



NEW ZEALAND  
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**NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER**



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SOUTH ISLAND RADIOCARBON DATES

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In the paper by Moore and Tiller (*Newsletter* 18/3, 1975) there were some noticeable differences between some of their dates and those we published for the same sites a few months earlier (*Newsletter* 18/1, 1975). As a result, we feel that some comment is called for, as obviously such discrepancies could be puzzling to anyone trying to rationalize the two sets of data. The following notes are listed according to New Zealand Archaeological Association site numbers.

S7/1 Heaphy River. Moore and Tiller show two dates, but it is quite certain that only one sample has been processed for this site. The result, as reported by the laboratory, is  $570 \pm 60$  B.P., when calculated with respect to the New Zealand shell standard.

S55/19 Lagoon Flat. Shown by Moore and Tiller as "unavailable". This result was actually published in our paper and is  $480 \pm 60$  B.P.

S64/4 Timpendean. The 290 date given by Moore and Tiller is the carbonate portion of some natural moa bone, the collagen portion of which gave  $1525 \pm 60$  B.P.

S61/24 Glen Gynk. Moore and Tiller show three dates; definitely only two have been obtained for this site as shown in our paper.

S68/9 Motunau Beach, not Motunau *Island* as shown by Moore and Tiller - there is also a site on the island. Results for both sites were published in our paper. To clarify the matter they are

S68/9 Motunau Beach  $410 \pm 54$  B.P.

S68/29 Motunau Island  $644 \pm 56$  B.P.

S84/77 Moa-bone Point Cave. Moore and Tiller show a bone date of 573. This is actually a bone *carbonate* result, as are many of their other "bone" dates, shown undistinguished from bone *collagen* dates. As we indicated in our paper the laboratory no longer recognizes bone carbonate as a dating material. However, Moore and Tiller have also omitted many bone carbonate dates which were processed but gave very young results. We feel that if any were going to be shown, then they all should be included for the sake of consistency.

S136/1 Tai Rua. Moore and Tiller show a moa bone collagen date here which was obtained as a result of a storage contamination experiment.

S140/2 Takaha Valley. Moore and Tiller show only one bark date, 830. The laboratory reported two dates,  $820 \pm 60$  and  $840 \pm 60$  B.P.

S143/2 Hawkesburn. Moore and Tiller show bone dates not calculated with respect to the New Zealand bone standard, which could lead to confusion when comparing them with other results.

As well as these anomalies, we have noted the following errors as they concerned sites with which we have been personally involved, although the results were not included in our paper.

S55/7 Pari Whakatau. Incorrectly shown by Moore and Tiller as site number S49/-. As well, the laboratory give the date as 340±40 B.P., not 320.

Scaifes Lagoon. Moore and Tiller's site 60, and shown by them as "unavailable". The dates for this site were published several times some years ago, but should certainly not have been included in a list of archaeological dates, even as asterisks. Scaifes Lagoon is a natural moa swamp and has no connection what-so-ever with archaeological sites. The average age of the bone material is about 2000 years B.P.

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Members of the Association may have been worried to hear from Mr Muldoon that supporters of the Historic Places Amendment Bill had been damaging their cause by sending him "strong, almost abusive, telegrams". The text has been supplied by the authors, Doug Sutton and Stuart Park of Dunedin, who do not believe that it can be fairly described as "abusive". Judge for yourself:

"The Prime Minister,  
Parliament Buildings.

Commencement of Historic Places Amendment Act requires Government commitment to fund and staff Trust adequately. Please specify your commitment or announce Government's unwillingness to protect New Zealand's past.

Park and Sutton"

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EDITOR'S NOTE:

This short paper arises from correspondence between the authors and Moore and Tiller. Whilst Trotter and McCulloch do not wish to give the impression that they are infallible on the subject of radiocarbon dating, they are concerned at the possible perpetration of errors, particularly as many people seem to regard radiocarbon dates as the ultimate in archaeological technique and will accept the accuracy of any date.