







THE RESERVE

The Reserve is an area of restored natural forest, a conservation site for wildlife and a pleasant area for quiet recreation.

It is currently 130 hectares around the summit of Mount Gibraltar (863m) which is composed of the igneous rock microsyenite, known commercially as Bowral Trachyte. This was quarried for 100 years, 1886-1986, for stone to build many grand public buildings.

The unique native forest, quarries and views from the Reserve are impressive to every visitor.

The quarry scars commemorate a major part of the history of the area, quarrying being one of its early industries.

In recognition of the Reserve's historical and natural significance the managers are proud to announce

that the Mount Gibraltar Reserve was listed by the NSW Heritage Council on its Significant Heritage Register in December 2013, both for its Endangered Ecological Communities and the Heritage Quarries Complex.

The forest was listed in November 2011, under the Australian Government's Environment Protection and Biodiversity Conservation Act as being part of the endangered 'Uplands Basalt Eucalypt Forests of the Sydney Basin Bio-region' following a similar listing under the NSW Threatened Species Conservation Act in 2001 as 'Mount Gibraltar Forest'.

In 2008 The NSW National Trust added the Mount Gibraltar Quarries Complex to its Industrial Heritage List.

The Reserve was registered with Land for Wildlife in 2014.

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FEATURES

What began as a small reserve on the summit of Mount Gibraltar, popularly called 'The Gib', has now grown to an area of 130 hectares.

The tall eucalyptus forest clothes the Reserve in a green mantle.

This provides an impressive landscape backdrop for the towns of Bowral and Mittagong and a central landmark for the Shire. The quarry scars are a permanent reminder of the men who worked to supply the stone for so many of the great buildings in Sydney and beyond.

Three lookouts provide distant views; each is worth visiting and may be identified on the map on pages 8-9. Near the Bowral Lookout there is parking, a picnic area and toilets. Uphill from this lookout is the Inner Bowl, a quiet place for a picnic, with a rich carpet of ferns shaded by tall trees.

The Reserve has many walking tracks for discovering the varied vegetation.

The easiest of access is the Rim Track which links the Bowral Lookout Picnic Area to the Jellore and Mittagong Lookouts.

An entrance off Oxley Drive, Bowral, leads to a car park and the start of the Heritage Quarries Circuit which traverses two quarry sites and links, via the steep Stone Stairway, to Bowral Lookout Picnic Area.

Further walks may be taken using the Gib East Firetrail in the Chinaman's Creek gully to enjoy the different type of vegetation growing in soil derived from Hawkesbury Sandstone.

The Reserve is a source of water for both the Nattai River via Chinaman's Creek on the north and Gibbergunyah Creek on the west, and the Wingecarribee River via the unnamed creek through Fern Gully to Mittagong Rivulet on the south.

This creek and its springs once supplied Bowral township with water.

ALL NATIVE PLANTS, ANIMALS, ROCKS AND TIMBER ARE PROTECTED

ABORIGINAL PEOPLE



Moyengully, a kooradgie of the Gundungurra people

The area embraced by this Reserve formed the eastern edge of the territory that was home to the Gundungurra people (The Mountain People) and borders Dharawal country which extends eastward to the coast.

These people moved around the land in small groups, according to the season, following food gathering opportunities and coming together with other groups according to their social and customary arrangements. The mountain has cultural significance for both peoples.

It is thought that Gundungurra people or their forebears could have inhabited this area for 40,000 years. The summit of Mount Gibraltar would have been a useful point for sending and receiving messages.

Many Aboriginal words are still in use locally, including the name of our Council, Wingecarribee.

In the Reserve grow many of the plants that were used by Gundungurra people for food, bedding, medicine, implementmaking and ceremonial purposes.

After the arrival of white settlers, Aboriginal numbers dropped dramatically from land displacement, disease, change of diet and interruption of their way of life, a terrible outcome of white settlement in the Southern Highlands.

WHITE SETTLEMENT

Early arrivals in the area were John Oxley, Charles Throsby and Surveyor Major Mitchell, who recorded the earliest mention of the name: "There is a naked rocky spot called by the stock people, Gibraltar". He also noted excellent whinstone, an early name for the trachyte which was used for road making in the 1830s. Quarrying began commercially in 1867 once the railway reached Bowral and could transport the heavy stone.

In 1892 Sir Arthur Streeton painted a fine watercolour from the heights of the Gib called 'The Vale of Mittagong'. (National Gallery of Victoria)

The timber on the mountain was used in the quarries to fire the steam engines, and for pit props in nearby mines. This almost denuded the mountain.

In 1919 a local councillor, Joshua

Stokes, purchased 32 hectares of land on the summit, with a vision for the area to become a nature reserve. This was not a popular move at the time, but he was eventually honoured and a plaque was erected at the Mittagong entrance to commemorate his foresight.

In the depression of the 1930s
Minister Eric Spooner provided relief
funds for men to construct the Scenic
Loop Road, lookouts and shelters for
public enjoyment of this Reserve.
In 1940 it was declared a Fauna and
Flora Reserve.

More recently communication towers have been built on the summit.

Over time the area of the Reserve has expanded to the present 130 hectares through successive councils acquiring adjacent land as it became available. The Crown land section on the northern side was gazetted as Reserve in 1995.

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FLORA AND FAUNA

The forest growing on the trachyte-derived soils is a unique endangered ecological community. This means that the particular assemblage of plants and animals, fungi and microorganisms found here should be protected and preserved for its rarity and special characteristics. Because the Reserve is surrounded by residential streets, there is a great deal of pressure on it – invasion of weeds, rubbish dumping, theft of rocks and timber, predation of native animals by cats, dog and foxes, night lights, roadkills, burning and edge-effect damage.

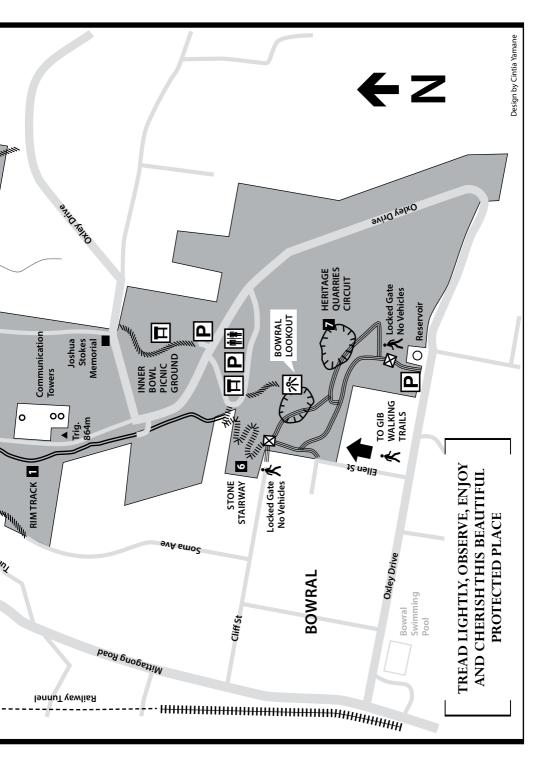


So walk softly in the Reserve and enjoy what is there. Under the magnificent tree canopy of Brown Barrel Eucalyptus fastigata, Gully gum E. smithii, and Sydney Peppermint Epiperita you will find Blackwood Acacia melonoxylon, Native Cherry Exocarpos cupressiformis, Mock Olive Notelaea venosa, Black Sheoak Allocasuarina littoralis, Geebung Persoonia spp, Tea Tree Leptospermum spp, Native Mulberry Hedycarya angustifolia, Honey- Myrtle Melaleuca hypericifolia and Sweet Pittosporum P. undulatum. Beneath this shrub layer is a rich variety of ground covers, ferns, lilies and ground orchids. There are vines such as Clematis and native Hoya Tylophora barbata.

Animals you may see include Swamp Wallaby, Wombats, Echidnas, Brush-tail and Ring-tail possums, Greater Gliders, Sugar Gliders, Bush Rats and Antechinus (marsupial mice), 14 species of insectivorous microbats, numerous species of birds both resident and migratory, Lace Monitors, lizards and snakes, frogs and countless invertebrates.

The Mount Gibraltar Moth Collection is on display in Bowral Library.

MOUNT GIBRALTAR HERITAGE RESERVE Locked Gate No Vehicles S GIB EAST III, FIRE TRAIL Chinamans Creek RAVINE TRACK MITTAGONG LOOKOUT 3 RESEVOIR TRACK Ŕ GIB WEST FIRE TRAIL Locked Gate A JELLORE LOOKOUT Allilling GB . Peod Jemos Locked Gate No Vehicles enool enool October 2014 0m 100m 200m 300m Lat. 34.36 S Long. 150.43 E 火 Lookout Parking Shelter **Toilets** Reserve No. 83436 _{Құұққ} Ц Δ



THE WALKING TRACKS

1 THE RIM TRACK: 1.2km

This track connects all three lookouts and provides excellent views. There are rough patches and some steps. A circuit walk can be completed via the road and Inner Bowl.

2 THE RAVINE TRACK: 600m

This links the Reservoir track with the Gib East fire trail via stepping blocks across Chinaman's Creek and takes you from Trachyte to Hawkesbury Sandstone communities.

3 THE RESERVOIR TRACK: 600m

This steep track links Mittagong Lookout to Dean Street, near the Bowral Road railway bridge and to the Gib West and Gib East fire trails.

4 THE GIB WEST FIRETRAIL:

Links The Gib East Firetrail and the Reservoir Track with Soma Avenue thus creating possible walking circuits.

5 THE GIB EAST FIRE TRAIL:

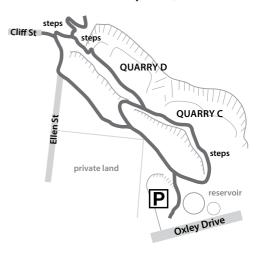
Links Railway Parade with Oxley Drive. It is a steep trail through Hawkesbury Sandstone vegetation.

6 THE STONE STAIRWAY: near Bowral Lookout Shelter Shed

This is a very steep set of heritage stone steps that link Bowral Lookout to Cliff and Ellen Streets, the Heritage Quarries Circuit and the Quarries car park.

THERITAGE QUARRIES CIRCUIT: 1.5km with steep steps (see below)

This new walk enables viewing of two of the large heritage trachyte quarries and links with the Stone Stairway to Bowral Lookout. The Quarries car park entrance is off Oxley Drive, Bowral.



(For all trails see map pages 8-9)

BUSH REGENERATION

Following the major disturbance of the quarrying and subsequent neglect, the Reserve was badly infested with weeds that had escaped from gardens or been dumped in the Reserve: Pine, Blackberry, Holly, Cherry Laurel, Cotoneaster, Hawthorn, Firethorn, Barberry, Privet, Honeysuckle, English Ivy, Turkey Rhubarb, and Cape Ivy. There were few replacement native trees or shrubs emerging.

A Landcare group of volunteers has been systematically weeding the Reserve since 1994, complemented by qualified contractors funded by the Wingecarribee Shire Council,
Australian Government, NSW
Government, Sydney Catchment
Authority, Local Land Services
and local groups. For all of this the
community is most grateful. Natural
regeneration is excellent. The status of
the Reserve is acknowledged by the
legal protection given by the listings
under the Threatened Species Acts and
the NSW Significant Heritage Listing.

More helpers are very welcome. Ongoing maintenance is now assisted by the qualified Bushcare Team funded by the Wingecarribee Environment Levy.

A PLACE TO CHERISH

The importance of this small Reserve cannot be overstated. Its resilience has shown that the biodiversity can be recovered so that the natural systems that support the web of life on earth can be conserved to provide all the essential eco-system services: clean water, clean air, peace and quiet. It is a major sanctuary and ecological link in the chain of habitat across the landscape. There is a vital need for connective corridors of native habitat to allow migration for replenishment of populations of plants and animals to maintain their vigour and integrity. In addition every native plant in gardens or roadsides supports some native creature and assists these linkages. We should all show the vision of Joshua Stokes and protect, defend and enhance this precious heritage.

THE GEOLOGY

Mount Gibraltar is an exposed volcanic of other minerals such as pyroxene. intrusion composed of very hard rock called microsyenite, commercially sold as Bowral Trachyte. Micro refers to the small size of the constituent grains. It may also contain thin pegmatite veins that consist of much larger mineral grains. Syenite is composed of alkali feldspar together with minor amounts

180 million years ago the magma pushed up the Hawkesbury Sandstone to form a high mountain. Over time possibly 4 kilometres have been eroded away by wind and water thus exposing the hard igneous rock which had cooled in such a way as to form the microsyenite.

Diagrams in cross sections showing the development of Mount Gibraltar (J. Lemann after R Stevens 1956)



1. Initial igneous intrusion lifts **Hawkesbury Sandstone and** Wianamatta shale layers 180 million years ago.



2. A fault develops on the west with further igneous intrusion.



3. Rapid erosion exposes the cooled hard rock, 100 million years ago.

THE QUARRY STORY

Taken from a summary by Philip Morton BDH&FHS

Following the opening of the railway in 1867 the trachyte stone commercial quarrying opportunities were taken up by several enterprising companies around the mountain. The stone's unique properties soon made it much sought after by architects and builders. Although very hard to work, the trachyte had strength and a very fine grain which took a beautiful polish. It was without crack or flaws and blocks of almost any size could be obtained.

Many buildings constructed at the turn of the 19th century contained Bowral Trachyte. Such was the demand that stone was sent all over Australia and across the world. This was the only available source. It was also used for kerb and guttering, and crushed for railway ballast and road aggregate. Its strength made it suitable for foundations supporting great loads, such as the first Hawkesbury River rail bridge, the base courses for Garden Island sea wall and hard wearing steps for the Art Gallery of NSW, the State Library and Central Railway Station in Sydney.

It was used, rough-cut, sawn and polished in buildings such as the Queen Victoria Markets, the Equitable Life Building, several banks in Martin Place, many war memorials, monuments and headstones throughout NSW and numerous other buildings.

The Gib provided the great Commonwealth Stone in Centennial Park on which Earl Hopetoun stood as he was sworn in as the First Governor-General of Australia in 1901. It was also used as the Foundation Stone for the Commencement Column in Canberra.

The first company to quarry The Gib was William Charker's NSW Trachyte Stone Quarrying Company in 1885, although a convict road party, the Gibraltar Iron Gang, had broken rock on the site in the 1830s during construction of the Great South Road.

In the early years of commercial quarrying large surface boulders were cut but as expertise and equipment improved, several large quarries were opened, employing as many as 200 men in the early 1890s. The work was hard and dangerous and accidents, even deaths, were not uncommon. Stonemasons Thomas Loveridge and Herbert Hudson took over Charker's quarry in 1888 and began using the stone for Sydney buildings.

In 1897 blocks weighing six ton each were taken down the Barrengarry Pass to be used to anchor the cables of the Hampden Suspension Bridge in Kangaroo Valley. A twelve ton block to be used as the pivot stone for Pyrmont Bridge took a month to transport from the quarry to the Bowral railway siding by horse teams and heavy dray.

Over the years the quarries were operated by numerous people. (Leggat, Raward, Phippard Brothers, Saunders, Amos Brothers, NSW Government Ballast Quarry, Granite Ware, Melocco Brothers, Haines, Mascot Granite Works, Gosford Quarries) but the Pope family name is the one most often associated with the quarrying. Three generations of the F J Pope and Sons family worked the stone until 1975. Concern about the blasting, dust and landscape damage led to the closure of their quarry in 1980 and the land was incorporated into the Reserve.

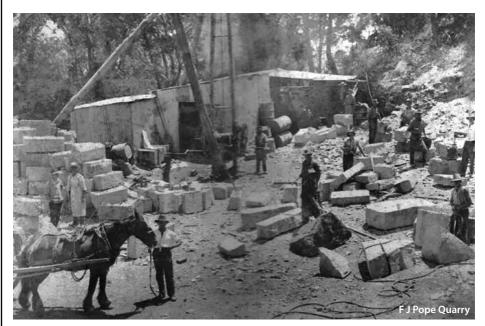
The use of concrete and steel led to a decline in demand and the stone was used for ornamental purposes such as veneer facing. The last major removal of stone was for the podium of the National Library in Canberra after which the last quarry was closed and incorporated into the Reserve in 1986.

It is with pride that we can view the massive stone buildings standing in Sydney today, and notice local buildings such as Bowral Court House, the many monuments and the large kerb stones underfoot, built of Bowral Trachyte by tough and skilled men, pioneers of our social and industrial heritage.

In the 1930s men were employed under the Spooner Depression Relief Scheme to construct the Scenic Loop Road with the lookouts and shelters to open the Reserve to the community. In the 1960s the Rotary Club made further improvements and established the walking tracks. These are being sympathetically restored by the Mount Gibraltar Landcare and Bushcare and Wingecarribee Shire Council with donations from community groups such as the Garden History Society.

Further reading:

- 'The Gib, Mount Gibraltar, Southern Highlands' by Mount Gibraltar Landcare and Bushcare 2007.
- 'Sydney's Hard Rock Story', by R. Irving, R. Powell and N. Irving 2014.
- 'Mount Gibraltar Quarries Handout 2014' extracted from NSW Heritage Council nomination by Garry Estcourt.







2014 Prepared by Mount Gibraltar Landcare and Bushcare editorial group: Jenny Simons, Jane Lemann, Jason Trenwith. Design by Cintia Yamane. Printed by Print NRG. Major Reference: 'The Gib, Mount Gibraltar Southern Highlands 2007.' Mount Gibraltar Landcare and Bushcare.

