



NEW ZEALAND  
ARCHAEOLOGICAL  
ASSOCIATION

## ARCHAEOLOGY IN NEW ZEALAND



This document is made available by The New Zealand Archaeological Association under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

To view a copy of this license, visit  
<http://creativecommons.org/licenses/by-nc-sa/4.0/>.

A NEW OBSIDIAN FIND FROM THE CHATHAM ISLANDS

Doug Sutton  
Department of Anthropology  
University of Auckland

Alan Hemmings  
Department of Zoology  
University of Auckland

There are apparently no natural occurrences of obsidian in the Chatham Islands. Therefore, any volcanic glass found there must have been transported to the islands, presumably in precontact times. This makes research on Chatham Islands obsidian finds particularly important because it can provide direct information on the geographical origins of precontact settlements (Leach and others 1986). To date obsidian has been found in appreciable quantities in only three locations. In contrast, very small obsidian flakes were excavated from the Waihora site (New Zealand Archaeological Association Site Number C240/283) which is dated to about 1650 A.D. (Sutton and Campbell 1981). The relative abundance of obsidian from New Zealand (Leach and others 1986) in apparently early contexts, compared with much smaller quantities found in later sites, has supported a model of single and early colonisation of the Chathams from New Zealand followed by isolation after about 1500 A.D. - the approximate time of origin of the Moriori culture (Sutton 1980).

This note reports an extension of the geographical range of obsidian finds within the Chathams and a point of interest concerning obsidian technology there. One of the authors (A.H.) found an obsidian flake tool above the pool on South East Island (NZMS Chatham Islands Sheet 2: Grid Reference 759 125) during the summer of 1985-86. This find occurred after large quantities of soil and vegetation were removed from the northeast coast of the island by a major storm in August 1985.

This is the most southerly obsidian find spot reported from the Chathams to date. The artefact is illustrated in Figure 1. It is a flake tool with the point of percussion located at the apex. It has been laterally reduced by unidirectional flaking from the dorsal side (shown on the right in Figure 1). The artefact has been truncated by a transverse step fracture, which apparently occurred after lateral reduction began. The central portion of the ventral margin of the step fracture has been used as a striking platform. One sizeable flake had been struck from it and other fine retouching or use wear has occurred in the same vicinity. The ventral flake struck from the step fracture forms a comfortable thumb grip. The result is that the tool can be held firmly and

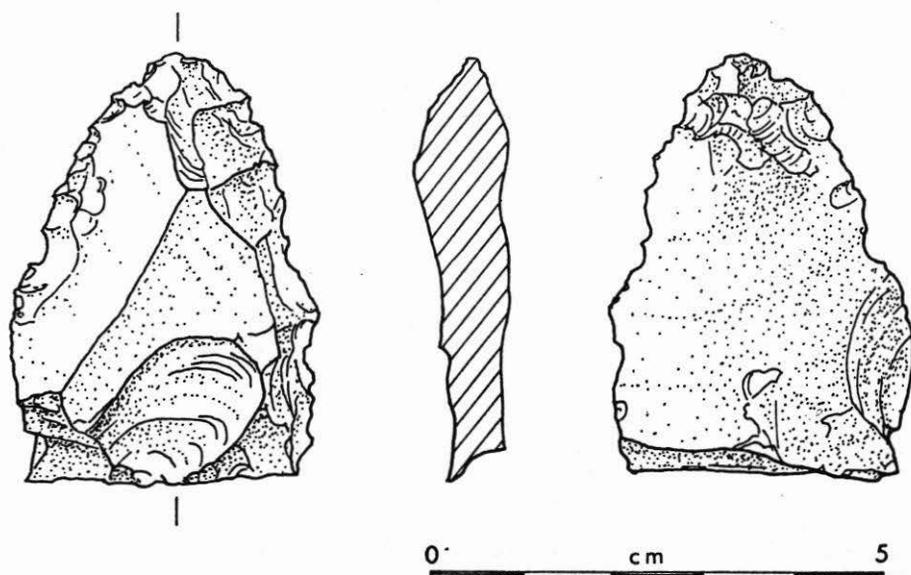


FIGURE 1. Obsidian find from South East Island.

easily in either hand. This was presumably done so that the most accurately retouched edges of the tool could be used as a bilateral scaper.

If the model of obsidian supply decay over time proposed for the Chathams by Sutton (1980) is accurate, the discovery of this artefact may indicate the presence of an early site on South East Island. If relatively large obsidian artefacts were present late in the sequence then the quantity of obsidian taken to the Chathams was probably larger than previously believed. This would raise the possibility of multiple voyages to the Chathams within the precontact period.

#### Acknowledgement

Caroline Phillips drew Fig. 1.

#### References

- Leach, B.F., with A.J. Anderson, R. Bird, P. Duerden, D.G. Sutton and E. Clayton 1986. The origin of obsidian artefacts from the Chathams and Kermadec Islands. *N.Z. Jnl of Archaeology* 8:143-170.

- Sutton, D.G., 1980. A culture history of the Chatham Islands.  
Jnl Polyn. Soc. 89:67-93.
- Sutton, D.G., and H.J. Campbell 1981. Patterns in prehistoric  
distribution of stone resources in the Chatham Islands.  
In B.F. Leach and J.M. Davidson (eds) Archaeological  
Studies of Pacific Stone Resources. British  
Archaeological Reports (International Series) 104:209-33.