



NEW ZEALAND  
ARCHAEOLOGICAL  
ASSOCIATION

**NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER**



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/>.

SUPPLEMENTARY RECORDS OF CEREMONIAL BONE FORKS

I.W. Keyes  
N.Z. Geological Survey  
Lower Hutt

Abstract

A further specimen of an early two-pronged, ornamented, ceremonial bone fork made from a human radius is described and a further published specimen noted. New information on a previously figured specimen is also given which shows it to be the first six-pronged example. All specimens known to date are tabulated.

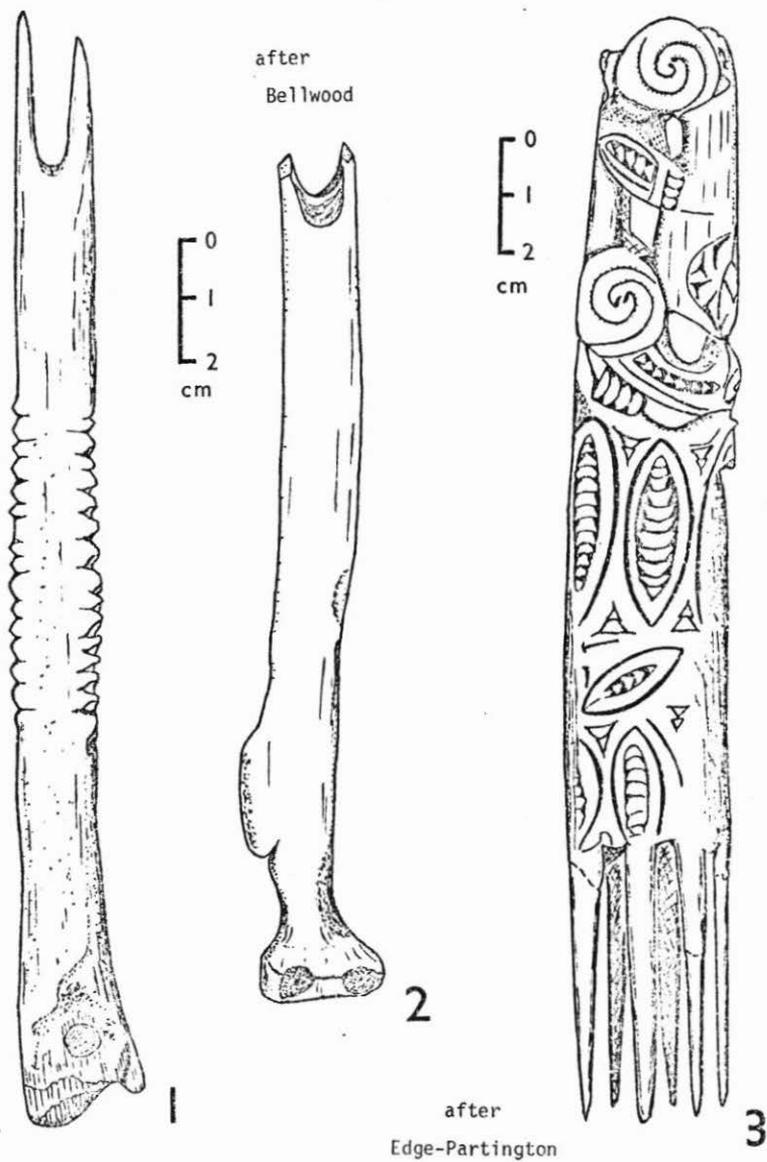
Introduction

In an earlier paper (Keyes, 1976) all examples of ceremonial bone forks known from either early New Zealand ethnographic records or from actual surviving specimens were described, classified and their use discussed. This supplementary note provides a description and illustration of a further interesting specimen as well as listing and commenting on two published examples.

1. Paterangi swamp paa N49/17 (Fig.1).

A specimen of a bone fork from the 'Hauraki - Coromandel area' was listed previously (specimen 'E' - Keyes, 1976:166) but could not be traced. The record of the existence of this specimen was provided by Mr B.W. Thomas (an owner of one of the specimens previously figured). He distinctly recalled having seen a two-pronged specimen years before that had been obtained from the region described. He was certain that the specimen had been in the collection of the late Mr C.J. (Pat) Murdock of Hikutaia. A written enquiry (January 1974) to Mrs Ada Murdock, and a search by her, however, did not enable the specimen to be located. In January 1978, Mr Thomas visited Hikutaia to examine the Murdock collection and he was successful in identifying the bone fork that he had remembered seeing years previously. He photographed the artefact and Mrs Murdock was later able to provide measurements and confirm locality details for the specimen. Thus through the enthusiasm of Mr B.W. Thomas and the assistance of Mrs Ada Murdock it is now possible to figure this important bone fork.

The specimen (like the other bone examples listed previously - Keyes, 1976) is made from the lower portion of a human radius, measuring 172mm in overall length, 18mm across the proximal end and 13mm in mid-shaft diameter. The distal end of the shaft has been cut to a depth of 24mm



FIGURES 1-3. Bone forks: 1) Paterangi, 2) Mangakaware, 3) British Museum.

and reduced from opposite sides to form two short, opposed, tapering prongs, with fine sharp points. One prong is slightly shorter (20mm) than the other possibly through breakage at one time. The proximal end of the specimen retains the flattened expanded distal end of the radius with projecting styloid process, but the bone at this end of the artefact is decayed (through its interment in the ground). The left side of the proximal end of the specimen carries a small worked, circular hole, 6mm in diameter, almost certainly created for the inlaying of a small disc of shell. (This is a feature shared with four of the six human-bone specimens previously described).

On both sides of the shaft along the mid section, and in line with the prongs are two sets of ornamental notches. These have been cut into the naturally ridged longitudinal keels of the shaft. There are 15 notches (giving 14 peaks) present on both sides occupying a length of 47mm. Although the notches are equal in number on both sides they do not match in size or alignment, being slightly irregular in arrangement. The notches are also cut more deeply along one side than the other. At either end of each series of notches the shaft surface has been reduced to give each notched region the appearance of being a series of "teeth" raised above the shaft. This form of axial notching is known from two other specimens (Keyes, 1976: Figs. 1 & 2) but has previously only been applied along one side of each shaft. The artefact is a rich medium brown colour towards the prongs, but in mid region it is weathered white with surface corrosion towards the proximal end.

The locality information available for the fork is that it was excavated at the site of the Paterangi swamp pa (south of Thames on the Hauraki Plains), Matatoki, by Mr C.J. Murdock. The Paterangi swamp pa along with the adjacent Oruarangi pa (some 100m distant) are two well-known Classic Period sites of the Hauraki Plains (Shawcross & Terrell, 1967). The artefacts obtained from Paterangi by Mr Murdock from his excavating over the years have been listed by Green & Green (1963) and Shawcross & Terrell (1967) but in neither account is the bone fork described above recorded. It thus represents an additional artefact type for the Paterangi list. The material assemblage from Paterangi and Oruarangi are very similar, and the presence of a single, simple-pronged shaft made from a human radius, 192mm long (described by Fisher, 1934:282, as a picker - specimen 19570.2) from Oruarangi almost certainly represents the 'equivalent artefact' type (but in simpler form - Keyes, 1976:172) to this two-pronged fork from Paterangi.

The material culture of adjacent Oruarangi is regarded as an important assemblage diagnostic of Classic Maori culture (Golson, 1959:54). Settlement of this site extended into the European contact phase (Golson, 1959:55) and although Best's (1977) radiocarbon dates indicate a time

depth extending back to the 15th century most of the classic artefacts are presumably of later origin. It is likely that Paterangi had a similar history extending through until European times, and Best's (1977) 16th and 17th century dates from the site indicate the time depth present. The bone fork is regarded as an 'early form' on stylistic grounds however, (Keyes, 1976:170) and can probably be related to the 18th century period.

2. Mangakaware swamp paa MA2-N65/35 (Fig.2).

A further example of a human-bone fork (damaged) made from a left radius was recently figured by Bellwood (1978:37, Fig. 17, no.20). This unornamented specimen is a further example of the 2-pronged style. From the C14 dates available for the Mangakaware site this specimen would appear to have a 16th or 17th century origin (Bellwood, 1978:71), and was associated with typical Classic Maori artefacts. It may well be one of the few early pre-European contact forms known.

3. A six pronged specimen (Fig.3).

One of the specimens discussed and figured previously (Keyes, 1976: 170, Fig.8 - 'specimen J') was a 4-pronged bone fork that had earlier been figured by Phillipps (1955:125, Fig.3). Phillipps' illustration was published without any scale or accompanying details, other than that the original specimen was housed in the British Museum. The figure of the specimen presented by Keyes (1976: Fig. 8) was drawn from Phillipps' illustration. From Phillipps' photograph the specimen appeared to have been cut from a flat piece of whale bone and it was therefore discussed as if this was the material utilised.

An attempt to trace this specimen has been successful and it has been identified in the British Museum ethnographic collection - registration number 6160 (pers. comm. Dr D.E. Starzeka). Surprisingly, the specimen is in fact the same artefact originally figured by Edge-Partington (1890-98, Vol. 2:223, item 2), that he described as "comb for carding flax, made from a human bone". (It measures 20.3mm in length). From Edge-Partington's poorly executed figure the recognition of the specimen as being the same as that figured by Phillipps would not be easily made. Phillipps' photograph suggests a flat specimen with 4 heavy prongs arranged in the same plane (with three of the prongs damaged), whereas Edge-Partington's simplified drawing shows a triangular shaped, hollow bone, bearing 6 finely cut prongs arranged around the perimeter of the distal end. Edge-Partington's interpretation of the specimen as a "comb for carding flax, made of human bone" is incorrect, as the specimen is definitely a 6-pronged example of a highly ornamented ceremonial bone fork possibly made from a human humerus. When Edge-

Partington prepared his drawings (c. 1890) the six prongs were obviously complete but at some later date two were apparently broken off completely, and three were badly damaged leaving only one prong complete. This damage must have taken place soon after Edge-Partington made his sketch while the specimen was in private hands before being presented to the British Museum. The original British Museum handwritten catalogue entry recording the specimen refers only to four prongs and also contains a sketch of the specimen showing only these four prongs remaining (as in Phillipps' photograph). The full information provided by the original catalogue entry gives - "New Zealand. Comb made from a tubular bone, with four teeth: the handle is carved and pierced with designs, some of which form portions of the human body, the head of which is missing. Presented by A.W. Franks Esq. 29 June 1893. (Bateman Coll.)."

The specimen can be classed as a true 'transitional form' (Keyes, 1976:171) - as it has an obvious link with early examples by being carved from a human arm bone (probably humerus) possessing fine prongs arranged around the perimeter of the distal end. However the richness and style of surface ornamentation and fineness of the prongs suggests that it was carved with steel tools which places it within the European contact period (probably 1800's). The specimen however is the only known example of a six-pronged form, and is the most richly ornamented specimen made from human bone. Fig. 3 is a sketch of the specimen from a photograph with all six prongs "restored" as originally indicated in Edge-Partington's illustration.

#### Summary

In the earlier paper (Keyes, 1976) supplemented by this present note an account is given of the occurrence and use of ceremonial bone forks in New Zealand, with a description of all known examples. These specimens appear to be a diagnostic artefact type of the Classic Maori culture and possibly reached a 'climax' of manufacture and importance during times of early European contact. Although surviving examples of this artefact are not plentiful, further specimens will undoubtedly turn up during investigations of North Island Classic settlement sites, as four specimens have been obtained in archaeological contexts from such sites.

In Table 1 all known specimens discussed in the two papers are listed. Of the 12 specimens listed 9 are made from human radii (and 2 possibly from ulnae or humeri), stressing the preponderance of this bone particularly for the artefact type and its obvious association with ritual desecration and cannibalism. The specimens are listed in a stylistic sequence of increasing number of prongs (which appears to

	Prongs	Reference	Locality	Material	Length (mm)	Decoration
a.	1	Fisher 1934	Oruarangi	radius	192	plain
b.	2	Bellwood 1978 (Keyes, above)	Mangakaware	radius	>143	plain
c.	2	Keyes 1976 'D'	Lake Ngaroto	radius	274	plain
d.	2	(Keyes 1976 'E') Keyes, above	Paterangi	radius	172	notched, shell inlay
e.	4	Duperry 1826 Lesson 1838-9 (Keyes 1976 'A')	Bay of Islands	?radius	?126	notched, shell inlay
f.	4	Lesson 1838-9 (Keyes 1976 'B')	Bay of Islands	radius	—	notched(?), ?shell inlay
g.	4	Keyes 1969 (Keyes 1976 'C')	Porirua	radius	153	notched, shell inlay
h.	4	Keyes 1976 'F'	N. Wairoa	radius	270	simple carving, shell inlay
i.	4	Keyes 1976 'G'	N. Wairoa	radius	267	simple carving
j.	4	Edge-Partington 1890-98 (Keyes 1976 'H')	N.Z.	?ulna ?humerus	216	ornately carved
k.	6	Edge-Partington Phillips 1955 (Keyes 1976 'J') Keyes, above	N.Z.	humerus	203	ornately carved
l.	2	Guiart 1969 (Keyes 1976 'I')	N.Z.	?whale bone	?	ornately carved

TABLE 1. Ceremonial bone forks.

approximate to their sequence of manufacture). The exception to this stylistic sequence however is specimen 'l' which, although a 2-prong specimen, has been placed at the end of the list as it is likely to be made of whale bone and of very late manufacture. Its history (and perhaps authenticity) is unknown, being originally 'bought in Sydney from a private collector' (J. Guiart, correspondence 2/4/78). Original references and the later figurings of specimens are given and references listed can be found in the bibliographies at the end of this or the earlier (Keyes, 1976) paper.

The age of most specimens can only be approximated. The first four in Table 1 ('a-d') appear to be the oldest; they are all from archaeological contexts and are also the simplest stylistically. An age in the 1600's - late 1700's is likely. The notching on specimen 'd' does appear to have been cut with a steel tool. Specimens 'e' and 'f' seen in the Bay of Islands in 1824 are well dated and specimen 'g' of similar style could relate to the same period. Specimens 'h' and 'i' are probably of an 1830-50 period origin, and are made with steel tools. Specimens 'j', 'k' and 'l' are late steel tool carved, highly ornate specimens and are probably distinctly 'art-objects' rather than functional implements. They also probably date from the 1830-1850 period.

#### References

- Bellwood, P. 1978 Archaeological research at Lake Mangakaware, Waikato, 1968-1970. N.Z.A.A. Monograph No. 9.
- Best, S. 1977 Report on fieldwork undertaken at Oruarangi and Paterangi Pa. Pp. 61-62 in Appendix II (Reports of Research Grant Recipients), Proc. Roy. Soc. N.Z., 105.
- Edge-Partington, J. 1890 An album of the weapons, tools, ornaments, articles of dress of the natives of the Pacific Islands...etc. Manchester. Private circulation. 3 Vols.
- Fisher, V.F. 1934 The material culture of Oruarangi, Mata-toki, Thames. Bone ornaments and implements. Rec. Auckland Inst. Mus., 1(5) : 275-86.
- Golson, J. 1959 Culture change in prehistoric New Zealand. Pp. 29-74 in Freeman, J.D. & Geddes, W.R. (Eds), Anthropology in the South Seas. Thomas Avery & Sons Ltd., New Plymouth.

- Green, R.C. & Green K. 1963 Classic and early European Maori sites on the Hauraki Plains. N.Z.A.A. Newsletter, 6:27-34.
- Keyes, I.W. 1976 The ceremonial bone-fork: a little-known artifact type. N.Z.A.A. Newsletter, 19:163-177.
- Phillipps, W.J. 1955 Notes with illustrations of Maori material culture. Dominion Mus. Rec. Ethnol., 1(4):123-82.
- Shawcross, F.W. & Terrell, J.E. 1966 Paterangi and Oruarangi swamp pas. Jl. Polynesian Soc., 75(4):404-29.