

Maps



Lake Macquarie City Council has big plans for Munibung Hill, including a 4.5 km network of walking tracks and bike trails, *through the establishment of easements, to provide legal public access and to upgrade part of those tracks and trails, where required.* The map above can be found on page 63 of the LMCC Glendale Recreation & Land Plan—October 2015

Facilities

There are no public amenities such as picnic areas, bbq stations, tables, toilets; no information boards or signage showing directions or distances. The paths from Lakelands begin with cement paving and galvanised steel steps then peter out into steep badly eroded tracks. From Farm Street, Speers Point, tracks have easier grades. Carry water and sunscreen. Wear covered walking shoes. Supervise children.

References

Charles Drazin: Mapping the Past: A search for five brothers at the edge of empire
Bill Gammage: The Biggest Estate on Earth: How Aborigines Made Australia
Neil Gunson: Australian reminiscences & papers of L.E. Threlkeld, 1824-1859
Fergus Hancock: Munibung Hill – features and value
C. Lloyd: What on Earth Happened LMCC (report to) re: Aboriginal Cultural Heritage Issues
Bruce Pascoe: Dark Emu, Black Seeds: agriculture or accident?



Endangered Squirrel Glider—LMCC Guidelines report 2015

Our special patch of country

It might sound a bit odd, but when we visit Munibung Hill we are not entering vacant or unoccupied land. It is teeming with life. It is home to non-human beings that have a DNA count not much removed from ours. We have a lot in common. In a sense we are 'guests' who have not asked permission to enter. With that proviso, Munibung Hill seems to enjoy our company, and appreciates those who care about her long term health and welfare.

For further information
Munibung Hill deserves to be protected for the Squirrel Glider and for all children for all time.

To find out more

E: munibunghcs@gmail.com
M: 0437 543 465

Enjoy your visit to Munibung Hill.

Call in again one day—there's a lot going on.

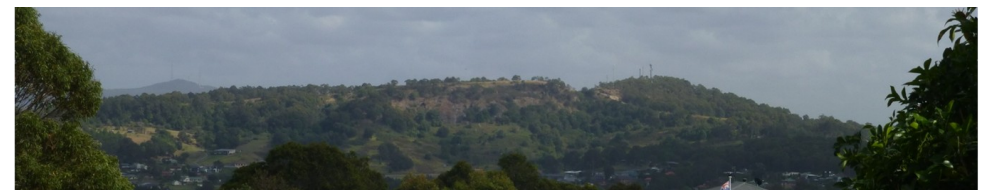
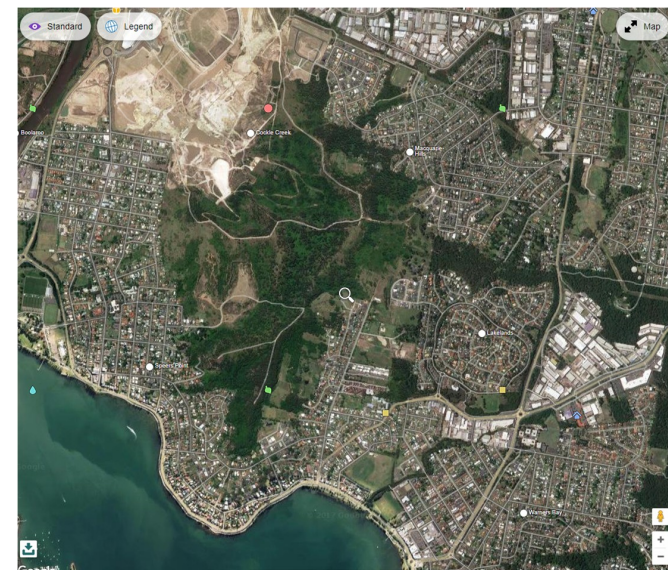
This paper has been prepared by the Munibung Hill Conservation Society (MHCS). This edition: 1/6/18

Printed on recycled paper or tree free paper from *Bamboo fibre*

A barefoot guide to ...



MUNIBUNG HILL



Munibung Hill

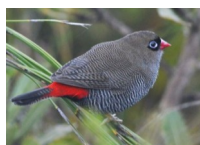
Taking a deeper look into nature

We invite you to see yourself as integral with the marvellous and mysterious parts of the Munibung Hill community.

These few pages are an introduction to the birth story dating back 251 million years, the plants and animals that call Munibung home and the opportunities for us to gain a better understanding and appreciation of what makes Munibung such a valued and sacred piece of country.

Munibung Hill has become home to many life forms, millions of which we never see because they live their entire lives closeted away in the soil or hiding behind tree bark or are nocturnal and only observable after dark.

We hope that you will be delighted with what you experience when you enter the Munibung Hill community. That you will think of it as being special and unique. That it must be preserved for all the community to enjoy into the long distant future—as a priceless gift for our children and their children and their children: for thousands of generations into the future—another 251 million years.



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At 169 metres high Munibung Hill (meaning 'fruit') keeps watch over the Lake and all that rests in the lowlands. She is watershed country, the upstream catchment land that is essential for downstream life.



Tracks & Trails

Through valleys and ridge country

There is so much to discover once you head into the bush. So many nooks and crannies ... So much more life than can ever be found in our paved over suburban streets. And the views are amazing.

Some trails are well defined, some are badly eroded, some have become overgrown with invasive plants. The trail along the ridgeline provides the best views.

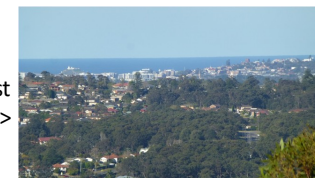


Please respect the wildlife, keep to the formed areas—take only digital pictures; leave only footprints.



Views

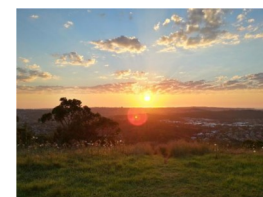
North ridge lookout, East to Newcastle >



West spur, Quarry Road Lookout ...south to Swansea

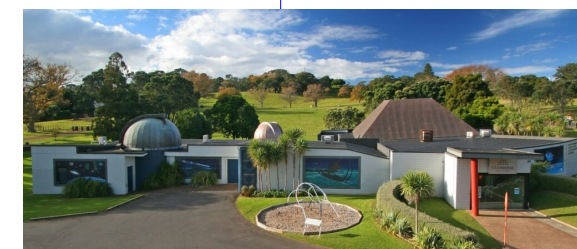


North ridge lookout, south east to Redhead



Night sky

Life on earth is made possible by the unique properties found nowhere else within the galaxy we occupy. The night sky is like a magic ball of glitter except that the glitter in this case is millions of stars in the Milky Way. The Earth is located in the Solar System and the SS is located in the Orion Spur. Learn more from the Newcastle Astronomical Society (NAS). Munibung Hill is a magnificent observation point from which to experience the wonders of the Universe. We have a dream. That Munibung Hill will be the site for an observatory and planetarium equal to that of the Auckland Stardome. You can be part of the dream for Munibung Hill to be declared a Conservation Park.



Geology

Munibung Hill spans four geological time periods. Permian, Triassic, Jurassic & Quaternary. It is impossible to contemplate her age—10,040,000 human generations.

Munibung Hill is representative of the youngest Permian geological series (251 million years ago) before the Triassic terrestrial sediments dominate (199 million years ago).

During the Pleistocene Glaciation (2.6 million years and lasting until about 11,700 years ago), sea levels were 168 metres below current sea levels which stabilised approx. 6,000 years ago.

This means that Aboriginal people of the era would have witnessed the valley—we know as Lake Macquarie—as it became filled with water.

There is the Teralba Conglomerate, which is underlain by the Great Northern Tuff, Great Northern Seam and Awaba Tuff. The text explains its importance, and the importance of the tuff members to the Awabakal people and the coal seam to early European occupiers. The seam was mined from the Speers Point side where the cliff



line lies north of Hopkins St.



Visitors

Attracted to Munibung

- .. Children and adults
- .. Runners, walkers, mountain bike riders
- .. Adventure loving to those seeking peace and quiet
- .. Locals and visitors from far & wide
- .. Parents & grandparents
- .. Artists & photographers
- .. Nature lovers and carers
- .. Science/ history explorers
- .. Travelers between suburbs or on the Great North Walk



For regulars to Munibung Hill it is like a home away from home—a place to get a sense of perspective, to take some deep breathes, re-charge the batteries, physically, mentally and spiritually. As the pace of human life quickens, the need for spaces like Munibung Hill grows ever more essential.



Getting there

When curiosity gets the better of you, take a trip down one of the tracks on Munibung Hill.

From the north there is: Macquarie Road, Blaxland Road and Lucilla Ridge, in Macquarie Hills.;

From the east: Ambleside Drive near Hawkeshead Way or Grasmere Way, in Lakelands; from the south-west there is: Hopkins Street and Farm Street, Speers Point.

First, the earth story

First there was the Universe, 15.6 billion years ago
Then the galaxies and supernovas, 10-14 billion years ago
The solar system came next, 4.5 billion years
Then the earth was born, 4 billion years ago, Hadean era

The emergence of life

Life in the oceans emerged, 3.7 bn years ago, Archean era
Next came plants, 3 billions years later or 700 millions ago—Proterozoic— then colonising land 466 million years ago, Cambrian era.

Gondwana was formed during the period 1 Billion to 540 million years ago.

After this the animals, first as insects, 400 million years, then mammals (from whom Homo sapiens evolved), 250 million years at the same time that Munibung Hill emerged, in the Permian era.

Australia became an entity as a separate continent, 180 million years ago, in the Jurassic era.

And then the evolutionary process with the emergence of human kind in all our varied forms, kicked off 2.6 million years ago, the Pliocene era, then the first Aboriginal people, 65,000 years ago, in the Tertiary era.

*waranta takara milaythina
nara mapali takara*

today we walk where once they walked

The Awabakal people, who found warmth and shelter in the caves and in the creek valleys of Munibung Hill, were one of over 500 first Australian nations. They and the land were as one—there was no separation, no possession or ownership..

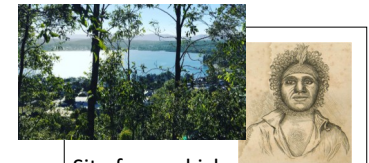
Today the Aboriginal community still practices many of the traditions to keep its culture alive, including the making of artifacts, passing on songlines and expressing culture through dance.

In more recent times, the biogeochemical altering impacts of human social & economic systems starting 270 years ago, ushered in a new geological age—the **Anthropocene**.

Acknowledgement

We acknowledge the elders of the First People of the Awabakal Nation, as custodians of the land on which we meet.

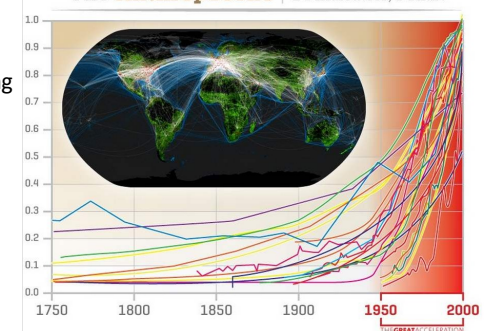
We pay respect to knowledge holders and community members as trustees of the land and pay respect to Elders past, present and future.



Site from which **Biraban** surveyed 'country' for which he had oversight during his time as elder and keeper of storylines. The range of high hills we now know as Munibung Hill was important in the spiritual and ceremonial life of the Awabakal people. (Threlkeld in Gunson 1974:64).



The **Anthropocene** | 24 Indicators, 1 Chart



Trail Discoveries

Welcome to the wonderful world that is Munibung Hill.

There is so much to discover regardless of how many times you visit.

The Munibung Hill community is much like a human community, only much more diverse. Having coevolved over millions of years its residents are very experienced at forming symbiotic associations and governance systems. What can we learn from this?

Trees may be shedding bark, dropping leaves or flowering or fruiting, providing food for pollinating insects and birds.

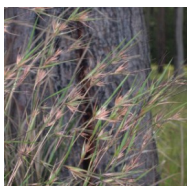
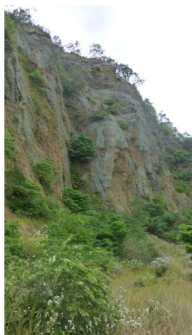
Grasses send up new shoots and set seed in anticipation of the wind carrying it to new 'garden' beds.

Birds are foraging for food or sitting on nests and raising their babies. The lizards, what are they up to?

In the vegetation on the forest floor, fungi will be breaking down fallen branches and returning their nutrients to the top soil.

Mammals will emerge at night to hunt and collect food for their babies.

There is lots happening at Munibung Hill right now.



Kangaroo grass—*Themeda triandra*



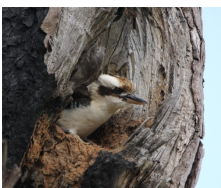
Lungs in the leaves



Just think ... Where would we be if it were not for all those myriad little factories suspended on the branches of all these trees, photosynthesising, 'breathing' in carbon-dioxide and 'exhaling' oxygen. There is no substitute for clean fresh air.



Rainbow bracket fungi, *Trametes versicolour*



Veteran trees with hollows

Flora

Due to extensive vegetation destruction since European settlement only remnants of the original forest cover remain. Dominant trees on the dry ridges include Spotted Gum, Grey Ironbark, Grey Gum and Forest She-Oak. Turpentine, Red Ash and Red Kamala occur mainly on the sheltered lower slopes. Understorey trees and shrubs include Sweet Pittosporum, Hickory Wattle, Sydney Golden Wattle, Muttonwood, Grass Trees, Burrawang and Ferns.

A wide variety of invasive weeds is found in disturbed areas, including Lantana, Privet, African Olive, Formosan Lily, Pampas Grass and Morning Glory in the gullies.

An ongoing program of weed removal and native seedlings plantings on the southern part of the hill is increasing biodiversity. There is plenty of scope for bush regeneration projects on the Hill: contact Landcare on 49210392 for more information.

The Soil environment

Over thousands of years the soil life beneath our feet has been evolving, mixing with the leaf litter and decaying fallen tree timber.

Feeding quietly as we walk above are millions of species, most of them still undiscovered including invertebrates (both carnivorous and herbivorous) such as beetles, centipedes, worms, ants and spiders, and billions of microorganisms including bacteria and fungi.

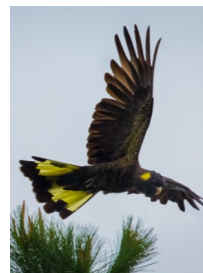


In a handful of fertile soil, there are more organisms than all the humans that have ever lived.

Professor Iain Young,
University of New England.

Amphibians

Banjo Frog



Reptiles

Goanna
Bearded Dragon
Blue tongue Lizard
Diamond Python & Green tree Snake (Non-venomous)
Red Bellied Black Snake
Long-necked Tortoise



Birds

Sulphur crested Cockatoo
Yellow-tailed Black Cockatoo
Firetail Finch
Kookaburra
King Parrot
Australian Raven
East'n Yellow Robin
Kestrel
Swamp—Harrier
Brush Turkey
Whiptail



Blue Wren

Mammals

Bandicoot
Echidna (perhaps)
Possum



Nightlife

Bandicoot
Tawny Frogmouth
Brush tail Possum
Ring tail Possum
Squirrel Glider
Powerful Owl
Spiders

