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**Susan Bulmer, Garry Law and Douglas Sutton (eds), *A Lot of Spadework to be Done: Essays in Honour of Lady Aileen Fox***

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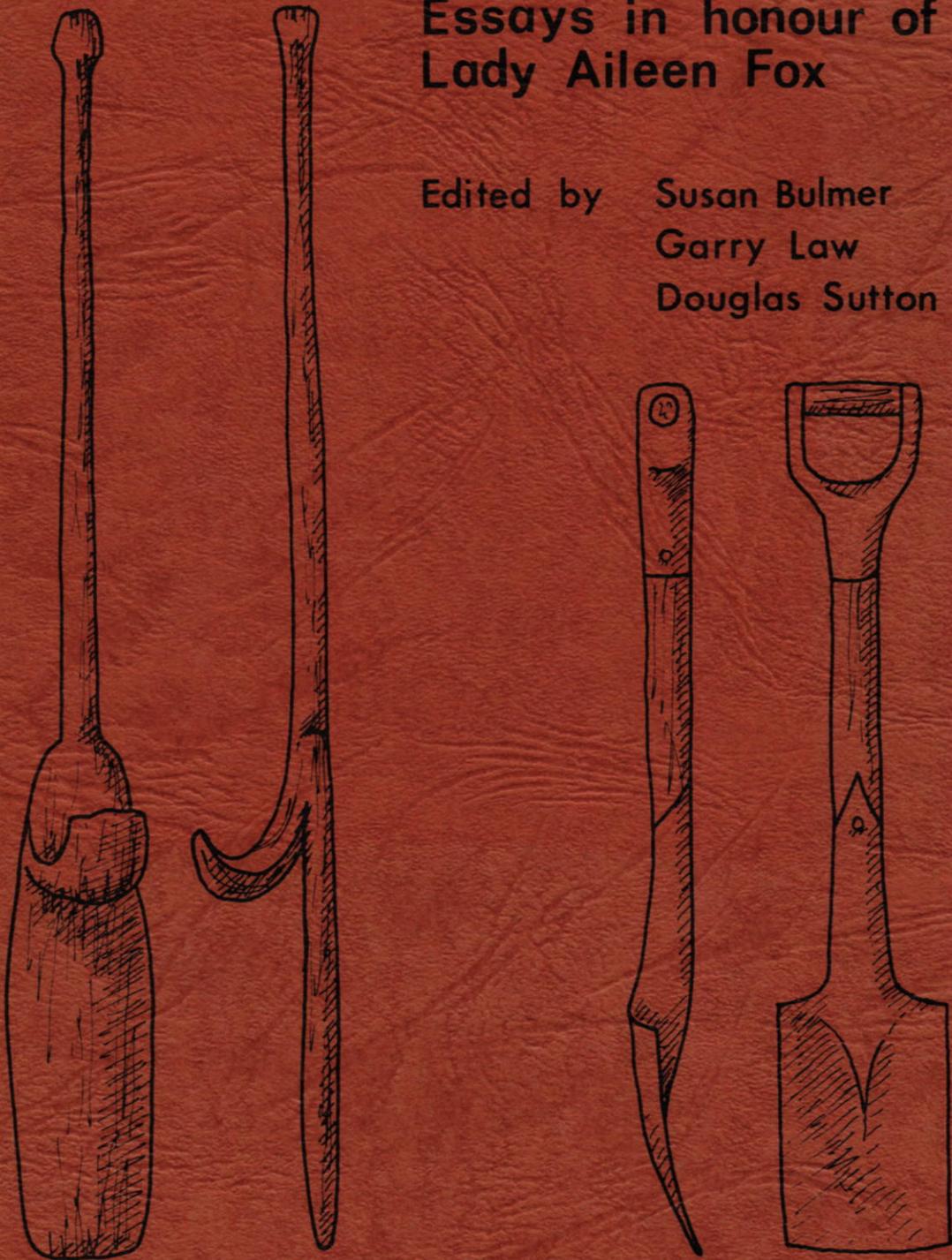
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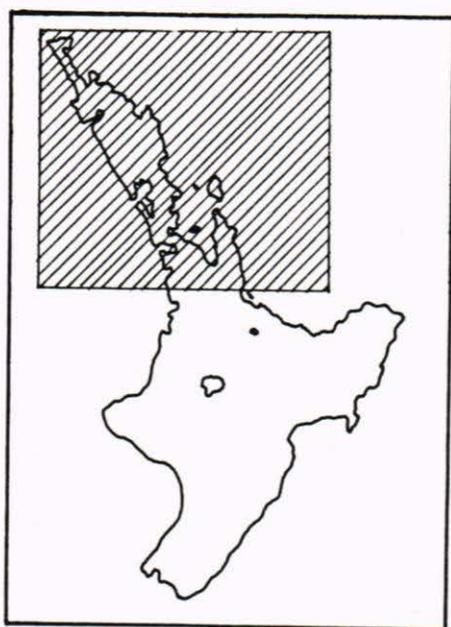
# A LOT OF SPADEWORK TO BE DONE

Essays in honour of  
Lady Aileen Fox

Edited by Susan Bulmer  
Garry Law  
Douglas Sutton



# THE POSSIBILITIES AND PRACTICALITIES OF PA RECORDING



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## Introduction

The topic for this discussion was stimulated by an essay written for an undergraduate course Problems in New Zealand and Australian Prehistory. In the essay chosen, I used my own data from four intensive site surveys undertaken on the Kaiāua coast and the Karikari Peninsula (Phillips and Millynn 1976, Phillips and Norton 1977, Phillips 1978, Phillips and Foley 1979), see Figure 1. The idea was to use the format suggested by Groube (1964), and Law and Green (1972) for analysing

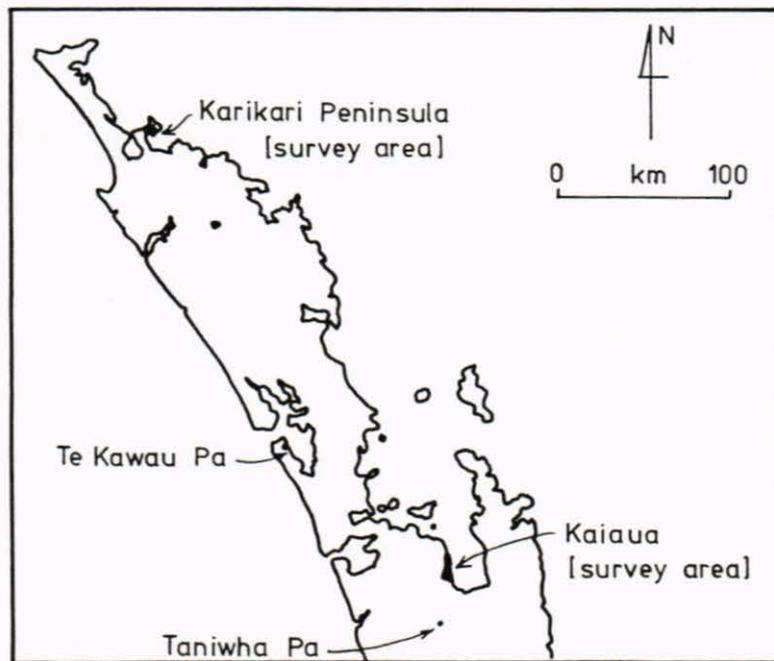


Fig.1      Location map.

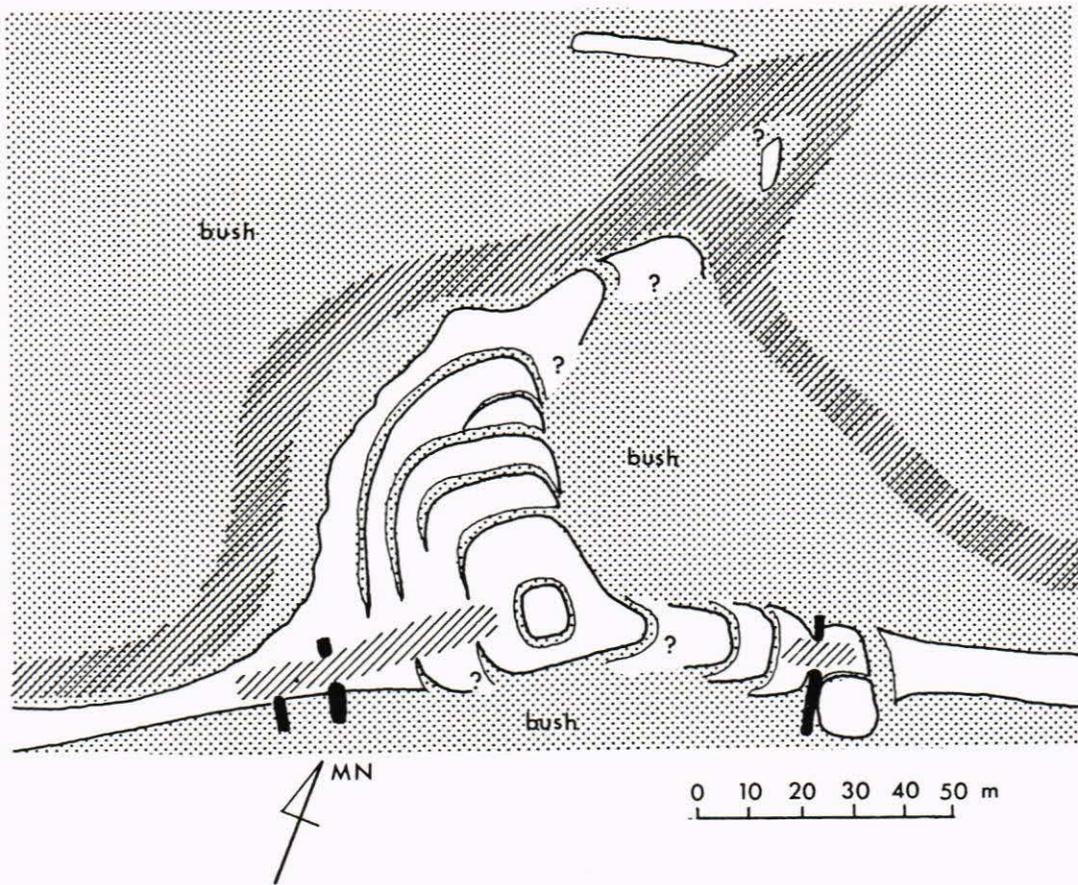
the internal features of a paa site; and to combine these with regional site distribution studies such as those conducted by Hodder and Orton (1976).

Somewhat to my surprise, I found that this was not possible for several reasons, including: inadequate recording, site damage, lack of records beyond the survey boundaries, and the problems of establishing site contemporaneity. While most of these are unavoidable, the first mentioned impediment was certainly not. Specific faults which led to inadequate recording in this instance were: omissions of locating the site boundaries; extent of terracing; steepness within and outside the paa boundaries; type of fortification, and extent of level interior. In Fig. 2, two such sites are illustrated. In paa N48/60 the extent of the site on the northern ridge is unknown (though it may have been obliterated by bulldozing), also the extent of some of the terraces under bush is not recorded. Likewise in paa N48/165 the extent of the site to the north-west is undefined. These omissions generally occurred on sites that were poorly preserved, damaged at specific points, or covered in thick vegetation. While this explains why the features were not recorded, it makes difficult (if not impossible) the subsequent quantification, comparison and hopefully explanation of the sites. It can also be noted that of 18 paa recorded in these four surveys, only 10 were thought to be complete enough to include in the essay, of these only 6 could be regarded as being reasonably well preserved and none came anywhere near the "... usually clear features preserved on..." Taniwha Paa (Law and Green 1972:255), see Fig. 3.

#### The History of Paa Recording

The standard of paa surveying since 1958 when the NZAA site recording scheme began has been rather erratic. Site record forms range from "spotted from a passing car" (even, "spotted during a

A



B

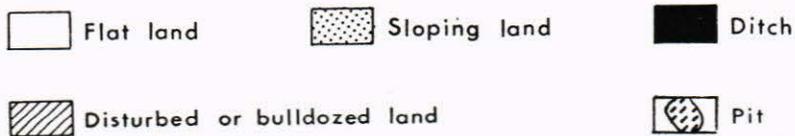
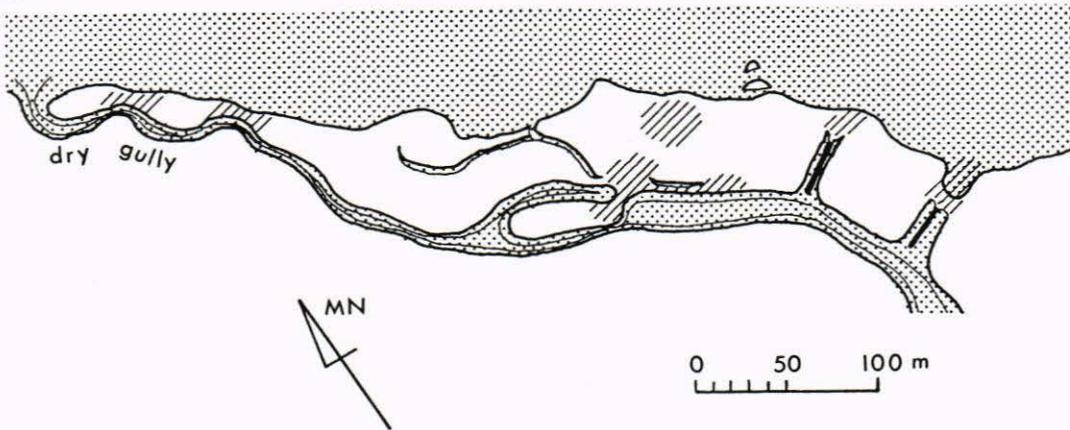


Fig. 2 Examples of incomplete paa recording. A (above): N48/60, Kaiiua Coast. B (below): N48/165, Kaiiua Coast. Note the key applies to all figures. All paa sites have been redrawn using conventions which emphasise the basic form and the three main aspects of scarp, flat and ditch. More detailed plans have of necessity been simplified.

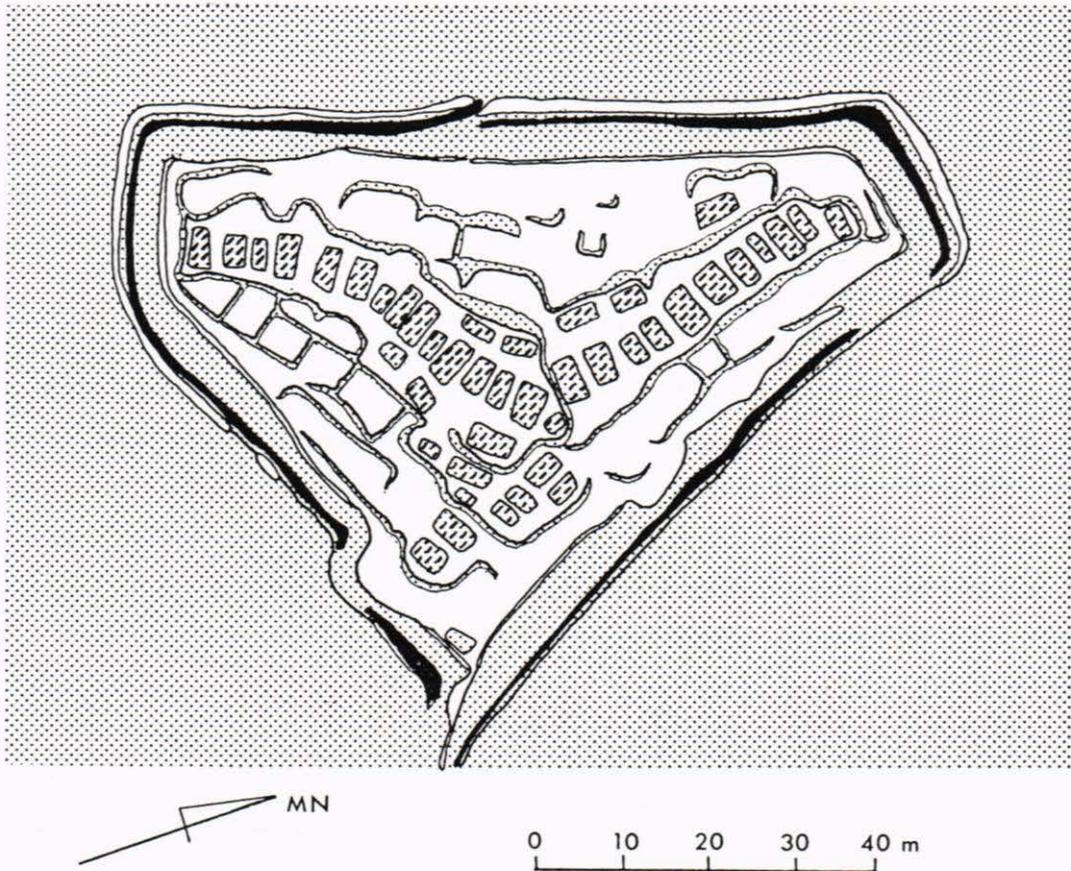


Fig. 3 Taniwha paa, Waikato, N52/1.

thunderstorm") to five page descriptions with accompanying location map, plane-table survey plan and sections. Most early site record forms were on the lesser end of the scale (the exception being some of those paa that were excavated); while the majority of the sites that have been recorded during the recent boom of contract surveying have been of a somewhat better standard. Most of the later records have accompanying sketches. These sketches however, vary considerably in quality and there has been little consistency in what details of the paa were to be included, despite the presence of the Site Recording Handbook (Golson and Green 1958, and Daniels 1970, 1979). Examples are given of two paa sites recorded twice by different surveying methods, see Fig. 4 and 5. Both sketch maps (4A and 5A) show gross inconsistencies in form and detail when compared with the more precise plans (4B and 5B).

The earlier site recordings were done in a very haphazard manner and more recently the trend has been towards whole areas being intensively surveyed. Again how accurate these surveys are depends on many factors, including the experience and bias of the surveyor, and the state of local vegetation; this has been more fully discussed in Furey (1981:24-30). An example of this occurred in 1979 when two survey areas overlapped by approximately 1 sq mile (due to an administrative error), and both recorders located sites that the other had missed (pers. comm. S. Best 1981).

#### Paa Site Studies and Data Required

The paa site is one of the few cultural units in New Zealand archaeology which is also seen as a definable unit on the landscape, and can therefore be investigated on these grounds.

There have been various people who have researched paa sites (such as E. Best 1975, S. Best 1980, Fox 1976, Golson 1957, Groube 1964, 1970 and Law and Green 1972). These all stress the need for

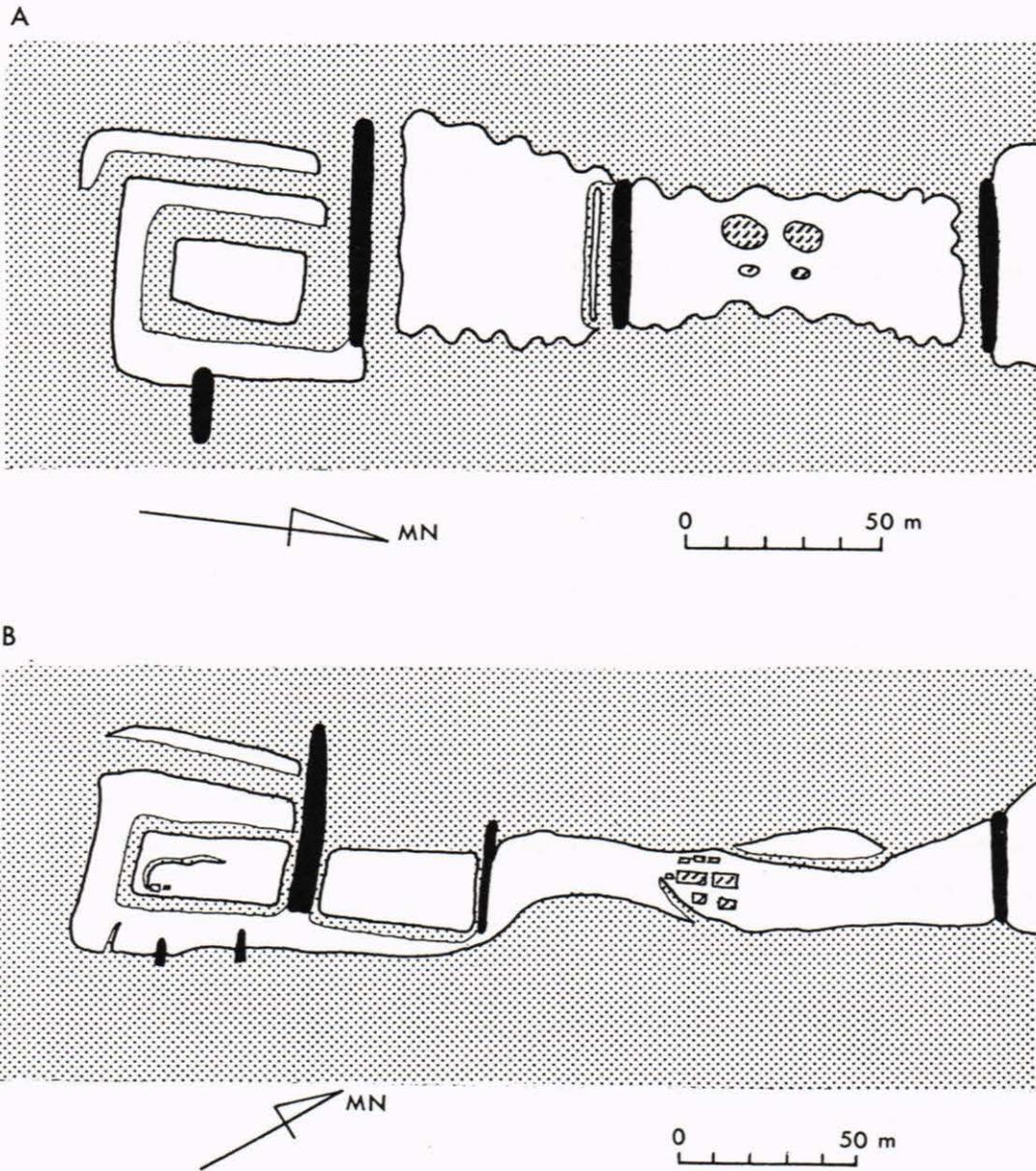


Fig. 4 Te Kawau paa, south Kaipara N53/5. A (above): pacing survey by several people. B (below): plane table survey by two people.

certain detailed information about the paa themselves; the required data is listed in Fig. 6. Other studies have discussed paa in the context of the physical environment and intersite relationships (Buist 1964, Cassels 1972 and Gorbey 1970). The data required for these are in Fig. 7. Usually the general environmental factors can be gathered from other sources, but often more precise details are not available.

Most of these studies focussed on certain aspects, such as the type of topography on which the paa is located, the type of defence and site complexity as a means of classification. This classification was then used to see if any patterns occurred, which might indicate regional variation preferred environment, presence of war zones, type of warfare, population density or historic development. These patterns might then hopefully be interpreted as being due to behavioural attributes. However, sorting out all the different elements that determine when and where site placement occurs, and the size and shape of construction are many. Groube discusses some of these:

"Factors inherent in the circumstances of any crisis, such as labour available at the time, availability and suitability of timber, or the known strength of the enemy..."

(1964:154)

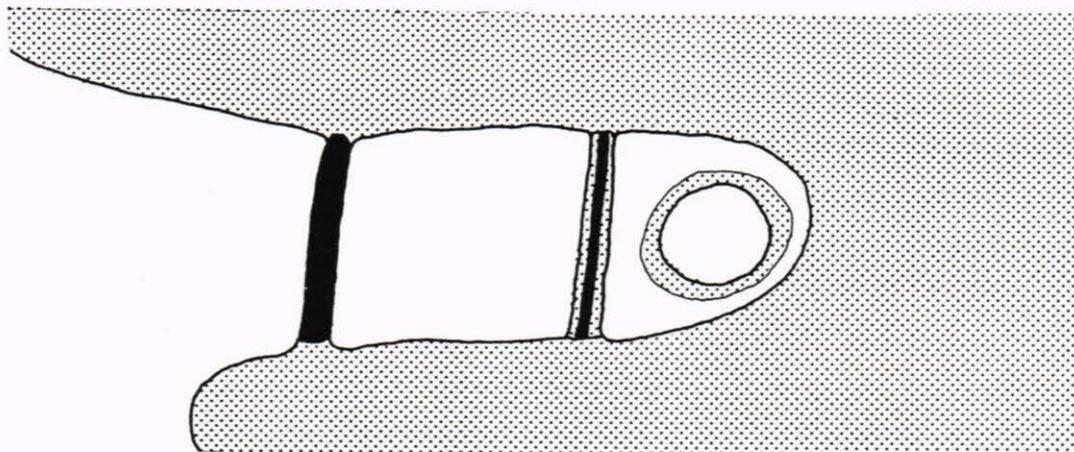
"Social factors such as the size, mobility, age, distribution and leadership pattern; economic factors such as the wealth, resources and manpower available, military strategy, weapons and traditions..."

(1964:149-150)

#### The Practicalities of Paa Recording

The requirements of the aforementioned studies, obviously have to be balanced against what is practical in the field. It should be noted that most of the variables mentioned could be

A



No scale or North point

B

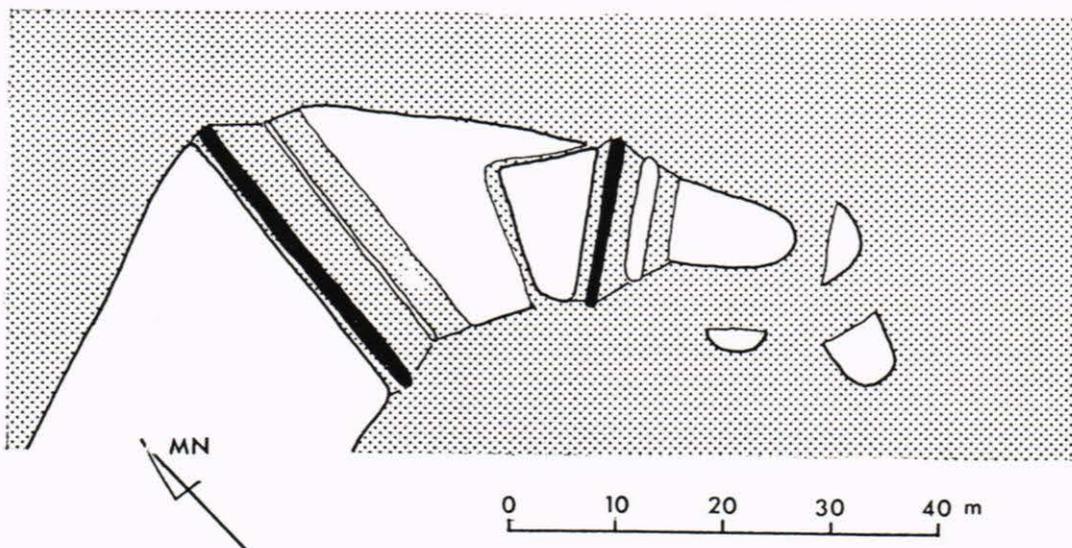


Fig 5 Rangiawhia paa, Karikari Peninsula, N7/157. A (above): brief sketch by one person. B (below): tape and compass survey by two people.

accommodated by detailed drawings of the site itself, a sketch map of the surrounding landscape and reasonably descriptive notes. The limiting factors are: time, money and personnel. At present there are at least three levels of mapwork undertaken by surveyors. These range from a rough sketch (Fig. 4A and 5A), tape/pacing and compass drawing (Fig. 5B), to plane-table survey (Fig. 4B). A guide to the time and number of people required for each recording method is shown in Fig. 8. This table shows that survey time and preparation of finished Site Record Forms increase with the level of recording. Sketch maps have been shown to be inadequate for any research work, and while plane-table surveys would be preferable it can be seen that the most efficient method of recording is a pacing/tape and compass plan.

Against these practicalities is the current system which results in a mass of paper containing data that cannot be readily compared, assessed or quantified; and which means that most researchers wishing to use Site Record data have to visit the area of their interest to resurvey, relocate and rerecord sites. This is compounded by the fact that sites are being rapidly destroyed, and even if not completely obliterated, details are being irreparably damaged; which increases the bias in the already biased sample that remains on the landscape.

#### Future Research Needs

The previous discussion considered whether the present site surveys could fulfill the needs of past research projects. But what about future investigations: what data will be needed for them? I am not psychic so I can't answer the question directly, but it is a subject that should be considered.

Some workers think of a problem and then go all out to solve it, while others collect all data indiscriminately and hope that it will speak to them. In excavation the former might be more realistic: in surveying it might be better to follow the latter maxim.

External size of site Internal size of site Area of internal terracing Area of pits Area of defence	Measured area
Type of defence Ratio of artificial to natural defence Scarp type Complexity (discrete units)	Classified forms
Identification of entrance(s) Presence of midden, pits, hangi, hearths other features	Observed detail
Type of topography site is on Amount of erosion	Physical attributes

Fig. 6. DATA REQUIRED IN PA SITE STUDIES

Broad environmental zone Climate Altitude	General environment
Visibility Height of surrounding land Vicinity to waterways Vicinity to coast	Local topography
Food resource area Identification of ecotones Soil types Agricultural (made) soils	Local resources
Pa density Site distribution	Intersite relationships

Fig. 7. DATA REQUIRED FOR PA ENVIRONMENT &amp; INTERSITE STUDIES

"Although site recording may be carried out for differing specific reasons, its scope should not become limited. Fieldwork should be carefully designed to also include broader research objectives."

(Challis in Daniels 1979:14)

If this is complied with, all details that can be observed would be noted and illustration would be of the highest standard. Here we run up against practicalities: while it might be desirable to plane-table survey, test excavate and record in detail every paa site, it is obviously not possible given the restrictions of time, money and personnel. Anyway all this data might still not include that particular information required by future investigators.

So what is feasible, given the present situation? It should be possible to illustrate each paa site sufficiently for the past research projects outlined previously, and this may also suffice for many future investigations also. But to achieve these aims there must be: a consistency of recording; illustrations of a prescribed detail and accuracy (to at least pacing and compass level); an inclusion of all observable site idiosyncracies; and interpretation made where field evidence is deficient. This interpretation should be made as a result of experience, discussion with the landowner, use of aerial photographs and, not least, a consideration of the landscape itself. To avoid confusion, interpretation must be clearly stated as such and the reasons for it given.

The latest Site Recording Handbook states the aims of the Recording Scheme in a rather contradictory manner, though to be fair to Daniels he does distinguish between recording of a high standard and that which is merely adequate:

"Recording is an integral part of the process of archaeological research...[it] cannot hope...to record sites with such accuracy and detail that further surface investigation becomes unnecessary..."

(Daniels 1979:2)

		Recording Level		
		Site location & field sketch	Pacing/tape & compass + detailed notes	Plane-table survey + detailed notes
A Time (person hours)				
	Field draughting of <u>pa</u> site	1-2	4-8	15-30
	Office draughting of <u>pa</u> site	½	3	4-6
	Location map	-	2	2
	Site record form details	1	4	4
	Site Record Form finalise and typing	1	2	2
	TOTAL	4-5	15-19	27-42
B People				
	Minimum numbers of people required	1	1-2*	2

\* 2 people required when using tape

FIG. 8. TIME AND NUMBER OF PEOPLE REQUIRED FOR PA RECORDING

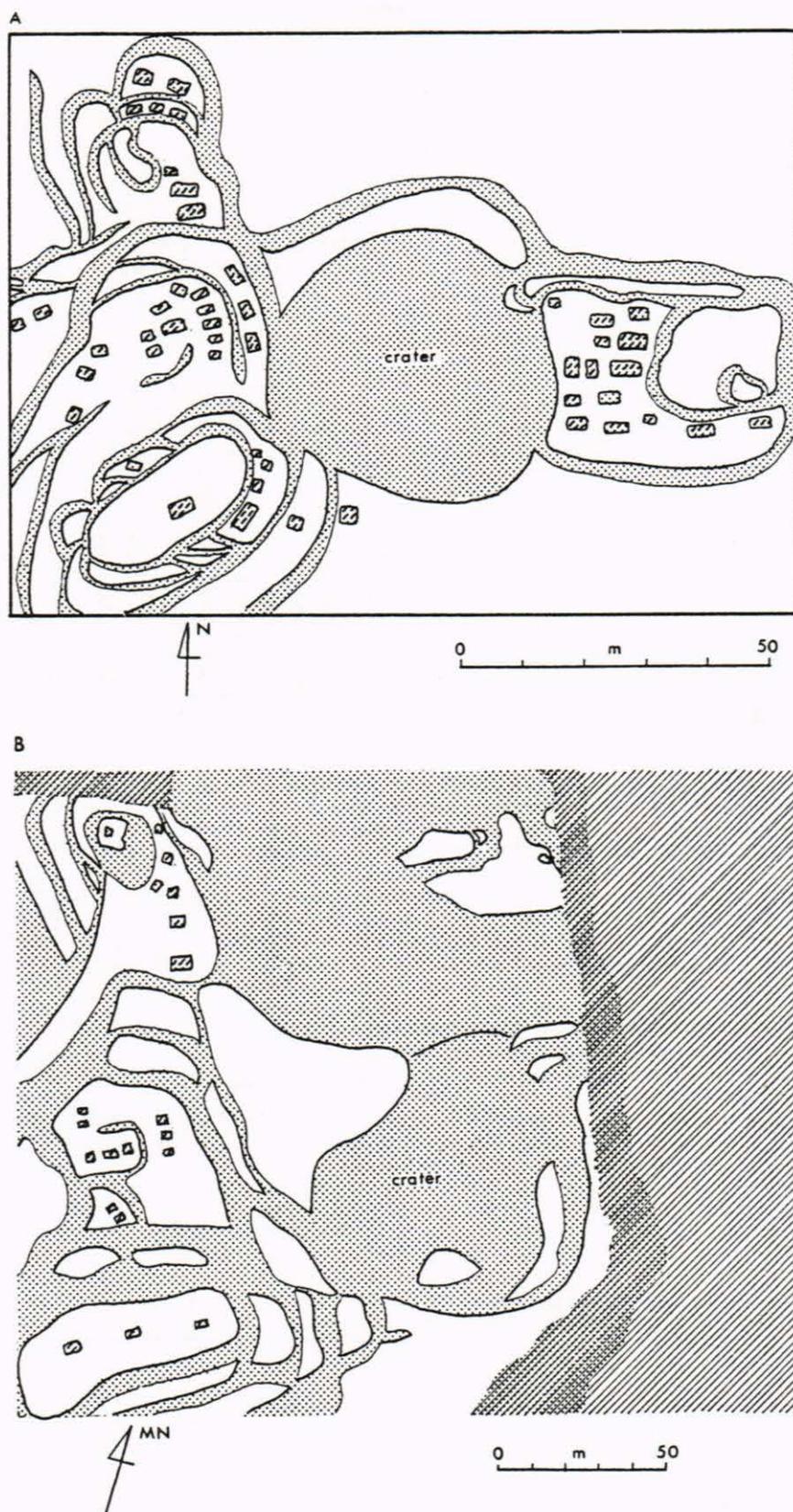


Fig.9 Taylors Hill, Auckland, N42/89. A (above): Sketch survey 1956. B (below): Plan from 1961 aerial photo, and 1978 plane table survey.

"...site records comprise an archaeological archive for an area. They provide...an index for future research..., so that the knowledge of this is never lost, no matter what happens to the site."

(Daniels 1979:3)

#### Summary

The development in paa surveying has been rather casual and no strict guidelines have been adhered to regards quality. This has resulted in a body of data which past research workers have found difficult to use. While there are certainly limitations on how much can be recorded; improvements could indeed be made. Whatever data are collected doubtless they will not fulfill all the requirements of all future workers, but in many cases they will provide the only records that will remain as sites are rapidly being destroyed. It is thus essential that a basic standard for recording paa sites and conducting intensive site surveys be set up, in order to achieve that accuracy, consistency and detail. At all times the recorder must be aware of the paa as a functional and cultural unit, not just as a few features scattered on the landscape, and if necessary add interpretation in order to contribute to a better understanding of the site.

#### Acknowledgements

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REFERENCES

- Best, E. 1975. The Pa Maori. Dom. Mus. Bulletin 6. Government Printer, Wellington.
- Best, S. 1980. Oruarangi Pa. Past and present investigations N.Z.J.A. 2:65-91.
- Buist, A.G. 1964. Archaeology in North Taranaki. N.Z.A.A. Monograph No. 3. Wellington.
- Cassels, R. 1972. Human ecology in prehistoric Waikato Journal of the Polynesian Society, 81:196-247
- Fox, A. 1976. Prehistoric Maori Fortifications in the North Island of New Zealand. Longman Paul (N.Z.A.A. Monograph No. 6.)
- Furey, L. 1981. Field recording and the Coromandel region: a discussion of site survey methodology and data analysis. Unpublished M.A. thesis, University of Auckland.
- Daniels, J.R.S. 1970. New Zealand Archaeology: a site recording handbook. N.Z.A.A. Monograph No. 4, Wellington
- Daniels, J.R.S. 1979. New Zealand Archaeology: a site recording handbook. 2nd edition N.Z.A.A. Monograph No. 10, Auckland.
- Golson, J. 1957. Field archaeology in New Zealand Journal of the Polynesian Society 66:64-109 .
- Golson, J. and R.C. Green. 1958. A handbook to field recording in New Zealand. N.Z.A.A. Monograph No. 1, Wellington.
- Gorbey, K. 1970. Pa distribution in New Zealand. Unpublished M.A. thesis, University of Auckland.
- Groube, L.M. 1964. Settlement patterns in New Zealand prehistory. Unpublished M.A. thesis, University of Auckland.

- Groube, L.M. 1970. Origin and development of Oceanic fortifications in the Pacific in R.C. Green and M. Kelly (eds). Studies in Oceanic culture history, Vol. 1:133-164. (Pacific Anthropological Records 11, Bishop Museum, Honolulu).
- Hodder, I. and C. Orton. 1976. Spatial analysis in archaeology. Cambridge University Press.
- Law, R.G. and R.C. Green. 1972. An economic interpretation of Taniwha Pa, Lower Waikato Mankind. 8:255-69.
- Phillips, C.A. and G.E. Millynn. 1976. Site recording on the West Coast, Firth of Thames, 1975. Unpublished report N.Z.H.P.T.
- Phillips, C.A. and E.A. Norton. 1977. Site recording on the Kaiiua-Miranda Coast, 1976-7. Unpublished report, N.Z.H.P.T.
- Phillips, C.A. 1978. Site recording on the Karikari Pensinsula 1977-8. Unpublished report N.Z.H.P.T.
- Phillips, C.A. and D. Foley. 1979. Site recording on the Karikari Peninsula, 1978. Unpublished report, N.Z.H.P.T.

Original plans of paa sites N7/157, N33/5, N48/60 and N48/165, are from the N.Z.A.A. Site Record File.