

RADIOCARBON DATES FROM A MOUND IN NAFINUATOGO VILLAGE, SANTA ANA,
SOUTHEAST SOLOMON ISLANDS

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The largest mound in Nafinuatogo village, Santa Ana, was investigated as part of the second phase of the Southeast Solomon Islands Cultural History program (see Yen 1982). Nafinuatogo is located on a raised coral reef platform on the eastern side of the island. The 2.5 metre high mound is located at the back of the village, closer to the limestone cliff behind the village than it is to the present strand. The radiocarbon dates reported here have just become available.

Four phases of site use were evident from the mound deposits. From latest to earliest these are:

1. house sites
2. rubbish dump
3. ?religious site
4. fireplaces

Two buildings are said to have been constructed in 1949 and 1971 on top of the mound; the platform of the former and a post hole from the latter were found. Beneath the house platform there was a rubbish dump, built-up from pre-contact to post-contact times. Apart from a bone arrowhead typical of the Santa Cruz region, all the other Melanesian cultural artefacts recovered were recognizable as traditional material culture items of the late prehistoric to historic period. This midden covered the stone remains of a structure evocative of a traditional "canoe house" (*aofa*). Beneath the buried soil on which these stone remains rested there were a number of small ash and charcoal lenses resting directly upon clean yellow sand. The latter blankets the raised reef platform.

Five charcoal samples were run by the Department of Scientific and Industrial Research in New Zealand. The two ash and charcoal lenses resting on the clean yellow basal sand date to 450 \pm 48 B.P. (NZ 7328) and 465 \pm 60 B.P. (NZ 7331) respectively.

A lens of charcoal above the buried soil but beneath the stone structure dates to 343 \pm 60 B.P. (NZ 7329).

The two samples for the pre-contact part of the midden above the stone structure gave dates of 640 \pm 80 B.P. (NZ 7289) and 480 \pm 90 B.P. (NZ 7332). Both these dates seem too old. One possibility is that the pre-contact part of the midden above the stone structure includes some materials from older deposits. This

Table 1: Recalibration of radiocarbon dates from Santa Ana

Sample No	Date	Recalibration extrapolated from tables in Stuiver & Pearson 1986
NZ 7328	450 \pm 48 BP	estimate 528-488 BP
NZ 7331	465 \pm 60 BP ¹	537-489 BP
NZ 7329	343 \pm 60 BP ²	490-308 BP
NZ 7289	640 \pm 80 BP	676-549 BP
NZ 7332	480 \pm 90 BP	estimate 587-553 BP but could also be 553-476 BP

1. recalibrated as for 460 \pm 60 BP
2. recalibrated as for 340 \pm 60 BP

could have happened, for instance, as the result of post hole digging, or as a result of burning old wood in fires. Another explanation for this discrepancy probably relates to the small quantity of dry weight charcoal obtained. These two samples only consisted of 4.8 and 5.3 grammes respectively, whereas the other three samples consisted of 9.6, 10.07 and 10.1 grammes.

The dates were kindly recalibrated by Matthew Spriggs using the tables of Stuiver and Pearson (1986). This was done to determine whether there were significant adjustments that could alter the sequence. The results presented in Table 1 indicate that the differences found are no more than would be expected if the charcoal samples (NZ 7289 and NZ 7332) resulted from the burning of older wood.

The basal dates (NZ 7328 and NZ 7331) have recalibrated ranges of about 480-540 years B.P., and indicate that the site was first occupied about 500 years ago. The presence of the first human deposits on clean yellow sand 95 metres from the current shoreline suggests that the site was occupied immediately after the uplifting of the raised beach on which the current village of Nafinuatogo stands. Land has been gained in this way on the southern coast of Santa Ana in historic times (see Figure 32 in Swadling 1976) and the coral terraces which make up a large part of the island show that it has happened many times in the past. The awe-inspiring 7.5 Richter scale earthquake experienced during the excavation of the mound in 1978 indicates that more land may be uplifted in the future.

The absence prior to about 500 years ago of suitable coastal land may explain why Santa Ana lacks any beach front deposits of the 3,000 year old ceramic horizon. This pottery has only been found in rock-shelters suggesting a temporary use of the island at this time. These rock-shelters are all located at the base of the first limestone cliff, some distance back from the present beachfront.

According to oral tradition Nafinuatogo is the oldest coastal site on Santa Ana. It vies with Faraina on the slopes of the weathered volcano as being the first site inhabited on the island (Swadling 1976:128). While the absence of kitchen refuse at Faraina suggests that it was probably not a major village site, the presence of coral walls across its rich volcanic soils and the existence of what are said to be traditional dancing mounds indicates that it has long been an important agricultural and ritual area.

Archaeological results indicate that Nafinuatogo has a history of some 500 years. The presence of the first human activity on clean yellow sand suggests that the newly exposed reef platform was quickly used as a settlement site. Soon afterwards these first fireplaces were sealed by a soil horizon which developed on top of the yellow sand. The formation of this soil confirms that yellow sand would not normally have occurred so far from the shore as a natural surface except after a major natural event. The lack of any cultural debris from prior settlements in the yellow sand reduces the likelihood that this surface was produced as the result of a tsunami or cyclone. The most likely event was the uplifting of the coral reef platform.

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