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## ARCHAEOLOGY IN NEW ZEALAND



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## A PREVIOUSLY RECORDED NORTHLAND OBSIDIAN REFERENCE

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In relation to Clayton Fredericksen's article in the March 1998 issue of *Archaeology in New Zealand* (A previously unrecorded obsidian source in Northland), I note that he does not acknowledge that the reference by P.G. Morgan to an obsidian deposit in the Takahue Survey District (Kaitaia), published in Geological survey Bulletin 32 in 1927, was initially outlined by Brassey (1985: 42).

In referring to this alleged obsidian deposit, Brassey noted,

A further reference to an obsidian occurrence near Kaitaia (Morgan 1927: 72) was not mentioned by Ward. This material is said to occur in a 'large dyke like mass' at 'a spot thirteen miles from Kaitaia' in Takahue survey District (Morgan 1927: 72). However, there has been no subsequent confirmation of the existence of this deposit. This deposit may be difficult to relocate, assuming that it does in fact exist, since the area described includes some rugged and heavily forested terrain (Brassey 1985: 42).

As a matter of regional archaeological interest, in the late 1980s and following the Reef Point excavation with its extensive lithic assemblage in the early 1990s, I undertook a broad preliminary assessment of the region's geological potential (excluding the sediments of the tombolo). The areas examined included the Maungataniwha, Herekino and Northern Warawara Ranges, the dissected plateau area to the east of Kaitaia, and the area of old volcanism in the Whangaroa.

This resulted in, amongst other things, identification of a range of adze grade

basalts, andesites and argillites, together with a small number of adze manufacturing sites. Also found were a considerable range of cherts, including two possible sources for the locally widespread silicified chert breccia and the less significant black chert, and a minutely fractured glass-like material with no lithic potential in the Victoria River catchment. Not found was any evidence of good quality vitreous obsidian in the region described.

Added to the fact that there has been no subsequent report of obsidian in the area is the questionable geological context given for the material in 1927, the lack of any immediately apparent anomalous obsidian material in sites from the region, and the absence of readily identifiable appropriate geological formations in the area in which good quality vitreous obsidian could occur. These factors led some time ago to doubts that such a deposit exists.

Apart from the long overdue need for detailed evaluation for Northland basalts and extensive ranges of cherts, I would suggest energies might be better spent in re-evaluation of the extent of vitreous obsidian in the area to the north of Whangarei where there is evidence of a wider distribution (Brassey, pers. comm.); evaluation of the altered obsidian from the Taupo Bay region; and further investigation of the source and extent of use of the dacite obsidian identified in the late 1980s by Brassey (1998, this issue) found during Fredericksen's Motutoa investigation (Prickett 1990: 82) and at a number of eroded sites on the west coast between the Hokianga and Whangape Harbours. With actual samples from each of the above areas, such efforts might ultimately prove more productive.

## References

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- Morgan, P.G. 1927. *Minerals and Mineral Substances of New Zealand*. Wellington. Department of Scientific and Industrial Research, Geological Survey Branch, *Geological Survey Bulletin 32*.
- Prickett, K.E. 1990. Identification and sourcing of lithic materials.

Appendix 3. In: An archaeological investigation of food storage and habitation site (06/3007-308) at Motutoa, South Hokianga, Northland. By C.F.K Fredericksen. *Science and Research Internal Report No 78*. Department of Conservation.