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 FROM PUHINUI (N42/17), SOUTH AUCKLAND

Ian Lawlor
Department of Anthropology
University of Auckland

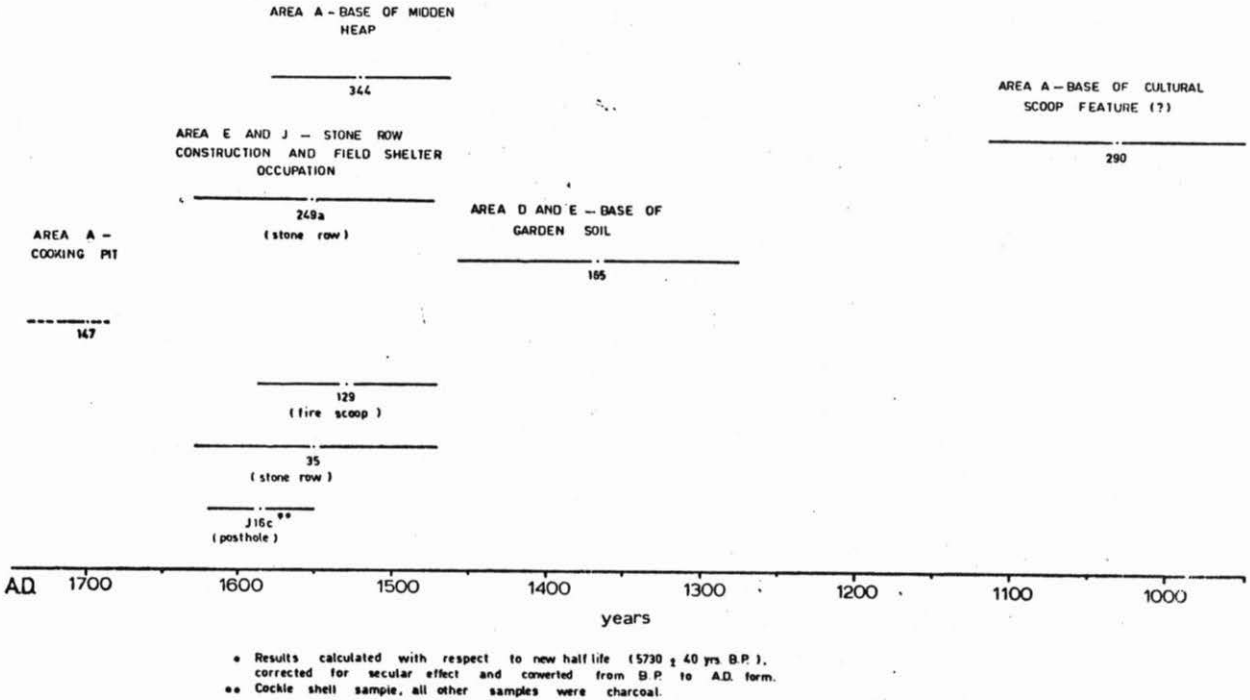
The eight radiocarbon age estimates depicted in Figure 1 have been received from the Institute of Nuclear Science, D.S.I.R., Lower Hutt (Table 1). All samples were of charcoal except for J16c which was cockle shell. They are derived from samples collected during the investigation of Oyster Point which is part of the Wiri Mountain - McLaughlins Mountain prehistoric garden zone (see Lawlor, 1980; 1981).

The charcoal identifications (Table 2) indicated that all samples except 290 contained stem wood from tree species with short life spans. Sample 290 was predominantly composed of totara which is a longer lived species. As a result a more likely age estimate for the activity associated with sample 290 is 719 years B.P. rather than 919 years B.P. (New half life (5730 ± 40 yrs B.P.) and corrected for secular effect); the 200 years has been subtracted to account for the long life span of the tree species.

The age estimates indicate that the creek bank was probably occupied as early as the 13th century (sample 290). The majority of estimates fall within the 16th century. These samples provide estimates

Sample Number	Run Number	Site Grid Location	(a) Years B.P. Old half life (5568 ± 40 yrs)	(c) Years B.P. New half life (5730 ± 40 yrs) corrected for secular effect
J16c	9099	u/33-1/7	354 ± 34	364 ± 35*
35	9191/1	v/21-3/1	305 ± 77	399 ± 79
129	9191/2	u/32-8/3	333 ± 57	420 ± 58
147	9191/3	w/11-5/3	MODERN	(250)
165	9191/4	u/19-10/1	566 ± 89	583 ± 91
249a	9191/5	s/21-3-5/1-4	305 ± 76	398 ± 78
290	9191/6	t/11-2/4	941 ± 80	919 ± 83
344	9191/7	v/12-6/6	352 ± 57	429 ± 58

TABLE 1. Puhinui radiocarbon dates (*not corrected for secular effect).



* Results calculated with respect to new half life (5730 ± 40 yrs B.P.), corrected for secular effect and converted from B.P. to A.D. form.
** Cockle shell sample, all other samples were charcoal.

FIGURE 1. Graph of C14 dates.

Identification		Collectors Sample Number						
		35	129	147	165	249a	290	344
	Hebe sp.			T				D*
Manuka	Leptospermum (?scoparium)				D*	T	M	
Mahoe	Melicytus (?ramiflorus)	Cd	M	Sd				T
Ngaio	Myoporum laetum	Cd*	D**	D*		D*		
Totara	Podocarpus hallii/P.totara						D***	
Horoeka (lancewood)	Pseudopanax (?crassifolium)						M	

D Dominant
Cd Co-dominant
Sd Sub-dominant
M Minor
T Trace

* Stem wood short life span
** Stem wood 1 or 2 larger branches
*** Mainly longer lived species

TABLE 2. Charcoal identifications (by B. Molloy, Botany Division D.S.I.R., Lincoln, Christchurch).

of: (1) cooking activity on the creek bank (sample 344); (2) occupation of Area J field shelters (samples J16c and 129); and (3) establishment of the Area E stone rows (samples 35 and 249a).

Sample 164 was from the base of the Area D and E garden soil and provides a maximum age of garden construction. It seems likely that this activity dates to the 14th century. This estimate should be treated with some caution. Excavations show that the garden soil was gathered from other surfaces and deposited within depressions. The soil may therefore contain charcoal of an older age.

Sample 147 was from within a pit depression located on the creek bank terrace. The modern age estimate indicates recent activity on the site.

The majority of sample age estimates reinforce previous results obtained by Agnes Sullivan for the "slope gardens of Wiri Mountain" (1975a; 1975b). The lava field gardens were most intensively used in the 16th century.

References

Lawlor, I. 1980 Puhinui excavations: an interim report. N.Z.A.A. Newsletter, 23:11-23.

1981 Puhinui (N42/17) Excavation Report. Department of Anthropology, University of Auckland.

Sullivan, Agnes 1975a Slope gardens at Wiri Mountain Manurewa. Unpublished paper, Department of Anthropology, University of Auckland.

1975b Radiocarbon ages from Wiri (N42/17). N.Z.A.A. Newsletter, 18:206-7.