

# Māori - When to Aotearoa?



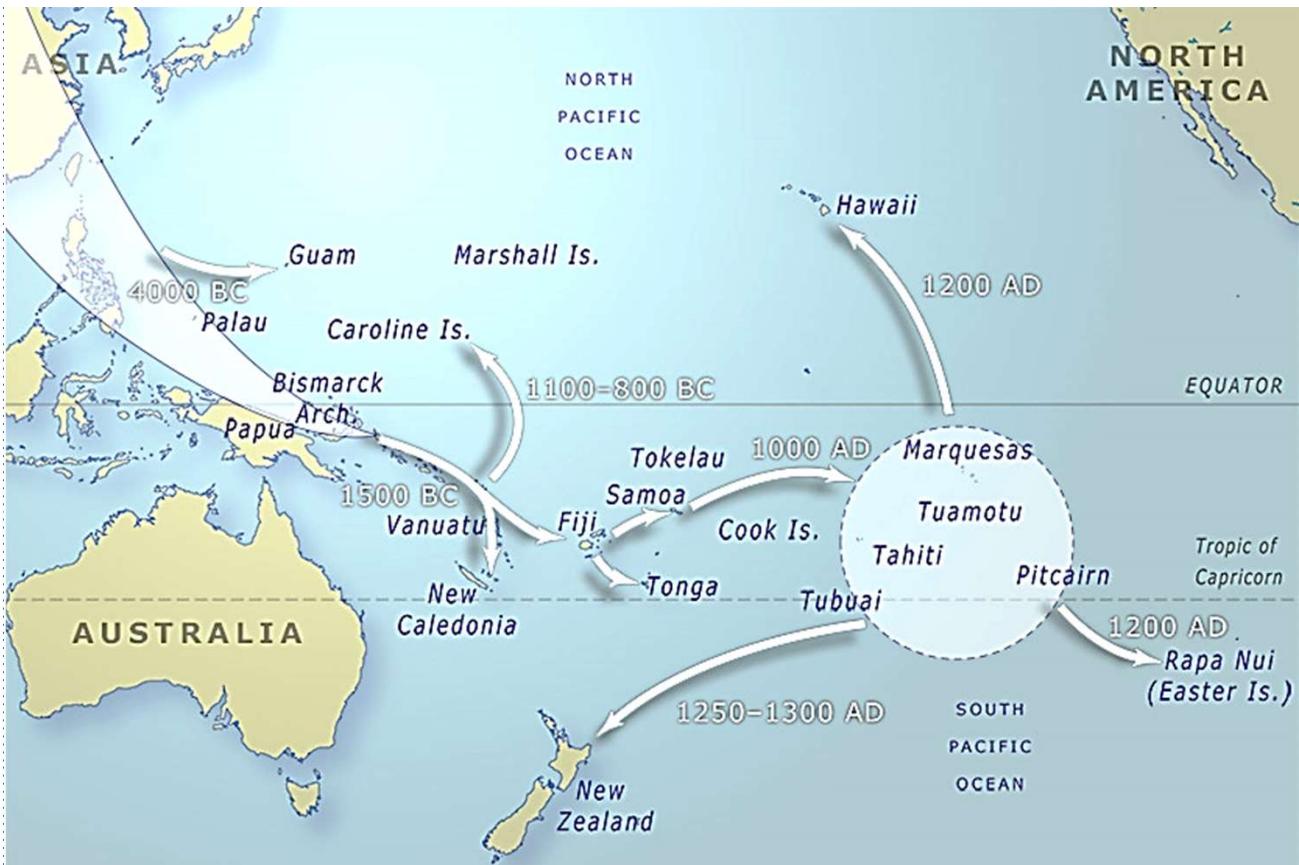
## Where from?

Language leaves no doubt - Māori is closely related to other East Polynesian Languages

Archaeology too is clear - the tools and ornaments in the earliest New Zealand sites have clear analogues in Eastern Polynesia in sites of similar age

The sequence of carbon dates of early sites in Eastern Polynesia suggest that the central part of East Polynesia was settled a little before New Zealand – but this changes quite often as dating is improved.

There is no credible evidence for any other cultural origins before European settlement.



## What event(s) are we looking at?

DNA has a clue.

Mitochondrial DNA - it is separate from nuclear DNA and provides energy in cells. It is only inherited maternally. Its forms have radiated over time so we have subtly different forms depending on small changes that have taken place. Every variety of mtDNA that exists in Māori represents either a small change that first occurred in NZ, or a separate ancestral female. Can exclude a say European female ancestor, but not so easily a more modern Polynesian immigrant to NZ.

Last word not written – **but is clear Māori female line ancestry was not a small number of people – likely much more than one canoe load. 50-100 women is one estimate.**

So if more than one voyage then we are not looking at a single date – settlement of NZ by Māori was a process, not an event.



Facial reconstruction based on a skull found at the

Wairau Bar, Marlborough [Credit: The Press]

## Lines of Evidence for When

- Māori Tradition
- Dating Archaeological Sites
- Dating Imported Items
- Dating Effects on the Environment

# Māori Tradition

At its most basic:

- We came from somewhere else.
- We came in waka (but no one remembered they were double canoes which they certainly would have been).
- Our origin here is related to different named canoes and ancestors linked to those canoes (mostly). The different canoes and ancestors form the basis of tribal identity.
- We brought some plants and dogs with us (diverse accounts between tribes).
- Some remembered following astronomical bearings.
- Some credibly record place names in Eastern Polynesia. Rangiatea / Raiatea.
- Some record finding people already here.
- Many supernatural elements.

## Māori Tradition -1

Did not exist to record history in a Western sense but rather the relationship with the land and of people with key ancestors.

Does not have calendar dates – can only derive ones from whakapapa generation counts. Whakapapa often start with ritualised name lists starting with gods / incantations. When do they become reliable history?

Includes supernatural events – not legitimate to report traditional history excising these, thereby making the remainder more credible.

Does not include any comprehensive single view of the voyaging to and settlement of NZ. Kupe, Toi and the Fleet are post-colonisation rationalisations, mostly by Pakeha.

Best early source is George Grey's work – Sent out notebooks to literate Māori who recorded tradition and genealogies in Māori. The notebooks still exist – Grey published a selection 1855: *Polynesian mythology and ancient traditional history of the New Zealand race, as furnished by their priests and chiefs*.

Some traditions cross link between tribes for early whakapapa and related stories – but not all.

Quite varied generation counts back to each key founding ancestor. Short ~18 generations, medium ~20 generations, long (Kupe e.g.) 23-25 generations, but the range is 10 to 32 gens. Best date estimates key ancestors 13<sup>th</sup> to 15<sup>th</sup> Century

## Māori Tradition - 2

Tradition is dynamic – lives to meet today's needs

With literacy Māori became more aware of each other's traditions. Progressively Christian – Bible in Māori progressively: extracts 1827, New Testament 1836-37, whole Bible 1868

Māori visited Rarotonga and some later accounts coordinate the traditions of both places

Archaeology happened: 1871 - J. von Haast: *Moas and Moa Hunters*. Moa Hunters not apparently Māori in any modern sense – and hence needed explaining. Did revisions to tradition seek that explanation?

*Hawaiki: the Whence of the Maori: With a Sketch of Polynesian History, Being an Introd. to the Native History of Rarotonga*. Percy Smith. 1898. An overview of many sources. Consolidated as Kupe, Toi and the Fleet.

### *THE LORE OF THE WHARE-WĀNANGA* 1913

"Written down by H. T. Whatahoro Jury from the teachings of Te Matorohanga and Nepia Pohuhu, priests of the Whare-wānanga of the East Coast, New Zealand. Translated by S. PERCY SMITH"

Both sources were long dead. The first recorder, John Milsome Jury, was a European who understood but did not speak Māori and wrote the accounts out in English. His son, Te Whatahoro, translated them back into Māori. Smith's retranslation had a strong bias to his views.

Going beyond the basic is fraught.

## Non-Māori Tradition

*Tangata moriori* is what the inhabitants of the Chatham Islands called themselves. They used both words in some accounts but *Moriori* separately in others. The word is the local version of the word *māori* (meaning *of this place*)

Some race based views of New Zealand history asserted they were a different race. This has no scientific support. The Chatham Island language and culture are most closely aligned to mainland New Zealand.

There is no evidence that anyone living in New Zealand ever called themselves Moriori, as distinct from Māori.

The story that they were an earlier race inhabiting NZ and exterminated by later arriving Māori is a Pakeha myth.

## Archaeology

Archaic Māori sites are distinctive by their artefacts, locations and economy. (Archaic is an archaeological term, not a pejorative.)

Many have been dated by carbon dating – Apply chronometric hygiene to eliminate poorly provenanced dates and there are no dated sites earlier than the 14<sup>th</sup> century (but lots in the 14th. C.)

Māori left remains from New Zealand in sites in the Auckland Islands, Kermadecs and Norfolk Island in the 14<sup>th</sup> Century and at uncertain date in the Chathams. So Māori were presumably numerous and active sailors then.

A marker horizon is the Kaharoa ash (source by Tarawera) – tightly dated by radiocarbon to AD 1314±12

There is only one site with an occupation stratigraphically below the Kaharoa ash – Cross Creek midden on the Coromandel – but that bottom layer is only loosely dated and the Kaharoa identification has been contested.

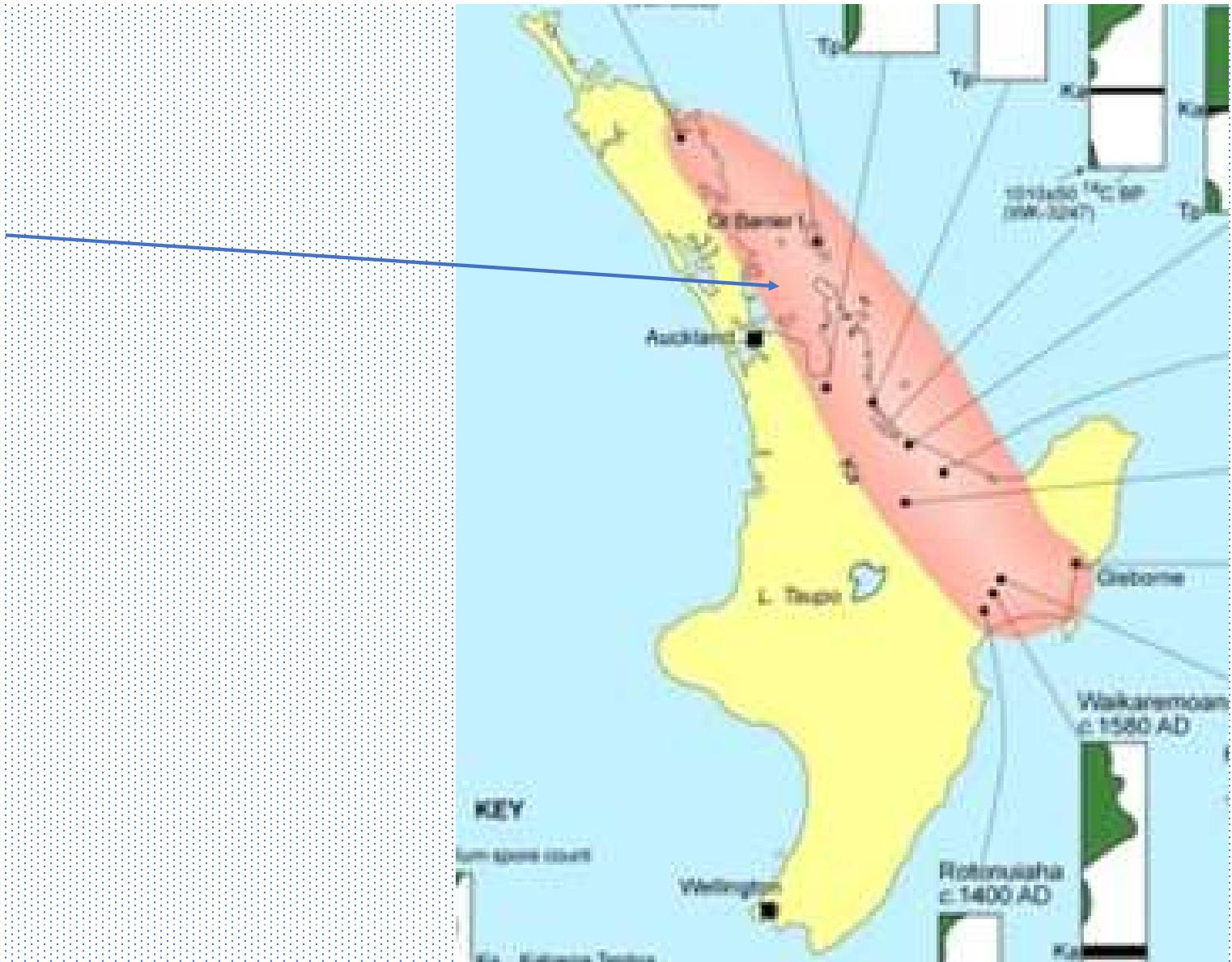
Have we dated the earliest site? Kaharoa ash did not cover the country.

Many early sites are small and coastal and easily lost to sea erosion and development. There is a strong possibility that the earliest smaller sites did not survive to modern study.

Some early sites are large - particularly Wairau Bar – but some of that is lost to erosion. The oldest part yet dated, is 14<sup>th</sup> Century - but is it the oldest part of that site?

# Archaeology

Kaharoa ash – extent.



## Dating Imported Items

### What has been found?

Several shaped vesicular basalt blocks from Southland – three sites, two early archaeological – look like marae kerb stones. Credible source has been located – Mehetia - a small volcanic island near Tahiti – date early but uncertain.

Chisel made from a tropical shell – Wairau Bar – site association only - date early but uncertain

Fishing trolling lure made of pearl shell – Tairua – from an archaeological context - dating is late 14<sup>th</sup> to late 15<sup>th</sup> century

Another also made of pearl lure - Coromandel – Slipper Island – not from an archaeological context.



## Dating Imported Items -2

Cook Island style adze from the Wairarapa – not from an archaeological context.

Do not help that much!

If there were lots of voyages should there have been more things found?

If there were lots of voyages why did pigs and chickens not reach / survive here? Likewise banana?

If there were lots of voyages here then we might expect return voyages to tropical EP. To date no NZ materials returned to tropical EP have been found archaeologically. Are two greenstone items from the Cook Islands known, but are casual finds, so no time control. Might be modern transports. There are two adzes of Coromandel basalt in Auckland Museum labelled “Cook Islands ?”

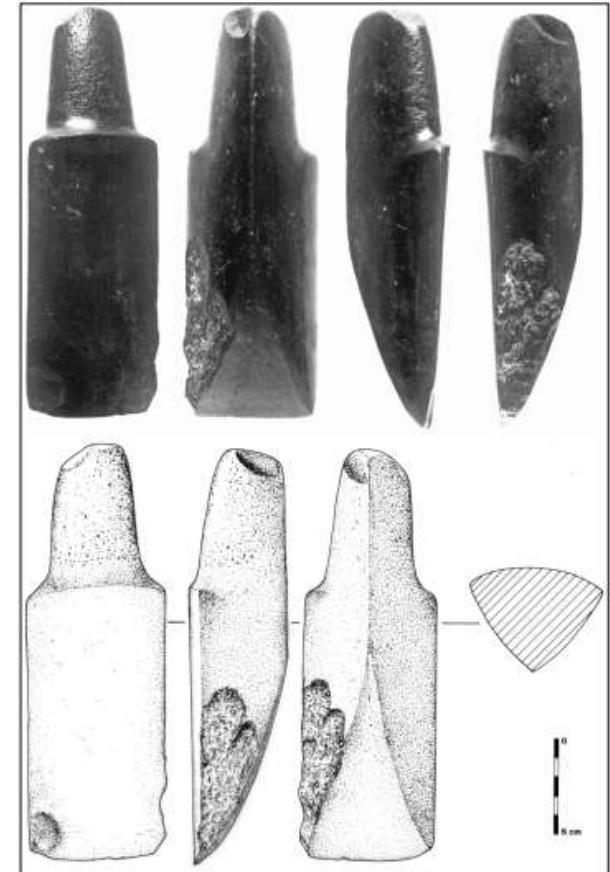


Figure 1. The Polynesian adze from Whatarangi, Palliser Bay (drawing by Joan Lawrence).

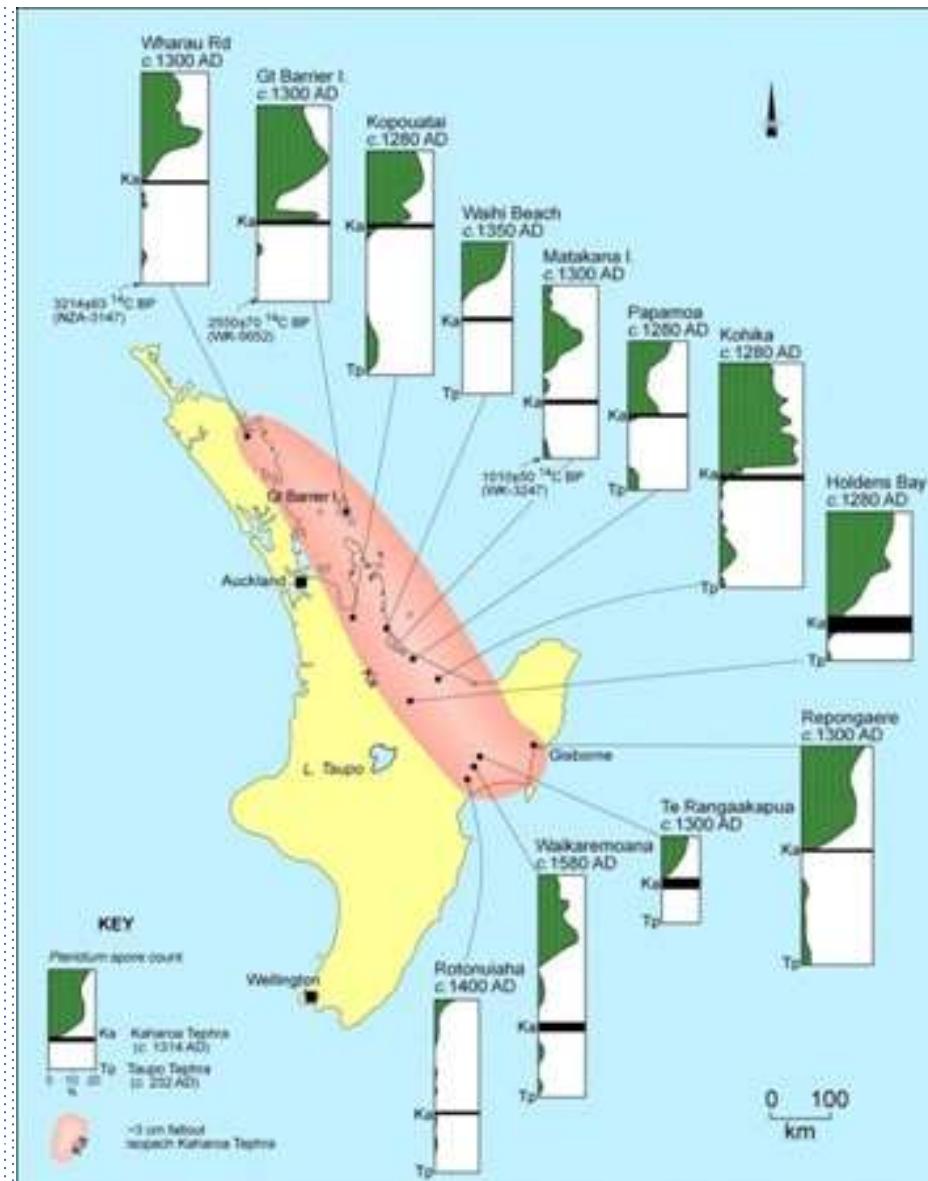
## Dating Effects on the Environment

Deforestation – happened early in the East Coast areas both islands but more in the South Is. Dated by looking at pollen sequences from swamps (+ bracken spores + charcoal) and by dating relict logs. 14<sup>th</sup> Century onward

Faecal traces in lake deposits – lipid - Coprostanol – New technique – human and dog origin – linked to pollen diagrams as well. Two small Central Otago lakes first reached in the 14<sup>th</sup> C. Early visitation there soon tailed off.

Swamps with Kaharoa Ash – just the barest trace of forest disturbance beneath the ash – but how much forest clearance did the very first settlers need – for planting crops? - for firewood? – arguably not much.

Seeds chewed by rats – again extracted from swamps, dated by Kaharoa ash association and by C14. Clear that rats were here only just prior to Kaharoa – but were rats brought on the first canoe or later ones?





Rat gnawed *miro* endocarp

Carbon date on oldest rat chewed seed  
~1280 AD

Rats did not get here without people

But an early voyage could have delivered rats, but the people on the canoe did not settle

Or alternatively might not have been rats on the canoe of the first people to settle.

# So When?

## ***First settlement:***

- Entirely data driven: Just prior to Kaharoa AD  $1314 \pm 12$  “Late 13<sup>th</sup> Century”
- Taking account of the possibility of absent evidence and possibly later rats:
  - Cautious answer - 13<sup>th</sup> Century
  - Best single date - if you have to have one - **1250 AD**

## ***Date Range for settlement - as a process – i.e. multiple voyages***

- Not known – probably effectively over by 1400 AD as the local population was then so numerous that any later arrivals would have had little cultural or biological impact.

Tradition - basic	Modern view
We came from somewhere else	Yes but Hawaiki probably one stage earlier – <i>Savaii</i> Samoa
We came in waka	Yes – very likely double canoes
Our origin here is related to different named canoes and ancestors linked to those canoes	Consistent with multiple voyages
We brought some plants and dogs with us	Yes, but some plants claimed are endemic / indigenous
Some remembered following astronomical bearings	Yes – an important part of traditional oceanic navigation
Some credibly record place names in Eastern Polynesia	Consistent with archaeology
Some record finding people already here.	Consistent with multiple voyages
Best date estimates on generation counts to key ancestors: 13 <sup>th</sup> to 15 <sup>th</sup> Century.	Archaeology first settlement 13 <sup>th</sup> Century, later separate arrivals not excluded.
Many supernatural elements	!