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NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER



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the best recorded locality, the impression is very strong that settlement was not confined solely to these well defended centres, but was somewhat dispersed within the locality.

REFERENCES:

- AMBROSE W. 1961 "Rock Carvings at Ongari Point", N.Z. Arch. Assoc., Newsletter, v.4, no.2: 49-50
- 1962 "Further Investigations at Kauri Point", N.Z. Arch. Assoc., Newsletter v.5, no.1 56-67
- BIRKS L. 1960 "Pa at Sarah's Gully, Coromandel Peninsular". N.Z. Arch. Assoc., Newsletter, v.3, no. 2: 16-20
- COLLINGWOOD R.G. 1939 An Autobiography. London, Oxford Univ. Press.
- GOLSON J. 1961 "Investigations at Kauri Point, Katikati, Western Bay of Plenty", N.Z. Arch. Assoc., Newsletter, v.4, no. 2:13-41.
- PARKER R.H. 1962 "Aspect and Phase on Skipper's Ridge (Opito) and Kumara-Kaiamo (Urenui)", N.Z. Arch.Assoc., Newsletter, v.5, no. 4: 222-232.
- SCHOFIELD J.C. 1962 "Preliminary Report on the Age of Rock Carvings and 'Cave Dwellings', Ongari Point, Katikati", N.Z. Arch. Assoc., Newsletter, v.5, no. 1:67-69.

FOLLOWING UP A SPOT FIND

Site S22/2

Mark L. Johnstone

In late 1959 Mr. Rex Woolley, an employee on the Chaytor Estate at Marshlands near Blenheim, was ploughing a large paddock sprawling across a low sandy ridge some three quarters of a mile from the sea when happening to glance sideways at his last set of furrows, he found a particularly fine specimen of a Duff type 1A dark argillite adze. Unfortunately, though quite naturally, he only noted the approximate area of his find.

The paddock was enormous, and apart from an intrusion of scrubcovered swamp taking up a large part of the southern side, it was almost featureless and almost flat. At one end of the paddock was one of the station houses and a few pine trees. The spot find was made within a few hundred yards of a corner and reasonably close to the house.

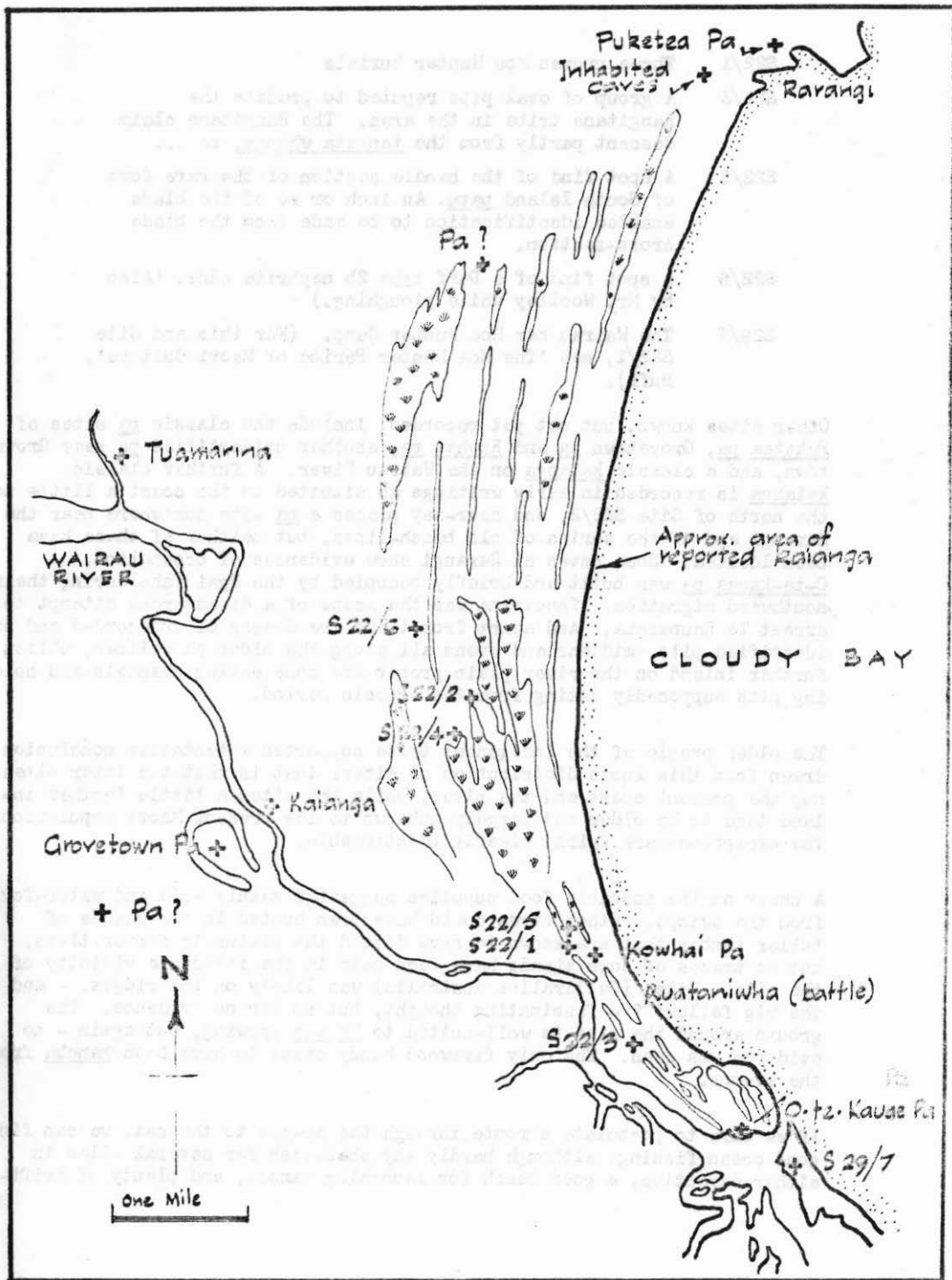
When I was first taken to the area the only discernable items of archaeological interest were a few fragments of oven stone scattered on the surface, one here, one there and ten or twenty yards between the pieces. It looked hopeless. There was at least one oven in it somewhere - somewhere under an awful lot of just plain dirt. On that first day I could not see anything at all, except those few bits of discoloured stone. So I started with them.

To determine a point which could be used for the map reference I located all the pieces I could find. The scattering appeared random, and it was obvious that they had not been just harrowed 'downstream' from their source. I stood back and looked at it in disgust, and there, faintly traceable, was the pattern. The fragments were larger around the general perimeter of the vague area. There was a focus of smaller fragments towards an off-centre position. The first peg (later designated 60005000) went in to the south-west of that position. I fed a Site Reference Form into my typewriter and pecked out the first of more than thirty sheets of close typing, scale drawings and photographs, all gathered from that hopeless looking paddock.

The Lands and Survey Department produced an aerial photograph of the area. That first peg had landed in a patch of discoloured soil which showed in the photograph but not on the ground. To the north the outlines of a former swamp showed in the next paddock, and to the immediate south lay the present-day swamp edged with kanuka (*Leptospermum ericoides*) and covered with harakeke (*Phormium tenax*). Between the two a faint depression passed within a few yards of the peg. Almost opposite the peg, across the depression, the barest outlines of a shallow oval pit showed near the top of a slight rise. Further around the edge of the swamp at some distance, but still in the same paddock, a series of three pits in line (Site S22/4) was found.

Turning to the standard map of the district (S22) it could be seen that the site lay on an old shoreline, and between the site and the sea was a series of ridges and swamps marking progressively younger shorelines. The pattern of ridges formed a distinct fan spreading out from the mouth of the Wairau River. It appears that the shoreline to the south of the river (where lies the Wairau Bar Moa Hunter Camp), and the area around the mouth of the river, has changed very little in a long time, whereas a few miles to the north the shoreline has been building up at a steady rate. It is tempting to speculate on a possible relationship between the age of the shoreline and the age of the site.

Correlation with known sites gave further grounds for speculation. Unfortunately very few Marlborough sites have been recorded in the Association's scheme as yet. Apart from this present site, and S22/4 already mentioned, the only recorded sites in the immediate vicinity are:-



- S22/1 Three proven Moa Hunter burials
- S22/3 A group of oval pits reputed to predate the Rangitane tribe in the area. The Rangitane claim descent partly from the tangata whenua, so ...
- S22/5 A spot find of the handle section of the rare form of South Island patu. An inch or so of the blade enabled identification to be made from the blade cross-section.
- S22/6 A spot find of a Duff type 2b nephrite adze. (Also by Mr. Woolley while ploughing.)
- S29/7 The Wairau Bar Moa Hunter Camp. (For this and Site S22/1, see 'The Moa Hunter Period of Maori Culture', Duff).

Other sites known, but not yet recorded, include the classic pa sites of Pukatea pa, Grovetown pa and Kowhai pa, another unidentified pa near Grovetown, and a classic kaianga on the Wairau River. A further classic kaianga is recorded in early writings as situated on the coast a little to the north of Site S22/2, and hear-say places a pa site somewhere near the Rarangi end of the series of old beach-lines, but neither of these have been located. Some caves at Rarangi show evidences of occupation. O-te-kauae pa was built and briefly occupied by the Ngai Tahu during their southward migration. Taumarina was the scene of a disastrous attempt to arrest Te Rauparaha. And apart from these are dozens of unrecorded and unidentified pits, middens and ovens all along the older shorelines, whilst further inland on the river plain proper are some eeling channels and holding pits supposedly dating from the classic period.

The older people of the indigenous tribe supported a tentative conclusion drawn from this known distribution of sites: that is that the later sites hug the present coast and the river, while the sites a little further inland tend to be older and largely unknown to the present Maori population. The exceptions are fairly clearly identifiable.

A check on the possible food supplies suggested mainly eels and water-fowl from the swamps. Other birds could have been hunted in the stands of taller timber that are known to have dotted the plains in former times, but no traces of such stands have been seen in the immediate vicinity of the site. Weka (Gallirallus australis) was likely on the ridges, - and the 'big fellow' ? - fascinating thought, but so far no evidence. The ground around the site is well-suited to lawera growing, but again - no evidence was seen. The only firewood handy seems to have been kanuka from the swamps.

If we care to postulate a route through the swamps to the sea, we can find good ocean fishing, although hardly any shellfish for several miles in either direction, a good beach for launching canoes, and plenty of drift-

wood for firing. Actually from the point of convenience of access to all types of food and supplies, the site would have been better situated much closer to the sea. Unless, of course, it was.

Further enquiries suggested that the general area of the site was hunted and fished in late times from the settlements along the coast and the river. Nothing was known of any permanent settlement in the area.

From there it seemed that any further information had to be sought with a trowel. Then the real paper work started.

Approval for investigation and excavation was obtained from:-

Mr. John Chaytor, Marshlands, Blenheim, R.D. 3;
 The Wairau Pa Maori Tribal Committee, Wairau Pa, Blenheim, R.D. 3;
 New Zealand Archaeological Association Inc., P.O. Box 3382,
 Wellington;
 Canterbury Museum Archaeological Society, Canterbury Museum,
 Christchurch;
 Marlborough Historical Society Inc., P.O. Box 308, Blenheim.

Gaining these approvals meant accepting certain conditions. Mainly these were those already observed by N.Z.A.A. Members, plus some dealing with the conduct of the investigating team on the site, i.e. a ban on smoking due to the danger of grass fires at that time. The owner's third condition is worth quoting. Taken as it appears on page one of the first excavation report it reads:-

3. At least some of any artifacts recovered should eventually come into the possession of the Marlborough Historical Society.

That Society lays down a code of minimum standards of methods and procedure for archaeological investigations conducted under their auspices. This code is designed to protect sites from improper disturbance. The society is seeking the co-operation of all local land owners on whose properties sites occur, and is asking them to refuse permission to investigate to all persons and organisations not approved by the society and the local committee of the National Historic Places Trust.

The grid was laid out in metres; a large square covering a hundred metres to a side. Only the pegs actually needed were set. Within the grid any point could be designated to a centimetre by using an eight-figure reference based on the south-west corner. The first four figures showed the number of centimetres north, and the second four gave them east. Thus all survey pegs, artifact finds, points of strata tabulations, and other phenomena to be recorded were all designated on the same basis, and measuring and record keeping were much simplified. All visitors and workers on the site mastered the system and had everything located in a matter of moments.

Excavation commenced in the 10M x 10M square 60 metres north by 50 metres east, i.e. 60005000, and sure enough there were the ovens. Six of us excavated only 22% all told of the hundred-square-metre square, but in that space we discovered eight separate ovens and possibly touched on the edges of four others. They varied from a small one at 65255900, 90 cm across by 35 cm deep, to a large oven at 66005400, 160 cm x 38 cm deep. The deepest oven was 41 cm deep, but its outlines were much disturbed, probably due to material being scooped up to cover a later oven. Some ovens were superimposed on others. Most of them contained only debris from the neighbouring ovens, the stones having been raked out for re-use in later ovens even though fresh stones could have been obtained without too much effort. This was significant. The present tribes in the area will use nothing but fresh stones, and will go to some trouble to get them.

Short of chemical analysis of the carbon residue, none of the ovens offered the slightest clue as to what had been cooked in them. A pollen analysis might provide an indication of the presence of kumera etc., but results so far do not seem to justify calling in the 'big guns'. The only piece of bone found on the site was a fragment of bone awl point probably from a large bird humerus or tibia, but even that, while found directly over an oven, was not in primary association.

Artifacts were few and far between, and what was not found is about as important as what was.

The most intriguing was a flaked knife (S22/2/13 from 65305515/21 cm A, which had been cleverly fashioned from a flake from the side of a water-worn greywacke boulder. This most difficult and unsuitable material was not otherwise observed on the site. That it was valued by its owner was obvious from the context in which it was found. A small hole had been dug into the 'natural' beside one of the ovens, the knife placed in, and the hole filled in again. In the process the spoil for refilling had become contaminated with charcoal. In the excavation report its function is noted as "possibly used as hard stone cutter", but subsequent study of other stone cutters convinces me that this knife was used in the preparation of food.

Mr. Owen Wilkes has kindly drawn my attention to a marked similarity between this knife and three others from the Heaphy River site. Two of these were fashioned in heaphyite, a coarse and not particularly good material, but the third was flaked in obsidian. The possibility that these four specimens were made to conform with a classifiable type cannot be overlooked.

The re-use of oven stones had produced a strikingly large number of spall-shaped fragments with sharp edges - not struck spalls, but simple heat fractures. Some of them showed possible signs of use. Again, although they would have made good stone cutters and I have noted them that way in

the excavation report, I am now inclined to connect them with the preparation of food. One well-worn specimen was virtually a surface find. Of two others recovered from the debris in one of the cleaned-out ovens, one showed faint use marks and for comparison the other, from the same immediate context, showed none.

Only two very small flakes of obsidian were recovered, one on the surface, and the other just below plough depth and on top of the 'natural' - the plough could have turned it down. Neither were in primary association with the ovens.

Of three small flakes of grey argillite, one was on the surface, but the other two were 5 cm and 6 cm below the plough's 8 cm bite, and in the charcoal-stained stratum of the ovens. A flake off the side of a hammer-dressed dark argillite adze, a probable broken dark argillite drill point, and another fragment were all close together in the same cleaned-out oven as the two "spalls" mentioned above. Also from the same oven came the only fragment of flint (or chert?) recovered. Its archaeological significance appeared slight.

Some very small and poorly preserved pieces of shell were recovered in association with the two pieces of grey argillite. One piece was definitely paua (*Haliotis iris*), and the rest appeared to be tuangi (*Chione stutchburyi*), but there was some doubt due to the crumbled state of the samples. Judging by the unrecoverable shell dust in the sandy soil, I estimated one paua shell and three or four tuangi - hardly a satisfying meal.

Samples were taken of organic material, mainly charcoal from the ovens; of the occupation stratum in several places; and of the four underlying strata which had been penetrated by the ovens. Below them nine further strata were checked and described.

In one place in the lower strata a collapsed burrow, possibly that of one of the smaller petrels, was found and traced. It had been caved in and filled when the next overlying stratum was deposited.

In a part of the grid away from the ovens a series of strips 50 cm wide was commenced, 10 M apart, stripping off the ploughed topsoil in a search for disturbances in the underlying stratum. A disturbance was duly found in one place. Two hours of careful scraping and brushing revealed bone, and another half-hour of painstaking endeavour showed that we had found the last resting place of a draught horse. We reluctantly concluded that this valuable discovery threw no new light on the methods by which moas were captured. At least not directly, but...Enquiries showed that the bones had been there at least fifty years, and not more than 120. In that

time the bones had been considerably eroded by a high soil acidity. If horse bones erode X amount inRough, but one possible clue to the lack of bones in and around the ovens.

Only a small section of the neck and skull was uncovered and disturbed. It is not impossible that one day a much more refined use will be found for the hugh quantity of undisturbed bone that must lie below.

The poor preservation of the horse bones contrasted with the good preservation of the bone awl point found. There are several possible explanations for this, but at the least a further doubt is thrown on the connection between the awl point and the ovens, and consequentially upon the connection between the obsidian and the ovens.

The reason why thistles should grown in a clump on one part of the site, and not elsewhere, has yet to be investigated.

The score card, then, so far reads:-

1. The adze ploughed up from the general area of the site.
2. Three pieces of a similar type of stone to the adze, being an apparent fragment from a similar adze, a broken drill point and another fragment found in primary association with a number of ovens. Also in the same context two pieces of grey argillite, one piece of flint, several pieces of oven stone with possible signs of use, some crumbled remnants of shell, and the greywacke knife.
3. Another fragment of grey argillite, two small flakes of obsidian, and a bone awl point found out of primary association with the ovens.
4. The possible site of a house pit near the ovens.
5. An immediate source of fresh water.
6. No indications in or around the ovens or otherwise apparent on the site, as to what was cooked in the ovens.
7. A possible reason for the lack of bone in or around the ovens.
8. A feasible supposed economy assuming the former existence of the present relationship between the site and the sea.
9. A more likely supposed economy if there was a closer relationship between the site and the sea at the time of occupation.

Much remains to be done, and there are now many good indications as to the courses that further investigation could take. So far the methods and techniques used have been only those available to a small amateur party without special resources. As Association members we are in the comfortable position of knowing that these resources can be called upon if the site proves to be of value.

In the meantime, our discoveries so far have given us a number of considerations to ponder upon.

If the artifacts recovered to date are a true representation of the material culture of the occupants, why were they so poor in suitable materials for tool-making? Even if the obsidian does belong to the ovens, there was very little of it. The small piece of flint was not a tool, and nor was it suitable for tool-making. To be reduced to using greywacke for a valued item indicates a distinct paucity of better materials. Even the shell fragments noted suggest imported tools rather than the remnants of a meal. The best materials found in primary association, the argillites, are available from a source which is fairly obvious and only a few days canoe journey from the site. Moreover, that source is a natural landing place for a party on a canoe journey between the two points at which a particular style of flaked knife has been noted.

The wide variations in the sizes of the ovens found indicate either corresponding variations in the numbers present to consume the meals or else variations in the amount of food to be prepared. The largest oven could provide one good meal for up to four hundred people; the smallest would be more suitable for a dozen or twenty. Did a small group occasionally entertain on a lavish scale? Did they sometimes find themselves with a large catch and cook a fortnight's meals all at once? Or is the site just a favourite camping place for travelling parties? The geography of the site as it is at present seems to make this last a poor choice. The small group with a taste for the social whirl hardly accords with the poor material culture. So what kind of small ill-equipped group would sometimes cook a little and sometimes cook a lot?

Fugitives? Hardly. The site is in plain view from dozens of natural vantage points, and probably always has been. Outcasts? A remnant of a conquered tribe, tolerated but not encouraged to encroach on the material wealth of the area? What a waste of good slaves. Or a small isolated group in a country which they had not had time to explore thoroughly?

This last is an intriguing possibility, and it accords well with all the information gathered so far. The main difficulty is that the facts so far would also fit a small group of survivors in the late eighteen-thirties when epidemics and inter-tribal wars had almost denuded Marlborough of its Maori population.

SOME OBSERVATIONS OF RESIDUAL PROTEIN
IN MOA BONE

K.G. Clarkson

INTRODUCTION:

During a salvage dig on the Ngatitoe Domain, Paremata (Grid reference: N160.418447) a quantity of Moa bone was recovered. Much of this consisted of tabs and small fragments of leg bone but a few vertebrae and whole leg