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OBSIDIAN HYDRATION AND THE DATE OF THE FIRST COLONISATION OF NEW ZEALAND

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Since my "Paradigmatic Shift" paper (Sutton 1987) appeared in the New Zealand Journal of Archaeology I've had several responses to that article, both oral and written. Most have been offered forcefully and they tend to divide neatly into either in favour of the paper or against it. Neal Enwright of the Geography Department here at Auckland may write a response to it for the Journal (pers. comm. 1988). So there is more to come.

However, nothing I've read or heard since returning to New Zealand in late January has modified my view that the date of first colonisation of New Zealand is as yet unsatisfactorily defined and that it could well be appreciably earlier than we've led ourselves to believe.

In this context readers of Archaeology in New Zealand should be aware of an article published by J.P. Lowe and others (1984), in which the results of a tritium - exchange method for obsidian hydration shell measurement are reported. Most of the hydration dates reported there fall within the length of the prehistoric sequence as defined by Davidson (1981). However, two specimens appear to pre-date the beginning of that sequence by a substantial interval. These are from N57/2 and N65/18. Their provenances are given (Lowe and others 1984:Table II) as:

- "N57/2 obsidian flakes in flax kit, Kauri Point"

and

- "N65/18 obsidian flake from Ngaroto Swamp Pa".

The hydration ages are approximately 1600 and 1400 years ago respectively (Lowe and others 1984:Figure 3).

In the view of the authors (Lowe and others 1987), "these results suggest that some prehistorical sites in New Zealand may have been occupied at least several hundred years earlier than previous archaeological estimates."

Clearly, there is a need for more experimental work on this method of dating and its application to archaeological problems and materials. Both the need for that research and the justification for it, in terms of the dating of first colonisation, are established by the data presented so far.

References

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