## The Wrath of Mataoho / Te Hihiri o Mataoho

## **General Information:**

- Te Pane o Mataoho or Mangere Mountain erupted about 20,000 years ago. A piece
  of wood found from beneath the lava flow was carbon dated and found to have died
  about 20,000 years ago
- It is 106m above sea level and is one of the largest scoria cones of the 48 volcanic cones and craters in Auckland's volcanic field. It is also the most preserved cone in the area
- It probably erupted in the following sequence:
- 1. A bubble of magma started forcing its way through the crust;
- 2. This magma met ground water;
- 3. Violent explosions took place and a large explosion crater formed with a low tuff ring;
- 4. Fire fountaining followed with lava bombs blasting up into the air and forming steep mounds:
- 5. Large amounts of lava came to the surface and flowed outwards through a breach in the crater; heated up and semi-fluid lava pushed upwards forming a tholoid in the middle of the main crater;
- 6. New vents blasted out more scoria within the crater; and
- 7. One vent in the crater rim erupted very violently to produce a second, very steep crater
- Lava fields from Te Pane o Mataoho spread in all directions except the south-east.
   They cover about 5 square kilometres. Lava caves and tunnels are found in and around the mountain as well as volcanic ash which spread in all directions except the south for about 8 kilometres. The soil became very fertile and was used for extensive gardening

## Images:



## Vocabulary:

lava flow Hot, melted rock that flows from a volcano or other opening in the surface of

Earth

carbon dating A technique used by Scientists to answer many questions about the past and

pinpoint when it happened to understand how and why it happened

scoria

volcanic Anything of, related to or produce by a volcano

magma Hot, melted rock material within the Earth

crust Earth's surface layer of solid rock

explosion crater

tuff ring

fire fountaining

lava bombs

breach

tholoid

vent

lava caves

lava tunnels

volcanic ash