

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER



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AN EXCAVATION AT OPITO BAY

C. J. Murdock and R. G. W. Jolly

In the vicinity of Opito Bay and along its shores there exist many places ideally suited to Polynesians who lived mainly by fishing and fowling. At present though no-one can be sure of the length of time that has elapsed from first settlement to the Classic Maori phase, evidence is gradually being discovered of all stages. On Opito Bay evidence for many of these stages has already been recorded ranging from the dominant pa (N 40/15) at the south-eastern end of the Bay to early middens with evidence of moa-hunting and archaic artifacts in several sites at the north-western end of the beach (Green 1963: 57-64). Among those sites previously reported is N 40/2, where on the dunes fronting the beach an investigation had been carried out (Jolly and Green 1962: 42). The consolidated state of the dune inland from the area previously investigated would suggest, perhaps, that

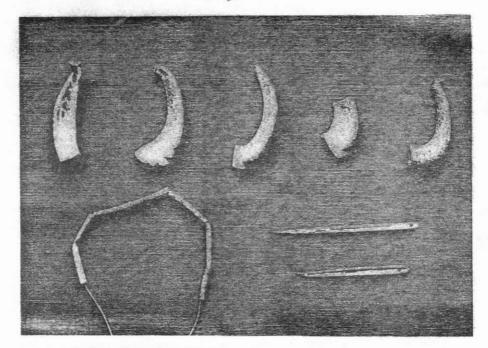
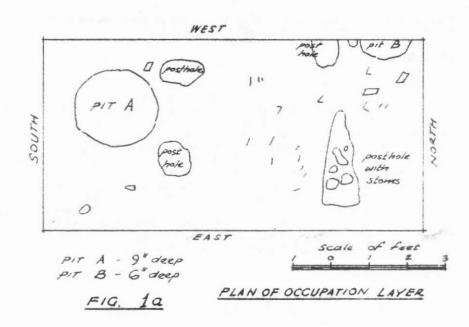


PLATE 1 : Opito Shell and Some Artifacts



PLATE 2 : Opito Bay from the east.



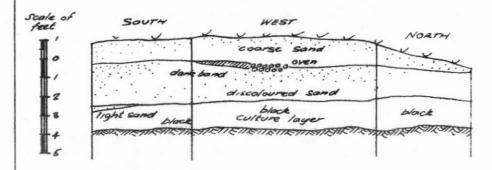


FIG. 1b SECTION

OPITO BAY N 40/2

this area had not been used; but a small controlled test excavation of 10 ft x 5 ft revealed that this was not the case.

STRATIGRAPHY

Four layers were encountered in excavation (Fig. 1b). The uppermost consisted of coarse sand, but about eighteen inches below the grassy surface was a very neat small oven about two feet across, containing some seventy-two stones up to four inches in diameter. No culture layer seemed to be associated with this and insufficient carbon was collected from it to make a proper sample for radiocarbon dating. The sand at this level showed some evidence of blackening but that was all. This layer continued down for 18 inches to 2 feet until a dark black sand layer was encountered. This proved to be the main culture layer and contained a variety of artifactual material, indicating that it may have been lived on for some years. Although the area of 10 by 5 feet was too small to reveal the full outlines of any structures in the natural dune sand underlying the cultural layer, a number of features including three post holes, one hole lined with stones, and two shallow pits were revealed (Fig. 1a).

PORTABLE ARTIFACTS

A full list of the artifactual material is given here (Table 1), so that only some items will be commented on. The most important are the hook segments. Among the artifactual material found along the East Coast of the Coromandel Peninsula, nothing is more delicate or rare than the shell hooks, usually in two pieces, made from Cookia sulcata. Four of these were found in this excavation, and all are portions of shank legs, two with knobs and one with notches to secure the lashing which joined the point and shank legs at the base (see Plate 1, top row). The shank of a broken moa bone hook was also found. It is similar in type to numerous bone hooks from the Coromandel Peninsula in museum and private collections; shell hooks are not so common and so far have been found by the authors only in three widely separated places on the Coromandel Peninsula; here at Whitipirorua, and at Te Kapoai.

Other shell material was varied but not plentiful, except for 42 segments of Dentalium, prepared for necklace units (Plate 1). A piece of sandstone suggests use as a stone grinder for squaring the ends of the Dentalium segments.

Stone flakes were numerous. Those in obsidian totalled 164 pieces in which there were about three pieces of Mayor Island obsidian to one of grey or Coromandel. A sugar bag of stone flakes which holds about eight gallons, mostly of the local Tahanga quarry stone, and almost as much in the form of other stones and pebbles were found. Five large

stones were discovered in one area within the natural which could have been used for footing a large post (Fig. 1a).

Other artifacts in stone included shaped flakes used as augers, pointed and retouched flakes (Gathercole points), flake knives, and at least 35 other flakes showing flake scars on the sharp edges as the result of use. Only one of the adzes was finished with partial polishing, while two were hammer dressed. The remaining 15 were various parts of roughouts, only six of which were still entire. All the adze material seemed to conform to one or more of the early archaic forms. A sinker was found towards the bottom of the cultural layer which is almost round, has an encircling groove, and is made from a stone that is very heavy.

Besides the fish-hook in moa bone, only two other items in bone were recovered. Both of these are very slender bird bone needles with round eyes (Plate1, bottom row).

When this assemblage is compared with those from other sites along the Coromandel Coast, it conforms most closely to those of the earlier period, but differs from them in the possession of the two piece fishhooks in shell.

MIDDEN

The data on the midden reveals that the mudflat and open beach shells which occur in the bay at the present time predominate in this site (Table 2). Similarly the data on the bone indicate that dog and seal were probably more important than the moa at this time (Table 3). This supports the indications from the artifact assemblage above that we are dealing here with one of the later middens of the early period sites along this coast.

ACKNOWLEDGMENTS

Our thanks are due to Mr O. Calder, the property owner; to Mr 'Skipper' Chapman for tractor transport and hospitality; to Mr R. J. Scarlett for bone identification; to Miss E. V. Crosby for shell weights and identifications; and to Dr R. C. Green for comment and suggestions on this report.

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TABLE 1

	No. o	Size
Hook segments	4	From Cookia Sulcata shell
	1	Moa bone, shank leg portion
Sinker	1	$8\frac{1}{2}$ ozs. 2 1/8th"x 2" Grooved. Probably ironstone.
Perforated scallop shell	1	2 ¹ / ₄ "x 2 1/8th"
Sandstone grinder	1	$\frac{1}{2}$ " thick. 2" x 1 3/4th" x 2
Sandstone file	1	2½" x 5/8th" x 7/16th"
Needle, bird bone, roundeye	1	2 3/4th" x 1/8th" x 1/16th"
Needle, bird bone, roundeye tip broken	1	1 3/4th" x 1/8th" x 1/16th"
Dentalium necklace segments	42	Longest 1"; shortest 1"
Obsidian Flakes:		
Mayor Island obsidian flakes, rough	102	
Mayor Island flakes, showing bulb of percussion	19	
Coromandel obsidian	43	
Stone Flakes:		
Stone flakes showing signs of use	35	
Ulu shaped stone knives	3	
Gathercole point	1	
Stone auger or hand drill	1	

TABLE 1 (Continued)

L	Stone Pieces:	No. of Pieces	Size
	Broken rounded piece of quartz - may have been sinker	1	
	Water worn scoria	2	
	Reddish flat stone, well used on thin edge	1	
	Sandstone pieces	10	
	Sinter	2	
	Small pumice piece, reminiscent of human face	1	
	Chert, quartz or similar	6	
	Stone, possibly hammerstone	1	$5^{\text{H}} \times 2^{\frac{1}{4}\text{H}} \times 1^{\frac{1}{4}\text{H}}$
	Unifacial pebble flake in chert, trimmed around edges	1	
	Kokowhai pebble	1	1 ¹ / ₄ " x 1 1/8th"
A	dzes:		
	Adze, part polished	1	2 3/4th" x 1 1/8th" x 1 ¹ / ₄ "
	Rough out adze, part hammer dressed	1	$3^{n} \times 1^{\frac{1}{4}n} \times \frac{1}{2}^{n}$
	Rough out adze, part hammer dressed	1	$3\frac{1}{4}$ " x $1\frac{1}{2}$ " x $3/4$ "
	Very light adze rough out	1	$3 \ 1/8 th^{n} \ x \ 1^{\frac{1}{4}n} \ x \ 7/8 th^{n} \ x \ 3/8 th^{n}$
	Rough out butts	4	
	Rough out tips	5	
	Rough outs	5	6", 4 3/4th", 4½", 4", 3 3/4th" long

TABLE 2

List of shells as supplied by Miss E. V. Crosby

Amphidesma subtriangulation Some shells rather large for present day,		
but not outside range.	248	grams
Amphidesma australe Some shells seem abnormally thickened,		
but this may be imagination.	118	grams
Amphidagma migaag		
Amphidesma pieces (not identified)	52	grams
Pecten novaezelandiae		
(Scallop)	115	grams
Lunella smaragda		
Cat's eye	73	grams
Neothais Scalaris (Rock shell)	40	grams
1 shell and 3 collumellas equal central column of shell		
equal central column of Shell		
Cookia Sulcata Small shells	50	grams
Maorioculpus roseus		
(2 only)	16	grams
Notoacmea scopulina		
Limpets	9	grams
Ostrea angasi		
Oyster	5	grams
Nertia and other winkles		
(three species)	8	grams
Perna canaliculatus Common mussel	125	grams
COMMON MGSSGT	147	Pr ama
Alcithoe arabica	400	
(Arabic valute) 1 shell	17	grams

TABLE 2 (Continued)

Dosinia anus 3 pieces	16	grams
Paphirus largillierti Carpet shell	2	grams
like Modelia granosa rock shell	16	grams
Haliotis iris very small shells very fragile state	15	grams
Modiolus neozelanicus lined mussel 2 indivs	5	grams
A shell fish that grows over rocks and worm shells, 2 pieces	2	grams
Unidentified, 7 pieces all different	10	grams
Unidentified, 3 pieces all from beach of past times water worn	3	grams
Cat's eye operculum	10	grams
Cooks turban operculum C. sulcata	12	grams
Shell, mostly mussel	30	grams
Unidentified piece from which several fish hooks might have been made	1	gram

TABLE 3

List of bone material condensed from list of identification supplied by Mr R. J. Scarlett of the Canterbury Museum.

Native Dog	10 pieces
Fur Seal	11 pieces
Snapper	3 large bones
Mutton Bird	2 pieces
Grey Faced Petrel	9 pieces
Shag	1 piece
Mollyhawk	3 pieces
Northern Blue Penguin	1 piece
Moa, possibly Euryapteryx sp.	6 pieces