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CALIBRATED RADIOCARBON DATES FROM CRYERS ROAD (R11/1519): A CORRECTION

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In our publication of the results of excavations at Cryers Road, East Tamaki, Auckland (Fredericksen and Visser 1989), we included dates from one charcoal and eight shell samples submitted to the University of Waikato Radiocarbon Dating Laboratory. We calibrated the dates using the University of Washington Quaternary Isotope Laboratory Radiocarbon Calibration Program 1987 (Rev. 2.0). This program compensates for differences in CO₂-induced C14 ages incurred through variations in local atmospheric and marine conditions (Stuiver et al. 1986a). The chosen calibration curves were:

Option 2: 20 year atmospheric record to 7210 BC (Stuiver and Reimer 1986)

and

Option 3: 20 year marine model to 7190 BC (Stuiver et al. 1986b).

A laboratory error multiplier was not included in the calculations. Delta-R was supposed to be set at -31 ± 13 for the shell sample dates, as this is considered to be a more accurate figure for the New Zealand marine reservoir effect than that given by Stuiver et al. (1986b: 995) (Dr Bruce McFadgen, Department of Conservation, Wellington, pers. comm. June 1989). However, an error was made while computing the delta-R figure for all eight shell dates. Hence the calibrated dates from shell samples illustrated in Table 17 and Fig. 51 in Fredericksen and Visser (1989) are erroneous and should be disregarded. The correct age estimates using a delta-R figure of -31 ± 13 are shown here in Table 1. Information on the provenance of these samples can be found elsewhere (Fredericksen and Visser 1988; 1989).

The recalibrated age estimates presented here indicate that the Cryers Road site was occupied from the early 16th century through to perhaps the early 19th century. This is not significantly different to our previous calculated occupation span and does not affect our interpretations of site usage. Site use over this period probably took the form of temporary but recurrent habitation associated with both the exploitation of local resources (forest and garden foods, estuarine resources, fresh water) and the utilisation of a convenient route from the Tamaki River to pa at Green Mount and Te Puke-o-Tara.

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TABLE 1. CALIBRATED DATES FROM SHELL SAMPLES

Laboratory no.	Conventional radiocarbon age	Calibrated age range (one standard deviation)	Calibrated age range (two standard deviations)	Calibrated age
Wk:1127	750±45 BP	463-369 BP	491-300 BP	427 BP
Wk:1128	700±40 BP	422-301 BP	454-279 BP	360 BP
Wk:1129	670±40 BP	389-285 BP	430-264 BP	310 BP
Wk:1130	590±40 BP	287-243 BP	313-136 BP	266 BP
Wk:1131	510±40 BP	245-85 BP	268-0 BP	139 BP
Wk:1132	680±45 BP	408-288 BP	445-265 BP	317 BP
Wk:1133	690±45 BP	417-293 BP	453-269 BP	329 BP
Wk:1134	520±45 BP	254-98 BP	278-0 BP	150 BP