



NEW ZEALAND
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NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER



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MT. WELLINGTON SITE SURVEY by L.M. Groube.Introduction

With the passing of the inaugural year of the Field Recording Scheme many problems of organisation and method will have become apparent to members. This article is concerned with one problem met in Auckland field work; the recording and description of complex fortifications. Large sites, such as the Auckland Isthmus pa present two major difficulties; one of field method, and the other of recording procedure. The ramifications of dozens of terraces, scarps, banks and ditches, the hundreds of pits, extensive middens and other associated features multiply field survey problems, especially when as with most Association members, only the simplest surveying instruments are available and time is limited. The second problem, which could be called procedural, poses the questions: what features of a complex site are to be recorded, in what detail, and how are these to be incorporated into the format of the Site Record/Survey forms?

The following is a brief description of the special methods used in the recording of one of the complex Auckland Isthmus pa, Mt. Wellington, or Maungarei. This method has departed radically from the format outlined in the Field Recording Scheme, and because of its success methodologically, suggests many innovations and improvements to the present scheme.

Following a brief description of the site, this recording method will be outlined, and at the end of the article, the advantages of this method, and its implications on the pending revision of the site record system will be discussed.

The Site

Mt. Wellington lies on the northern shores of the Tamaki river* overlooking to the east, the open waters of the Tamaki estuary and the Hauraki Gulf, and the low

* See map

inland waters of the Tamaki estuary to the West. The famous portage route to Otahuhu, lies only a little distance to the south, and at the mouth of the Panmure basin, is Mokoia Pa, now virtually destroyed by the Panmure bridge. To the north and south, almost all the fortified cones of the isthmus are clearly visible, surrounded by the thousands of acres of rich volcanic soil for which the Isthmus was famous.

The site is a volcanic cone, with one main and two subsidiary craters, which are surrounded by an almost complete rim. It is the most perfect cone-shaped volcano apart from Rangitoto visible today on the Isthmus. Its sides are extremely steep, rising to over 300 feet very rapidly. These sides have been scarped and terraced similar to, but differing structurally from the terracing on the better known cones of Mt. Eden and One Tree Hill. There, on the more sprawling dimensions of their multiple craters, the terraces are broad and continuous for great lengths around the sides of the cones. On Mt. Wellington the terracing is narrower and segmented, clearly approaching to the discontinuous terraced, a type which Best** suggests could be the archaic form of the terrace proper.

The rim of the cone has been flattened and scarped, with the extrusions of scoria above the general line of the rim being terraced and scarped also, forming two major tihi or summit areas within the defences of the pa. Three ditches have been recorded cutting across this rim in various places, and changes of level are marked by scarps, and in one instance, a low bank. On many of the terraces are pits of varying sizes and shapes. On the slopes beneath every terrace and most parts of the rim area are thick middens (12-18in), collected no doubt from the rich shellfish beds of the nearby harbours.

The size and complexity of the site can be gauged from the fact that so far over 80 terraces have been recorded, over 150 pits, and as many again middens. Signs of occupation extend from the base of the hill in all directions, especially on the Tamaki river side. On this side also, seven series of terraces etched into the steep slopes emphasise the importance of the river.

Field Survey

A base map was compiled by the epidiascope projection method***

* See Fowlds, p.

Best, Pa Maori, p.221. *Handbook, pp38-40.

<u>TERRACE RECORD CARD</u> (Artificially flattened area, abutted by a scarp)		Site No.
		Site:
(i) Position:	Terrace Index No.	
(ii) Dimensions: (a) greatest width: (b) Narrowest width: (c) Length:		
(iii) Other archaeological features present:		<u>Index No.</u> <u>for sketch</u>
	<u>Number of</u>	<u>Size</u>
(a) PITS :	:	:
(b) BANKS :	:	:
(c) DITCHES :	:	:
(d) MIDDENS :	:	:
(e) UNKNOWN :	:	:

(iv) SKETCH OF TERRACE: Showing features	Please note following with reference to terrace
	(i) Direction of sun. (N)
	(ii) Direction of prevailing wind and/or shelter from.
	(iii) If discontinuous terrace, describe how and where it finishes.
	(iv) Mark suspected routes of accessibility to terrace.

PIT COMPLEX RECORD CARD			Site No: Site:
Pit Index No.	Type of pit	Size of pit	Position in relation to associated arch. features

<p>Abbreviations: a) Semi-subterranean = S.S. b) Rectangular = R. e.g. Semi-Sub. c) Circular = C. Rectangular Pit = d) Rimmed = Rm. S.S./R. e) Subterranean (<u>Rua</u>) = S. With rim it would f) Uncertain. = Uc. be: S.S./ R./ Rm.</p>			
Index No.	Type	Size	Position

Because the aerial photograph was so poor, only a few terraces and trees remained clear after projection. Other detail, clear under pocket-stereoscope viewing, were sketched in by eye. The resultant base map, although it showed only about a third of the site in any detail, pinpointed sufficient landmarks for work to proceed.

The next operation was the designing of record cards for the separate structural and habitational features visible on the site. Thus a Terrace Record Card, a Platform Record Card, a Pit Complex Record Card, and a Midden Analysis Card were designed. Examples of two of these are included in this Newsletter. The card measures 6x4 inches, but because card printing is expensive, a facsimile of both sides was put on stencil and copies on heavy quarto paper were cyclostyled. This cyclostyled form could then be folded down the centre and glued or stapled together and filed as if they were cards. Other features which were present, such as ditches and banks, were so few in number as not to warrant cards. However, for a complete coverage of a complex site by the record card system, cards for ditch and bank defences will have to be designed.

A dozen copies of the base map were obtained at reasonable cost from a plan printer. One of these was kept as the master copy, the rest were to be field copies. Blocks of record cards were stapled to stiff cardboard backs and issued to the half dozen people who helped with the survey. This group could only assemble for one day each weekend, but by using the record cards continuity of recording was achieved. In all, only 6-8 days were entailed in the recording of the site, and usually there was only a very small labour force available.

This small force was split into groups, each handling a separate set of record cards -- thus one group was recording the middens, another only the pits, etc. Each group had a copy of the base map and the index number of each feature was put on the map and gaps filled. To facilitate the compilation of the master copy each group used a different numbering system, e.g., pits were numbered in ordinary numerals, platforms in Roman numerals, terraces in letters of the alphabet (a-z, aa-az etc.), and middens used italic letters. Thus each field copy of the base recorded the location of the features described in detail

on the record cards. The cards were designed to give complete cross-references; thus in recording pits the group concerned would have to describe the terrace or platform they were on, not the presence of associated features such as middens. The group recording terraces would also note the presence of these pits, and the midden, etc. Each record card also included a sketch of the features involved, and their relation to associated features. At the end of the day, the cards were fully cross-referenced; the terrace on which pits 10, 11, 12, were situated was given its correct index number from the terrace record cards, and the pits described for that terrace were given their correct number.

This system of recording afforded a wealth of detailed consistent material. The control which the cross referencing gave to the method meant that there was no confusion -- one terrace was not mistaken for another, one group of pits was not recorded twice, etc. And the gradually developing master copy of the base map showed the location of all the features recorded.

Two examples of the record cards are not included in this Newsletter. Of these two, the Platform Record Card is identical in layout to the Terrace Record card, and the Midden Analysis Card, compiled by Mr. C.D. Smart, is at the moment undergoing revision. It will be seen from the examples that the cards structure the information, ensuring that nothing is inadvertently left out.

As the compiler of the other cards, I attempted to ensure that every detail which could be of significance had a place on the forms. From the experience gained on Mt. Wellington with these cards, I am going to completely revise them, and I would be keen to hear from other Association members who could suggest improvements. A Ditch/Bank Record Card has been designed, but not tested in the field.

All the information on the cards is of the same comparable value, no matter who filled it out and what experience they had in field recording. This makes the compilation of a composite description of the whole site relatively simple.

One element in the system can, however, get a little out of control, and that is when, as in the case of the Mt. Wellington survey, much reliance has to be placed on sketching in the location of the features on the field maps. Anyone with experience of surveying the field will realise how hopelessly incorrect sketched-in features can be on a scale map. The drawing up of a master copy as the record cards are filled in points out the anomalies in posit-

ioning the eye on the field maps. When the survey was complete on Mt. Wellington, we made a series of carefully selected cross-sections by Abney Level across the site tying in the features recorded. Any such instrumental check at the end of the survey would prove of value, especially to give relative heights and slopes, which cannot be assessed by eye.

The complete file of cards (over 300 in the case of Mt. Wellington) is now a very detailed record of the entire site; every pit is numbered, its size and location is known, etc. Types of feature involved, distribution of same can quickly be assessed from the cards.

Equipment needed in the field in using this method is at a minimum; drawing boards for the record forms, pencils and perhaps a compass. A tape is of value, but for most of the Mt. Wellington recording pacing was found to be sufficient.

Conclusion

The record card system described above solves one of the problems which complex sites pose: the methodology of site survey. The cards have proved simple to operate; one person can use them at intermittent periods and still have control over his survey; or a large group can use them to cover a site in a single day. Only a minimum of experience in recognising features is needed to fill them in accurately.

The method also solves another of our initial problems; what features are to be recorded and in what detail, because so long as record cards are designed to cover all possible features, everything can be adequately recorded in detail.

The last problem; how these can be incorporated into the Site Record/Survey system is not so easily solved. Obviously this wealth of detail cannot fit onto either of the present forms, yet it is detail which should find an appropriate position in the record system.

With the pending revision of the Site Recording Scheme mentioned in the Secretary's report, I feel that this is an appropriate time to suggest that some such system as has been described be incorporated into the site survey scheme. The detail record cards offer is not appropriate on the Site Record Form which is primarily the record of the existence of the site, but

could easily find a home within the Site Survey Scheme. The pro's and cons of any such move cannot be discussed in this Newsletter, but I hope that the system described will give food for thought to the many Association members, who, like myself, are involved in the Site Recording Scheme.

EXCAVATIONS AT MT. WELLINGTON by J. Golson.

The decision of the Auckland City Council to begin the construction of a large reservoir on Mt. Wellington has provided the opportunity for the first extended excavations on one of the major pa of the Tamaki isthmus. The work is being undertaken by the University of Auckland Archaeological Society. A generous grant from the National Historic Places Trust has made possible the recruitment of full-time labour from members of the Society, two or three of whom are on the site at all times. Volunteer labour is occasionally available during the week and abundantly so at weekends. Excavation began on the weekend of March 26, 27, and will come to an end when the bulldozers move in during the first half of May. Day to day direction is in the hands of Leslie Groube under the general supervision of Jack Golson.

The area under excavation is one of the two lowest parts of the crater rim: a breach in the crater rim facing N.N.W., 20 yards across at its narrowest point and 30 yards long. This area comprises two parts, a large square flat (to be called the lower flat) bounded on the west and south by a 5/1 scarp leading up in the one direction to a 15 foot wide terrace (the upper terrace) beneath the steep slope of the breach wall, in the other to a 25 foot wide flat strip (the upper flat) sloping above the high steep fall into the crater itself. Twenty five feet below the top of the crater scarp is a terrace (the lower terrace) beyond which no excavation has been contemplated.

The aim of excavation has been to dig a complete section from the lower terrace, covered beneath the grass with scoria boulders, up the crater scarp, with its surface scattering of shell, over the upper flat on which no surface features were present, across the lower flat with its dispersed rectangular pits clear to the outer edge of the rim. From this section line excavations were to be carried west and east as occasion warranted and to link up with excavations on the upper terrace.