Volcano Fact Sheet

Tongariro Volcano

Description

• Tongariro is a massive complex of volcanic cones formed by eruptions from at least 12 vents over more than 275,000 years.

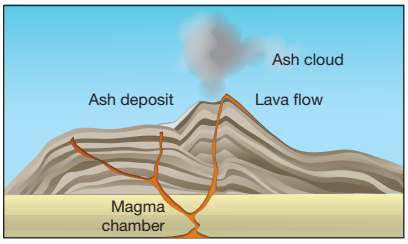
• It is located in Tongariro National Park which was given to the nation in 1887 by the Maori chief Te Heuheu Tukino IV.

• Volcanic explosions, collapse and erosion during the last Ice Age has modified the volcano.

• Ngauruhoe is the youngest cone (7000 years old) and most historically active vent, it has been frequently active in recorded times but has not erupted since 1977.

• Historic eruptions have also occured at Te Maari.

▼ The complex is a **stratovolcano (also called a composite cone)** - It is made up of alternating layers of ash and lava flow.



▲ The Tongariro volcanic complex.

▼ August 2012 eruptive vents.

Maori Name

Tongariro –fire carried away or seized by the cold south wind.

Features

• Ngauruhoe at 2291m is the highest point of the Tongariro complex and is on Tongariro's southern flank.

• Areas of mineral springs and fumaroles (steam vents) include Ketetahi Springs, Red and Te Maari craters. These are part of NZ's highest geothermal system which underlies parts of the volcano.

• Altitude, steep slopes, 'fresh' volcanic material and erosion prevent vegetation growing on most parts of the Tongariro complex.

• Some craters have filled with water to create Blue Lake and the Emerald Lakes.

Type

• It is an active stratovolcano (also called composite cone volcano).

• It is made of alternating layers of pyroclastic material (ash and rocks) and mainly andesite lava flows.

Cause

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

• The Earth's crust is stretched and thinned in the entire Taupo Volcanic Zone by movement of the plates.

Eruptive material

• Pyroclastic ashfalls and flows, andesite lava flows, blocks and lava bombs are widespread over the complex.

Historical eruptive activity

• Ngauruhoe has erupted many times, most recently in 1977.

• Upper Te Maari crater(s) erupted in 1869, 1886, 1893, 1896–7 and 2012.

Monitoring (GeoNet)

• 4 seismographs, 1 microphone, chemical analysis of water and gases, 3 continuous GPS stations, and 3 web cameras facing Tongariro are used to observe activity.

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