



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/>.

RADIOCARBON DATES FOR AWAMOAO, NORTH OTAGO

Michael M. Trotter  
Canterbury Museum

The earliest archaeological investigation to be undertaken in the South Island was made by Walter Mantell in 1852 at a place he called Awamoa. This was at the mouth of the Kokomuka stream in North Otago (site S136/4), and it was called Awamoa by Mantell to commemorate his discovery of moa bones there.

Mantell's account of the site is well known, having been republished on a number of occasions; he obtained quantities of moa bones and moa egg-shell in association with evidence of human occupation, although portable artefacts were restricted to orthoquartzite flakes and a shaped ball of baked clay.

The rather stark artefactual remains contrasted strongly with those from a nearby Maori site at Kakanui where Mantell found elaborate ornaments of greenstone and a carved stone bowl (now in the Auckland Museum). It was evidence such as this that gave rise to the division of New Zealand prehistory into two cultural-temporal periods or phases, a concept that still haunts the study today.

A small investigation of part of the Awamoa site in March 1979 (permit number 1978/43) provided data that supported some of the 1852 findings but also considerably added to them. Mantell's detailed section diagram (now held in the National Museum) was found to be basically correct. He had, however, failed to recognise that besides the moa bones derived from moa hunting activities, there were older natural deposits of moa bones in the site. It seems probable that at least some of the shipment of bones Mantell sent back to his father in England were in fact from the natural deposits.

Besides numerous pieces of flaked orthoquartzite (some with re-touched edges) and broken pieces of baked clay, which correspond to the artefacts recovered by Mantell, the 1979 excavations produced others: a section of cut fossil Dentalium shell, a drilled tab of red stone, pieces of worked bone, and fragments of flaked and ground adze heads of argillite and similar materials. The whole assemblage is much more representative of the type of material we would expect from an early South Island site than the rather limited range reported by Mantell. Faunal remains were of moas (both bones and egg-shell), dogs, sea-birds and shellfish.

Radiocarbon dates have been obtained for both the cultural deposit and for the earlier natural moa bone. In terms of radiocarbon years Before Present, calculated with respect to the appropriate standards, these are:

NZ 4872	Moa bone	660 <sup>+</sup> 54	B.P.
NZ 4873	Marine shell	678 <sup>+</sup> 58	B.P.
NZ 4874	Natural moa bone	1670 <sup>+</sup> 75	B.P.

A few years ago a charcoal date of 984<sup>+</sup>37 B.P. was obtained for the site by Stuart Park (NZ 926). This shows the usual discrepancy for charcoal, being some three centuries earlier than those from faunal remains (see Rafter et al., 1972; McCulloch and Trotter, 1975).

My thanks are due to Bruce and Jenny McCulloch (of the North Otago Museum) for assistance with the excavation, to Mr and Mrs D. Kearney for permission to dig holes in their property, and above all, to the Institute of Nuclear Sciences for processing the radiocarbon samples.

#### References

- |   |      |  |
|---|------|--|
| McCulloch, B. and<br>M.M. Trotter                                   | 1975 | The First Twenty Years. Radiocarbon Dates for South Island Moa-hunter Sites, 1955-74. <u>N.Z.A.A. Newsletter</u> , 18:2-17.                            |
| Mantell, W.B.D.   | 1853 | Notes from the South. <u>New Zealand Spectator and Cook's Strait Guardian</u> , 27 August 1853.  |
| Rafter, T.A.,<br>Jansen, H.S.,<br>Lockerbie, L. and<br>M.M. Trotter | 1972 | New Zealand Radiocarbon Reference Standards. <u>Proceedings of the 8th International Radiocarbon Dating Conference</u> . Royal Society of New Zealand. |