pope and Sons Quarry

Mount Gibraltar Quarries are significant. The six distinct locations were used consistently for 100 years of quarrying, from 1886-1986. The trachyte quarried there is unique and provided dimension stone for notable buildings throughout NSW and internationally. The quarries are an important aspect of Bowral's industrial history.

The stone is geologically known as micro-syenite and was traded as Bowral Trachyte. The use of Bowral Trachyte by Sydney City's engineers as a hard rock to replace crumbling sandstone kerbs and gutters was the catalyst which spurred the Gib's development.



Kerb and Gutter

The trachyte from Bowral and the quarries from which it was extracted are significant for their contribution to the built heritage of the State. Some stone was used locally but the bulk was exported to Sydney where it was used for major public works such as the building of Hawkesbury River Railway bridge at Brooklyn and for major city buildings at the time of Federation as an expression of the spirit of the Empire and while the country was prosperous from the gold rushes.



Queen Victoria Building

Examples: Challis House, Martin Place; National Mutual Building, George St; ANZAC Memorial, Hyde Park. The columns of the Queen Victoria Building are made from Bowral Trachyte and were turned on the Abernethy and Co. Stonemason's Lathe.

At least 16 structures using Bowral Trachyte are listed on the State Heritage Register for their architectural, technical and engineering qualities. The stone from these quarries was also used for the commemorative



Quarrymen at work

stone for Federation and for the foundation of Canberra

and for many war memorials and headstones. The Government ballast quarry was important to the construction of the Great Southern Railway line from Mittagong to Goulburn in the late 19th century.

For a hundred years stonemasons and quarrymen used their remarkable skills for blasting, cutting, trimming, polishing and handling the dense rock. The technologies of the time have technical significance and the quarries as an entity, formed the basis of social development in Bowral as many families were involved with their operation. It was a major industry for the township of Bowral. There were a great many quarrymen and stonemasons working at times, some living in poor circumstances in temporary dwellings on the top of the mountain or near Victoria Street. There were many accidents and the men formed the 'Berrima District Workmen's Accident Relief and Endowment Fund' as a result.

Mount Gibraltar is a volcanic intrusion that cooled in such a way as to form this special rock. 180 million years of erosion have exposed the rock. The micro-syenite, or Bowral Trachyte as it was traded, has the unique properties of great strength and durability and decorative potential when polished as well as accessibility for quarrying.

This rare rock was studied by our great geologists such as Rev. W. B. Clark, Andrew Griffith Taylor, T.W. Edgeworth David and Douglas Mawson. Architects such as Walter Liberty Vernon, George Macrae, Edward E Raht; builders such as John Leggat, Loveridge and Hudson, Amos Brothers, Saunders, Phippard Bros; Melocco Bros and engineers of the railways, road bridges and dams made use of the stone.

As early as 1894 the Government geologist E.F. Pittman urged 'the use of Bowral Trachyte for any important building in which permanence might be desired. The trachyte may, for all practical purposes, be regarded as indestructible' (Dept Mines annual Report 1894). When Edward Raht chose Bowral material for 350 George St (Equitable Life Building) he compared it to Cologne Cathedral saying it would last for not a hundred years but a thousand.



**Equitable Life Building.
George St.**

The quarries have created considerable scars in the side of Mount Gibraltar and are most visible from the southern/Bowral side. At close quarters the works cliff faces are impressive with walls of up to 50 metres. Although over grown, the quarries retain many elements of their industrial heritage including scars of the quarrying that show how the stone was removed (plug and feather technique), machinery parts and the remains of trackways and loading benches. They contain rubble which is used from time to time for current projects, e.g. plinths for plaques and landscaping works.



Quarry C 1970 | Wallace

During the depression the Minister for Local Government, Eric Spooner, visited Mount Gibraltar announcing that £60,000 would be made available for relief work. By 1936 stone structures had been built for public access and recreation: the Scenic Loop Road supported by an impressive retaining wall on the western side (built by the Harvey Brothers); the Stone Stairway; Bowral Lookout Shelter and picnic table; male and

female WC buildings; Inner Bowl Shelter; Oxley View Shelter; Mount Jellore Lookout and Shelter; Mittagong Lookout Shelter and Joshua Stokes Memorial.

HISTORY



Loop Road Supporting Wall

Commercial quarrying started in the Mount Gibraltar area following the opening of the railway in 1867. William Charker commenced operations at the top of Cliff St in 1885 when he opened the NSW Trachyte Stone Quarrying Company. The Gibraltar Rock Quarries were opened by Messrs Leggat and Company in 1886, John Leggat supplied the Bowral Trachyte piers for the Hawkesbury Railway Bridge. By 1888 Loveridge and Hudson, which had been quarrying poorer quality stone at Quarry A at the top of Oxley St, took over Charker's quarry (Quarry D). A notable builder of the period, it had blocks quarried for buildings such as the Equitable Life Building, George St. Sydney; the Australasia Bank, corner Martin Place, Sydney and the anchor blocks for the Hampden Bridge in Kangaroo Valley.

By 1890 Frank Raward was quarrying blocks in Quarry C of which the largest was 9 tons 7 hundredweight, these became part of a gate pillar for Centennial Park. Sydney. F. J. Pope and Sons took over the lease in 1912 and prepared the blocks taken to Australia House in London and for the Commonwealth Bank in Martin Place, Sydney. The blocks were often taken out by rail from a specially constructed siding in Bowral. The quarries also provided local building stone and several of the quarries provided kerb stones and tramway support for local towns as well as Sydney. Pope purchased the quarry in 1928 and installed a crusher to produce aggregate for road works.

In 1881 the Amos Brothers acquired Quarry E on the western face of Mount Gibraltar, along Soma Avenue (Amos spelt backward). By 1888 they were producing stone for railway ballast. In 1890 the government resumed part of their land and opened the Government Ballast Quarry (Quarry F).

The NSW Government quarry supplied rock to a crusher at the railway via a double light rail system. This closed after 2 years and after a court case, Alexander Amos got back the land that had been resumed.



Double Light Rail to Crusher



Loverage & Hudson Quarry

1960 Photo I Wallace

At his death in 1915 Alexander Amos owned most the northern and western sides of the mountain. The administrators of his estate sold the summit site to Joshua Stokes, on behalf of the Bowral Municipal Council, for a future reserve while the lower portions were subdivided for housing and the crown resumed the northern side intending to quarry for construction of the Avon Dam. Later, rock was purchased from existing quarries).

The purchase of the land for a Reserve by Joshua Stokes led eventually to successive councils implementing a program for

expanding Stokes original 79 acre (32 ha) purchase to today's 320 acres (130 ha). Stokes forethought was finally honoured in 1950 by the placement of a plaque on the entrance to the Reserve.

By 1973 only Quarry C was active and changes in building methods and materials had reduced the demand for Bowral Trachyte. There were also strong community concerns over the impacts that quarrying was having on the town landscape. Additionally, quality of life near to the quarry was an emerging concern with the regular blasting. Negotiations with F. J. Pope and Sons saw the quarry close down. Ten years later an application was made to quarry stone for the extension of the National Library in Canberra. In the face of community opposition a deal was struck allowing a small amount of stone to be quarried but with the remaining quarry being sold to Council at its completion. This site was incorporated in the reserve in 1986.



Canberra Foundation Stone

In 2003 the Department of Public Works removed some loose blocks to repair the steps of the NSW State Library.

The land was neglected until 1995 when a volunteer management committee was formed under the auspices of the Wingecarribee Shire Council for 'care, control and management' of the Reserve.

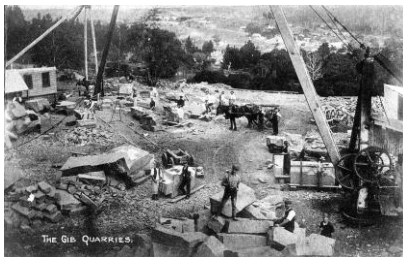
Authors

Garry Estcourt: NSW Heritage Council

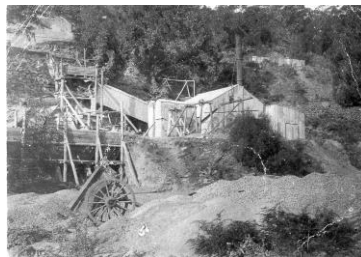
Jane Lemann: Mount Gibraltar Landcare and Bushcare

Jenny Simons: Berrima District History and Family History Society

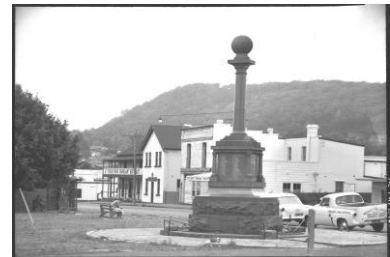
Further information may be found in the books: *'The Gib: Mount Gibraltar, Southern Highlands'* MGLB 2007 and *'Sydney's Hard Rock Story.'* Irving, Powell and Irving 2014



Loveridge and Hudson Quarry



F J Pope Gravel Crusher



Bowral War Memorial F Hurley



Angel Place, Sydney, rough-cut, sawn and polished trachyte



Trachyte Lathe



Bogged with 12 ton stone in 1896