

## ARCHAEOLOGY IN NEW ZEALAND



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## A LAPITA SITE ON OVALAU ISLAND, CENTRAL FIJI ISLANDS

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During the course of archaeological–environmental fieldwork on Moturiki Island in June–July 2002, a research team from the University of the South Pacific and the Fiji Museum spent two days reconnoitering the northwest coast of Ovalau Island (Figure 1). Ovalau is a high volcanic island, considerably larger and better-watered than its neighbours Moturiki and Naigani from which three Lapita sites have been described (Best 1981, Nunn 1999, Nunn *et al.* 2003). The northwest coast of Ovalau faces the Lapita site at Matanamuani on Naigani and is linked to the area by legend (Ramoli and Nunn 2001).

Like most parts of the Ovalau coast the northwest part is characterised by steeply-rising land—part of the Pliocene Lovoni Volcano—which abuts the shore in many places. Only around the mouths of large rivers have coastal flats developed. In the northwest of the island two of the largest coastal flats occur at Rukuruku and Taviya.

Extensive searching by ten people of these coastal flats and the adjacent foreshore areas exposed at low tide yielded an extensive collection of potsherds. Only one of these, found on the Taviya foreshore close to the seawall at the mouth of the river which runs through the village, was subsequently found to be dentate-stamped and therefore Lapita in age. This potsherd, illustrated in Figure 2, comprises three groups of parallel lines of dentate stamps.

The Lapita sherd found at Taviya was unlikely to have been *in situ* although, given the history of erosion of the Ovalau coastline (Nunn 2000), it could conceivably be so. This would be true if the shoreline had once been significantly farther out to sea at this location and that erosion had removed the finer material, leaving only the pottery which the area's inhabitants had left on the surface. This option is considered unlikely because of a lack of many other potsherds in the area where the Lapita sherd was found (particularly away from the river mouth) and because of a lack of shell midden in the same area.

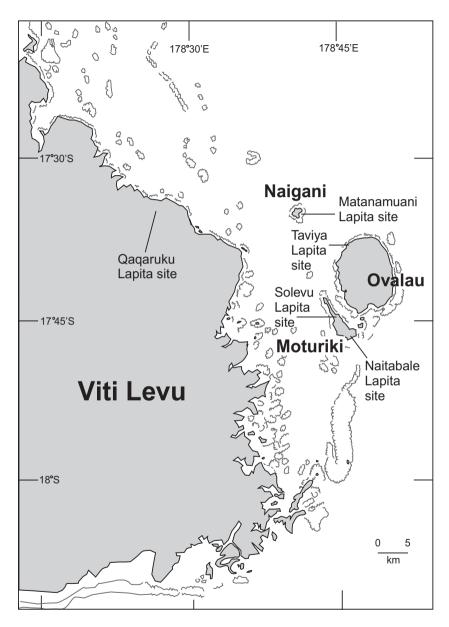


Figure 1. Map of eastern Viti Levu and islands offshore, showing the known Lapita-era settlement sites.

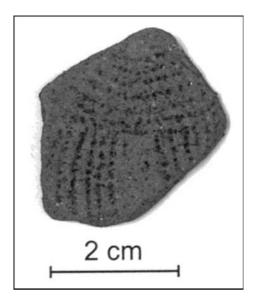


Figure 2. Photo of the dentate-stamped potsherd from Taviya.

The location of the Lapita settlement is likely to have been at least 50 metres inland, perhaps more than 200 metres inland, because the sherd was found on the foreshore at the mouth of the river which cuts through the southwest part of Taviya village. In this scenario the sherd would have been washed downstream, perhaps during a flood.

At present the location of the Taviya Lapita settlement cannot be determined precisely. There is considerable disturbance of the inland areas associated with the development of a growing village, the circumisland road, and lowland and hillslope farming.

It is more valuable to look

at the implications of the discovery of a Lapita site on Ovalau Island.

A plausible conclusion is to reaffirm the idea that, upon reaching this part of Fiji, the Lapita people favoured settlements on smaller offshore islands rather than the larger islands Viti Levu and Vanua Levu. The reason for this was probably because of the larger and more productive reef flats which surrounded these islands approximately 900 BC when sea level was perhaps 1.5 metres higher than today (Nunn and Peltier 2001). At this time reefs in tropical Pacific Island archipelagoes would have been neither as numerous nor as large in size as today. It is likely that plumes of both freshwater and sediment from large rivers on Viti Levu and Vanua Levu inhibited reef growth offshore of these islands for much of the last few thousand years. In particular, when Lapita people arrived in the area it is unlikely that there was any windward fringing reef off the east Viti Levu coast except perhaps in its northern parts where annual rainfall was/is much less than in the south and where few sizeable rivers exist. It is noted that an inland Lapita site (Qaqaruku) was found in this area by Kumar and Nunn (2003).

Although no age is known for the Taviya Lapita occupation we suggest it is either approximately contemporary with or slightly later than that at Matanamuani on Naigani Island, occupied approximately 950–750 BC (Best 2002). The basis for this reasoning is that the Naitabale site on Moturiki Island appears to be the earliest in this part of Fiji. Its pottery predates that from Naigani (Simon Best, personal communication 2002) while radiocarbon dates suggest it was established earlier: one charcoal date is 1220–890 BC but the earliest of the other 12 dates is 900–780 BC (Nunn unpublished dates). In favour of this succession of settlements we also note that Naitabale (Moturiki Island) was established adjoining a broad windward reef flat whereas Matanamuani (Naigani Island) was established on a tombolo adjacent to a much smaller reef flat, probably much less productive per unit area than that at Naitabale. In terms of its breadth, the fringing reef flat at Taviya is between the two but was/is much less productive because of its leeward location and the effects of freshwater and sediment washed off Ovalau Island (102.75 km<sup>2</sup> in area), which is many times larger and higher than either Moturiki (10.89 km<sup>2</sup>) or Naigani (1.91 km<sup>2</sup>).

We envisage that Naitabale on Moturiki Island was the earliest Lapita settlement in this area, and that the sites on Ovalau and Naigani were established either by later immigrants or by people from Naitabale who left perhaps when its population had grown to the extent that reef foods were no longer so readily/ easily obtainable as they had been at the time of initial settlement.

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