

UNUSUAL KARST at WAIRERE BOULDERS

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Always having an 'eye out' for eccentric landforms, especially karst, I was fascinated by a TVNZ 'Country Calendar' program screened 26 Jun 2010 and decided we would visit this area. It appears I wasn't the only viewer as I believe crowds visited the Wairere Boulders after the program was aired. How could these boulders have formed? Basalt with all the features of karst! It seemed nature had been up to its tricks again.

Spending Christmas 2011 with family within a hundred kilometres of these formations, we made it our business to explore this area. Felix and Rita Schaad came from Switzerland in 1983 with the intention of buying land in New Zealand. They found this block on the Wairere Stream, quite near the Hokianga Harbour in North Auckland. Reading about this area I discover a William Webster, one of the early white settlers, erected the first water-driven timber mill in New Zealand here in 1845. Most of the kauri and other valuable timbers were milled and over the years the creek had been overgrown with gorse and every other sort of vegetation, and the boulders were not visible. Neighbours questioned them purchasing such a weed-infested area but they still felt happy with their purchase and started clearing it. Although it took a number of years, every day brought fresh surprises. This was unique, they had uncovered, and are now assuming that 'Wairere Boulders' is the only known karren eroded basalt boulder valley world wide. It is composed of such an enormous number of karst like rock in the middle of clay and basalt country. The rocks are 2.6 – 2.8 million years old. They are the erosional remnants of a basalt layer. The erosion of the rock called fluting, lapiez, karren or solution runnels.

Felix and Rita gave me a website www.wairereboulders.co.nz (*image below sourced from this excellent website -Ed.*) where a friend helped me source an article on this area by J.A. Bartrum and A.P. Mason, Auckland University, published in 1948. It

seems this area was known of but perhaps forgotten, as back in 1916 J.A. Bartrum had recorded this phenomenon and samples were in the Auckland Museum. "Karst in Stone" by Jill A. Kenny and Bruce Hayward (2009) also record these formations on p.7.

An explanation for pseudo karst bizarre forms is explained on a walkway notice:

Kauri and the erosion of rock surface. Leaching caused by rain dripping through the acid foliage of the rain forest and runoff over acid soil is thought to have created the world unique flutings on the rock surfaces of the Wairere Boulders. Kauri has played an important role in this process because of its acid foliage, which is thought to produce organic acids. The kauri has contributed to the bizarre form of erosion.

The Schaads have constructed bridges, paths, lookouts and information notices that make this geological gem a picturesque and fascinating walkway. The loop encircling Dragons Cave and a Nikau Forest took us about an hour. For \$15 it was excellent value and they made us welcome to park our campervan there for the night in this magical valley. The next morning my husband rose early and explored the area right up the viewing platform about another hour up the valley and enjoyed that.

This is a private park and the enterprise was established by years of hard work and without government funding. Inspect their website and read more of the geology of the area. A spot well worth visiting on your next New Zealand visit – perhaps after 2013 ACKMA at Waitomo.

