

TRAVELLERS' CLUB REPORT 6TH MAY 2007

Thirty members came along to see and hear about volcanic landscapes from Douglas Raupach. Well did we have a feast !

Personally, I had no idea that so many volcanoes exist and are active nor that so many places have evidence of a volcanic heritage. Douglas is obviously an enthusiast and it seems that he has visited most of the world's volcanic areas and photographed many.

Volcanic activity (eruptions, explosions, lava flows and hot/thermal springs/geysers) has happened throughout our planet's existence but only since photography have we been able to see the action as it changes the landscape.

We commenced with aerial shots of the most photographed eruption/explosion – Mt. St. Helens in the North American Rockies – (1980). Humans, fauna and vegetation were killed in a 23 mile radius and it also discharged debris into the atmosphere to an altitude of 70,000 feet. A former tourist attraction, Spirit Lake boiled over and contributed hot water to the eruption. We then looked at Mt Rainier, also in the Rockies, which erupted a mere 1000 years ago and is now a thriving winter sports resort. These are examples of explosive volcanoes.

We learned of other types – flow volcanoes whose lava flows down and covers sections of the landscape e.g. Galapagos, and shield volcanoes whose regular continuing activity builds up a layered shield of rock completely covering a region.

At various points, Douglas showed us distinctive shapes and patterns in volcanic rock i.e. cooled lava. Basalt cools with vertical cracks and looks like clustered columns when exposed as a cliff or cutting.

The western boundary of North and South America is part of the "Rim of Fire" around the Pacific Ocean ie volcanic landscapes/evidence/activity even in Antarctica. In Ecuador, the highway along the Valley of the Volcanoes is lined with volcanoes on both sides – the largest being Mt. Cotopaxi.

The next part of the talk dealt with chains of volcanoes as we jumped across the Pacific to northern Asia. From Kamchatka in the north the Rim of Fire is evident as a chain through Japan to the Philippines, Indonesia, New Guinea and New Zealand.

We looked at active and remnant volcanoes including Fujiyama and Aso in Japan, and volcanoes in Indonesia and Auckland, New Zealand, where Rangitoto island is a typical Shield Volcano.

We lingered in New Zealand, looking at thermal areas, numerous recent eruptions (Tarawera, Tongariro, Ruapehu, Ngauruhoe, Egmont), black basalt beaches and Lake Taupo.

Hawaii and Maui are totally volcanic although not part of the Ring of Fire. They are at the centre of the moving Pacific Plate. As we heard about undersea volcanoes and former hotspots we looked at superb shots of the coast, geysers erupting with red lava, canyons resulting from lava flows, buildings inundated by lava, currently very active volcanoes and Diamond Head now extinct.

Onwards to Lord Howe Island and Norfolk Island also completely volcanic landscapes – layer upon layer of lava which incidentally has provided scant material for the beaches which are largely shellgrit (no quartz sand as on Australia's beaches).

We were amazed at the number of volcanic items in the landscape of our homeland! How about an undersea volcano adjacent to Bondi and numerous volcanic deposits/necks near Sydney which are the source of paving/broken rock for concrete and roads (Minchinbury, Prospect, Kiama) as well as basalt caps in the Blue Mountains including Mounts Wilson, Hay, Charles and Banks. Then there is Australia's very own chain of extinct volcanoes from Glasshouse (the oldest) through Narrabri, Warrumbungles, Warning, various others, to Gambier (the youngest).

Onwards to Africa and the world's highest volcano Mt Kilimanjaro and other Rift Valley volcanoes whose caustic output/rocks with high content of sodium carbonate means that vegetation can't survive in the Rift Valley lakes (only flamingoes survive). Nearby Ngorongoro crater with its huge caldera and lake contains a huge permanent population of wild animals.

Lack of time meant that Europe's active volcanoes were featured at the expense of the extinct – although I suspect that Douglas has researched or visited the lot. The aerial photos were the most fascinating as we went from Etna via Stromboli to Vesuvius. We also visited the volcanic island of Volcano from which all other volcanoes are named.

The hotspot finale was Iceland – a hotbed of activity at the moving border of the European and North American Plates. We saw lava flowing into the ocean and heard about villagers spraying sea water to cool and slow down a lava flow that threatened their homes.

Who would have thought that there was so much to enjoy around volcanoes?

Thank you Douglas!