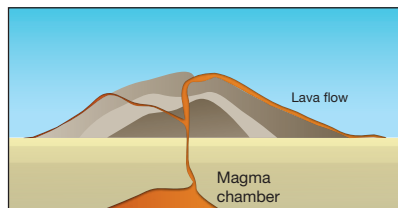


Dunedin Volcano



Description

- This long extinct volcano was probably around 1000m high but has been eroded down over millions of years. The highest point today is Mt Cargill at 700m.



▲ Dunedin harbour and peninsula are remnants of the now extinct Dunedin volcano.

◀ It was a **shield volcano** - a broad volcano that is built up from fluid lava flowing down its gently sloping sides.

Features

- The Dunedin City area, Portobello Peninsula and Otago Harbour are all part of the volcano.
- The hills surrounding Dunedin (Mt Cargill, Flagstaff, Saddle Hill, Signal Hill and Harbour Cone) are remnants of the volcanic crater.
- The sea has drowned the lower slopes of the volcano.
- The area between Port Chalmers and Portobello was the vent of the volcano and is now part of Otago Harbour.
- Outcrops of lava and ash are visible around the city and harbour.

Type

- This is an extinct shield volcano.

Cause

- These volcanoes occur away from plate boundaries and subduction zones. They probably arise from hot spots in the mantle and produce mainly basalt magma.

Eruptive history

- It began erupting around 16 million years ago and had 3 main eruptive phases. Between phases the slopes of the volcano were forested and traces of these forests are preserved between lava flows in swamp and lake deposits.

Eruptive material

- These are pyroclastic flows, lava flows and fall deposits made mainly from basalt magma.

Last eruptive activity

- The rocks are dated at about 10 million years ago.

Monitoring

- None is necessary because the volcano is extinct.

