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**NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER**



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FAUNAL IDENTIFICATIONS FROM MUHUNOA WEST MIDDEN (N152/50),HOROWHENUA

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Napier

See Butts (1981) for the preliminary account of the small excavation at Muhunoa West Midden in Ohau, Horowhenua, on the south-west coast of the North Island. This paper outlines the faunal identifications which have been made following the sorting of excavated material at the Manawatu Museum during the 1981-82 summer. The material comes from a single as yet undated occupation layer. Tuatua and charcoal samples are to be submitted for C14 dating.

The identifications

Shells. Detailed analysis of the shells has confirmed the earlier assumption (Butts, 1981:266) that tuatua is the dominant species (in excess of 90% of maximum minimum number calculated for one square). Other species well represented are Hyridella menziesi (fresh water mussel), Paphies australis (pipi), Spisula aequilateralis (triangle shell), Chione stutchburyi (cockle) and Dosinia anus (ringed dosinia). These are, however, only a small proportion of the total. The other species identified are represented by only a small number of individuals in each case. The following is a list of all species identified arranged systematically within general habitat areas:

## 1. Open sandy shore

Maurea selecta (Cunninghams top)  
Umbonium zelandicum (wheel shell)  
Maoricolpus r. roseus (turret shell)  
Zeacolpus vittatus  
Tanea zelandica  
Austrofusus glans (southern olive)  
Dentalium nanum  
Spisula aequilateralis (triangle shell)  
Paphies s. subtriangulata (tuatua)  
Paphies ventricosa (toheroa)  
Bassina yatei (frilled venus shell)  
Dosinia anus (ringed dosinia)  
Arachnoides zelandiae

## 2. Estuarine

Amphibola crenata (mud snail)  
Pecten novaezelandiae (scallop)  
Mactra o. ovata (oval mactra)  
Paphies australis (pipi)  
Chione stutchburyi (cockle)

## 3. Fresh water

Hyridella menziesi (freshwater mussel)

4. Non-speciated specimens. Some shells were difficult to identify to species and all that can be said of these is that the following are present:

Duplicaria sp.  
Penion sp.  
Alcithoe sp.  
Xenophalium sp.

Birds. Information regarding body parts is available from the Manawatu Museum on request. Tui and parakeet are most numerous. Given the small number of species identified, the total list is given in systematic order with no habitat division, although this is noted where possible.

Pachyptila sp. (prion) marine  
Pelecanoides urinatrix (diving petrel) marine  
Coturnix n. novaezealandiae (N.Z. quail) grassland  
Cyanoramphus n. novaezealandiae (red-crowned parakeet) forest  
 small Passeriformes (not tui)?  
Anthornis m. melanura? (bellbird)? forest  
Prosthemadera n. novaeseelandiae (tui) forest

Other less certain identifications include a small petrel and a small duck. Rattus exulans and 'a lizard' were also identified.

Fish. An analysis of the fish bone has provided the following identifications:

Chrysophrys auratus (snapper)  
Chelidonichthys kumu (gurnard)  
Caranx lutescens (trevally)

The maximum minimum numbers of each species is: snapper 9; gurnard 1; trevally 1.

Human. One human incisor was recovered.

### Discussion and conclusions

Shellfish clearly dominate this midden, with birds and fish being represented by only a small number of bones. The interesting observation is the range of habitats which have been exploited. Shells have been taken from the open sandy coast, estuary and freshwater lagoons or streams. Birds have been caught on or near the coast, from the forest and possibly on the fresh water lagoons. As well as this fish have been taken from the sea to supplement an already varied diet.

Further analysis of this small excavated sample would provide numerical analysis and establish relative proportions of species. However, circumstances have not allowed for this work to be completed. A general statement can be made on the basis of the analysis done to date. The following statement should be seen as a working hypothesis only though it is substantiated to a certain extent by information provided in this report and in the author's general observations of the archaeological and ethnographic evidence from the south-west coastal region of the North Island (Butts, in press).

Tuatua dominate the midden material both in terms of bulk and minimum numbers to such an extent that it is suggested that an activity relating to this species is the primary concern of the occupants of this site. This activity is most likely to have been the steaming, opening, drying, and stringing of tuatua as a winter supplement or for trade with the people of the interior of the North Island. Two quotes from G.L. Adkin's diaries describe the activity:

".....the Maori went out and lived at the beach each summer... and got food supplies. Baskets of pipi were put in the hangi for 20 minutes - came out cooked and open - then strung on long rushes, tied in a loop and dried - would then keep for years."

(Adkin, ms: Vol. 21 3 Feb 1943)

This method was described to Adkin by Maori informants and was still being practised when Adkin was recording his information. That the dried shellfish were still being used as a trade item in the 1930s by the Maori in Horowhenua is testified by another note from Adkin's diary:

"Along the beach, near the Waikawa mouth, we came to a group of Maori, P. Rikihana and two women, preparing tohimanga for sending to Rotorua and actually in the process of making a midden with the shells. The shell fish are boiled after removal from the shell, the intestinal part cut off and packed in flax kete to be dried. In exchange these local Maori receive piopio (a flax garment) from their Rotorua friends."

(Adkin, ms: Vol. 16 28 Feb 1931)

The estuary and freshwater shellfish, birds and fish may represent a varied diet eaten by the occupants of the site while processing tuatua. Many of the open sandy shore species identified in small numbers were most probably collected in association with the tuatua as a result of a non-selective collection method.

It must be stressed that the above comments are based on a small area of excavation and need to be verified by the excavation

of larger areas of this or similar sites and more detailed analysis which has not been possible in this case. The explanation offered above does account for components of the excavated material identified during analysis. All of the environmental niches exploited would have occurred within a three kilometre radius of the site.

Adkin (1948) has differentiated between what he considers to be the early and late middens on the Horowhenua coast, in terms of their faunal and artefactual components. Muhunua West Midden would fall into the latter category according to his scheme. However, the analysis undertaken on the material excavated on this site shows that at least some of the sites which fall into this broad category have a more complex faunal composition than Adkin was able to identify by his predominantly surface observations. A full archaeological research programme at the Horowhenua - Manawatu middens would be a most profitable exercise.

#### Acknowledgements

I thank the following people for their generosity in identifying faunal remains: Mina McKenzie (shellfish), Atholl Anderson (fish bone), and Ron Scarlett (bird, rat and lizard bone). Thanks are due to the Turnbull Library Endowment Fund for supporting a period of research on the Adkin Papers at the Turnbull Library. Thanks are also due to Mrs Helen Berry and Miss Joanne Gillies, Hawke's Bay Art Gallery and Museum for typing.

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