

Linking Geological Events to Aboriginal Oral Tradition and Stories

Katarina Samurović | Geomorphology | August 20, 2020

Genetic research from 2016 showed that the [oldest existing human civilization can be linked to one location](#), with carbon dating pointing to (at least) a **50,000-long existence** in Australia. It is now believed that they were the [first *Homo sapiens* "explorers"](#), who sailed out of Africa and across the ocean.

In light of this new information, researchers have gained new perspectives about Aboriginal culture. One of them is that the culture's ancient quality and traditional focus on the environment opens up a possibility that actual major geological events have been described in Aboriginal oral tradition and stories.

The Story Of Budj Bim

Budj Bim, formerly known as **Mt. Eccles**, is a **volcanic field** located in the [Newer Volcanics Province](#) which spans across the state of Victoria, covering an area of 15,000 square kilometers. The province contains over 100 shield volcanoes and features **400 shield volcanoes** and **lava domes**. The volcanic activity occurred from the Late-Pleistocene to Holocene, making some of them the youngest in the world.



CRATER OF MOUNT MCCLES (VICTORIA)

An 1860 lithographic print by Eugene von Guerard
domain via [Med](#)

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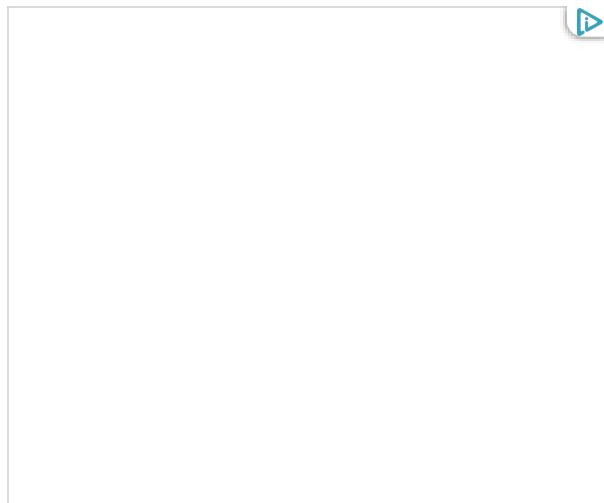
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The main features of the landscape around Budj Bim are the Tyrendarra lava flows which stretch towards the sea, forming the area's trademark wetlands. The wetlands were utilized by local **Gunditjmara people** to form ancient elaborate stone-walled aquaculture systems that are now recognized by UNESCO as a [World Heritage site](#).





Also, Budj Bim is an important mythological figure to Gunditjmara. They believe that Budj Bim, which translates to '*High Head*', is the landscape feature that outlines their creator, and a part of their central creation myth.

The story goes something like this:

The Great Creator had sent four Creator Beings in the form of giants that appeared in the landscape, in the secret sacred location of the Stony Rises country. Three Beings strode out to other parts of the land, but one crouched in place and transformed to Bim.
The Being's teeth and blood became landscape and created the wetlands.
the Creator Being reveal himself.



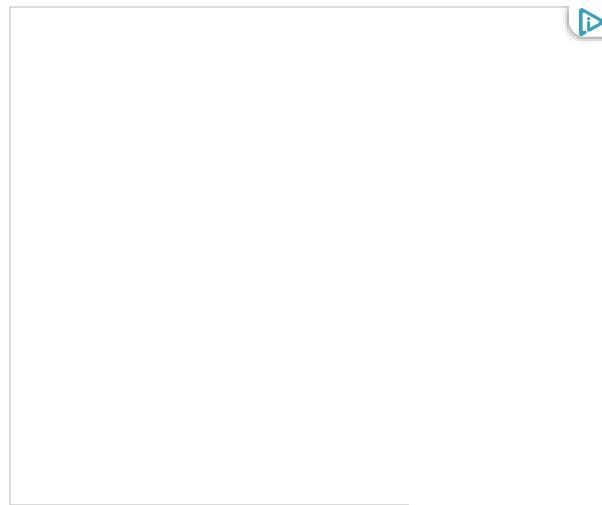
called **Mt. Napier**, **Mt. Rouse**, and **Mt Eccles**, respectively, by Western explorers.

Although the creation of myths is sometimes triggered by real historical events, for a long time it was considered almost impossible that this Gunditjmara creation story could have been an actual testimonial of an actual geological event.

However, while it is not yet certain, the likelihood that the story is not simply a myth, but a metaphorical testimony

The estimates of the Budj Bim eruptic
between 6,000 and 27,000 years ago
techniques had shown that the erupti

place for more than 13,000 years, thereby missing the eruption by at least 20,000 years. However, in **1947**, archaeologists found a stone ax near the neighboring **Tower Hill** volcano – beneath the volcanic rocks. What that meant is that the ax – and the existence of humans who left it there – **pre-dated the eruption** which covered the object with lava that turned to volcanic rocks.



Other researchers have recently raised the possibility that shells and burnt stones surrounded by cemented sand[×] at Moyjil, a coastal spot in Warrnambool, below the Tower Hill, c activity that stretches as far as 120,000 years ago. At the exact age of the rocks was still a i

Now, a [new study](#) published in **Geology**

potassium-40 into argon-40. **David Phillips**, the head of the University of Melbourne's School of Earth Sciences, says that argon radiometric dating is much more accurate than carbon-dating methods used previously.

What's even more interesting, the clues suggest that the peaks could grow **tens of meters high in a matter of days to months**.

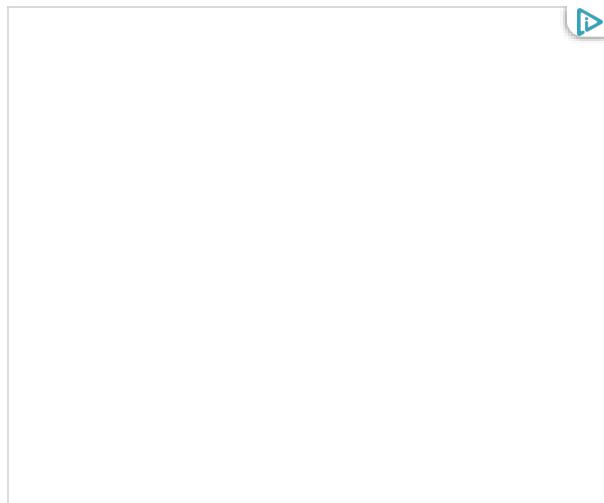
A sudden, violent eruption could have made a great impression on the people, who we now know were living in the area at the time. The event itself and other significant environmental effects that followed (e.g., the creation of swamps) could sprout something so culturally significant as the central creation myth.

Sean Ulm, an archaeologist at James Cook University, Cairns, who was not involved with the study said that "*It is an interesting proposition to think about these traditions extending for tens of thousands of years.*"

Still, he and other researchers believe that we should refrain from hard conclusions at this point since no other oral stories are believed to have survived for so long, even among Aboriginal tales which are already some of the oldest known in the world.



There is one more feature working in
Unlike many other human populations
to have occupied the same place for
the study of ancient hair samples fror
esis.
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"That, I think, could help explain why stories might have been so well preserved for so long," says **Patrick Nunn**, a geographer at the University of the Sunshine Coast, Maroochydore, and a co-author of a study that found that 21 communities around Australia have been independently passing down a story describing a sea-level rise event for around 7000 years.

Could it be possible that the Budj Bim tale is as much as **five times older?**



The evidence is mounting, but more interesting proposition. Nevertheless, these new significance of ancient oral traditions indigenous communities that keep the



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