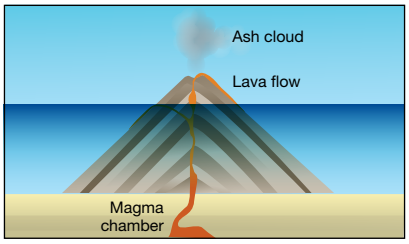
Volcano Fact Sheet

White Island Volcano

Description

- This is New Zealand's most active during the last 40 years.
- 70% of the cone is under the sea.
- It is an uninhabited island about 2 km in diameter and 48 km from the coast of the Bay of Plenty. The closest towns are Tauranga and Whakatane.
- It marks the northern end of the Taupo Volcanic Zone.
- The highest point is 321m, and the crater floor is less than 30m above sea level.
- The island is a privately owned scenic reserve, despite the harsh environment it is home to a number of bird species including a gannet colony.



▲ White Island is 48km off the coast of the North Island.

◄ The island is actually a submerged **stratovolcano (also called a composite cone)** - which is a volcano made up of alternating layers of ash and lava flow.

Maori Name

- *Te Puia o Whakaari* meaning to make visible.

Features

- Sulphur mining occurred at intervals from the 1880's until the 1930's and the remains of a factory can be seen on the island
- 11 sulphur miners were killed by a debris flow in 1914, when part of the crater rim collapsed.
- In May 2004 a dinosaur figurine (Dino from the Flintstones) was glued in front of one of the GeoNet web cameras and has been there ever since. Is he still there? Check: http://www.geonet.org.nz/volcano/activity/white-island/cameras/whiteisland-latest.html

Type

- White Island is a stratovolcano, also called composite cone volcano.
- It is made of layers of andesite lava flows and pyroclastic deposits (tephra).

Cause

- It was created by subduction of the Pacific Plate below the Australian Plate.

Eruptive history

- White Island has been active for at least 150,000 years
- There has been continual low level activity and some small eruptions since human settlement of NZ.
- From 1975 until 2001 there were frequent small eruptions making this the island's most active period in hundreds of years. Ash and gas plumes rose as high as 10km, lava bombs and blocks were thrown into the sea and occasionally the glow of red hot rock was visible at night from the Bay of Plenty coast.

Last eruptive activity

- Previous activity occurred from March to September 2000.
- A new eruptive episode started on the island in August 2012. This followed only a few days of unrest. Eruptions have produced a tuff cone and a small amount of lava was extruded in December 2012.

Other Volcanic Hazards

- Craters and fumaroles continually produce gases which are mainly steam, carbon dioxide and sulphur dioxide. Gases dissolved in the magma escape and rise towards the surface where they mix with, and heat the groundwater beneath the crater floor. This produces the white steam/gas cloud which is usually present above White Island. This acidic cloud can sting the eyes and skin, affect breathing and damage equipment and clothes.

Monitoring

- This includes 2 web cameras on the island and one at Whakatane, 1 seismograph and a microphone to detect volcanic explosions, regular monitoring of water, gas and soil, and levelling to measure land deformation every 3 months