

Monday, 15 October 2007

When the big wave struck

Just when we thought we knew all about New Zealand history, along comes Bruce McFadgen with his giant tsunamis.

The Wellington archaeologist reckons that a tsunami the height of a seven-storey building hit northern New Zealand about 500 years ago.

The wave swept the coasts of Northland, Auckland and the Bay of Plenty and by the time it hit Cook Strait it was still 10 metres high. This mother-of-all-tsunamis decimated Maori and changed their way of life forever.

Dr McFadgen has scoured nearly every inch of our coastline, studied estuaries and sand dunes, earthquakes, volcanic ash, ocean-rafted pumice and buried soils.

He has picked his way through records of more than 50,000 archaeological sites and drawn on over 1500 radio-carbon dates from pa and moa-hunter sites, fossil shells, bones, charcoal and lake mud.

He has looked closely into traditional Maori legends. Maori have explicit accounts of huge waves overwhelming coastal communities up north about 20 generations ago.

There is tonnes of evidence of the big tsunami but the most compelling evidence is of coastal boulders, stones and gravel swept way inland to 32 metres above sea level.

Before the tsunami hit Aotearoa, the earliest Maori were coastal hunters and gatherers living in open coastal settlements.

Their craftsmen built large double-hulled canoes, and made and traded a wide range of stone and specialised adzes.

Dr McFadgen thinks that the tsunami must have carried away most Maori canoes and fishing nets and wiped out their gardens and stored food supplies. He shows that most coastal settlements were abandoned immediately after the tsunami. He suggests that, along with the bulk of the Maori population, the disaster must also have killed many skilled craftsmen so that big sailing canoes requiring skilled boat builders and navigators disappeared, to be replaced by single hulled, paddled canoes. The stone trade fell away and the range of stone adzes shrank. Maori fishing techniques changed, along with their trading routes and diets. Some tribes' genealogies run back to the 1500s but no further, possibly because keepers of kaupapa perished in the catastrophe.

Before the tsunami struck there are no archaeological signs of warfare or fortified pa and no weapons in any museum collections but Dr McFadgen says plenty of weapons and fortified pa appear in the archaeological records immediately after the tsunami.

He says the catastrophic event marked the cultural boundary between the "Archaic" Maori and the "Classic" Maori encountered by Abel Tasman and James Cook.

Our archaeologist also has news of another lesser but damaging tsunami that hit the east coast of the North Island about 400 years ago.

Dr McFadgen is already renowned worldwide for his recalibration of the carbon-dating technique, but the publication last week of his new scholarly book, *Hostile Shores: Catastrophic Events in Prehistoric New Zealand and their Impact on Maori Coastal Communities*, promotes him into the ranks of New Zealand's most visionary scientists and historians.

The cover blurb reads "Essential reading for anybody living within 300 metres of the New Zealand shoreline."

Right on!

You may not copy, republish or distribute this page or the content from it without having obtained written permission from the copyright owner. To enquire about copyright clearances contact

clearance@fairfaxnz.co.nz.