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– RESEARCH REPORT –

Recent Recoveries of Archaeological Ceramics on Santa Isabel, Central Solomon Islands

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ABSTRACT

Recent field investigations on Santa Isabel (Isabel) in the Central Solomon Islands have revealed the presence of archaeological pottery in both terrestrial and intertidal contexts. Preliminary dating results and comparative stylistic analyses of sherds provide evidence to suggest an antiquity of ceramics in northwest (NW) Isabel spanning the late Holocene to the recent historic past. These research outcomes expand the known distribution of pottery within the Solomon Islands and provide new knowledge about the prehistory of Santa Isabel. Here we describe the Santa Isabel ceramics, and suggest several implications of the research for current settlement models of the Solomon Islands and for our understanding of the variability in the archaeological record of mid- to late-Holocene ceramic distribution throughout the region.

Keywords: Santa Isabel, Solomon Islands, pottery

INTRODUCTION

Recent fieldwork on Santa Isabel has revealed the presence of archaeological ceramics in a range of contexts, including deposits associated with hill-top forts and settlements, small islands, coastal sites and most recently, on an intertidal mudflat. This represents the first ever recovery of pottery on Santa Isabel, and most significantly, expands the known distribution of ceramics within the Solomon Islands. Based on preliminary radiocarbon dating sequences and basic comparative stylistic analyses with ceramics from the Western Solomon Islands, the ceramic assemblage is interpreted as new evidence of the late Holocene human occupation of Santa Isabel. In NW Isabel the identification of sherds in both terrestrial and intertidal contexts suggests the nature of human occupation may have been diverse, with the possibility of a shift in settlement strategies over time. Here we provide basic descriptions of the archaeological pottery and site contexts, and suggest several implications of the Santa Isabel discoveries for our current understanding of the prehistory of the Solomon Islands.

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BACKGROUND TO THE RESEARCH AND POTTERY FINDS ON SANTA ISABEL

Although there have been several archaeological site recording programs undertaken on Santa Isabel (Figure 1) by the Solomon Islands National Museum (SINM) since the 1970s (Miller 1979; Mukaida 1991; Keopo and Kiko 1994; Keopo and Kawamura 1999), the authors' project is the first substantive research project aimed at developing a broader understanding of the human occupation of the island, particularly the nature of colonisation, and cultural continuity and change since initial settlement. The discovery of ceramics on Santa Isabel has been made by the authors during several seasons of investigation. In 2006 David Roe and Lawrence Kiko (Solomon Islands National Museum) conducted preliminary fieldwork in the Mbughotu area in the island's southwest (Figure 1). As part of the same preliminary season investigations were also undertaken in the Zabana region of NW Isabel (Figure 2) by David Roe, Melissa Carter and Martin Gibbs (University of Sydney). Since 2006 the majority of investigations have been undertaken in NW Isabel by MC and JK as part of MC's postdoctoral research into the nature of settlement and the development and change of marine subsistence patterns during the late Holocene to early historic period. With the aim of establishing the range of site types and site distribution in the study areas, archaeological survey and excavation has been conducted in a range of landscape contexts including inland ridges and hill-tops, hill-slope rockshelters, mainland coastal margins, offshore islands and coastal mudflats. As a complement to the interpretation of midden deposits found on these sites, MC has also

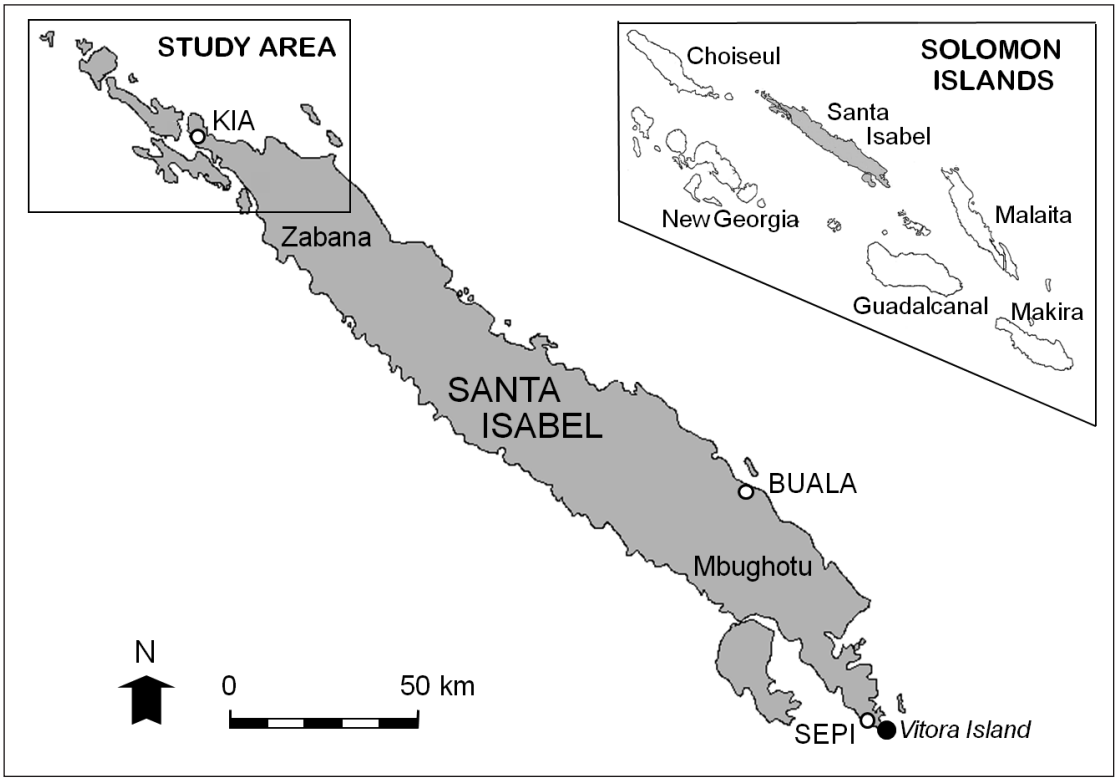

Figure 1. Map of Santa Isabel showning main study area and places referred to in text.

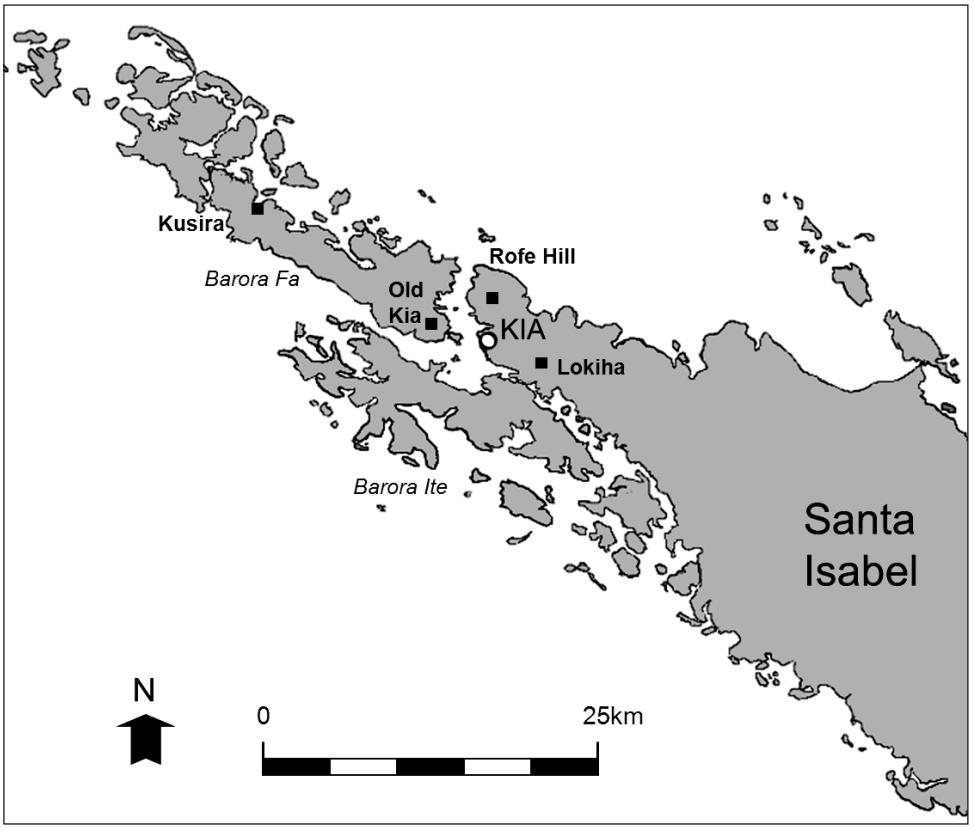

Figure 2. NW Isabel study area showing sites referred to in text.

been documenting contemporary shellfishing practices and associated ecological knowledge through working closely with women shellfishers in Kia village (Figure 2).

As part of the 2006 field season in Mbughotu, three small test excavations of rockshelter/overhang deposits were undertaken on the mainland coast at Sepi, disappointingly revealing very little in the way of cultural remains (see Figure 1 for location of sites in southwest Isabel). However, a survey of a small coconut plantation on Vitora Island, located a short distance from the mainland, revealed the first pottery sherds identified on Santa Isabel (Roe *et al*. 2007) (Figure 3). A total of 32 plain, brown-orange coloured sherds were collected as surface finds. Average sherd thickness is approximately 7mm with four sherds having a thickness of >10 mm. Many of the sherds have a coarse-grained fabric, with a large quantity (28 sherds) displaying possible calcareous (shell) inclusions that are visible to the naked eye.

In NW Isabel archaeological fieldwork has predominantly been limited to the mainland due to some access constraints for the larger islands of Barora Fa and Barora Ite (Figure 2). This restriction has been especially unfortunate as local oral histories indicate that it was on these two islands, particularly Barora Fa, where the occupants of Isabel first settled. So far archaeological investigations have largely focused on several mainland hill tops where *sara* (shrines) were known to exist and where landownership has been clearly established. The archaeological fieldwork has confirmed the past occupation of these inland contexts, with a range of cultural deposits and features recorded, including shell middens, stone and coral shrine complexes (*sara*), stone platforms and stone walling (*toa*).

Figure 3. Selection of sherds from Vitora Island pottery assemblage.

In 2008 six small, plain pottery sherds were excavated from a shell midden located on a hill fort site known as Rofe Hill (Figure 2). The 1 m × 50 cm test excavation was undertaken to construct a sequence of site use and occupation based on the nature and timing of the deposition of marine subsistence remains. The midden revealed three stratigraphic units (SUI–SUIII) based on visible differences in sediment colour and texture and the density and species composition of shellfish remains. The excavation ceased at a depth of 55 cm below surface level due to the encroachment of large subsurface boulders. Sherds were recovered from all three stratigraphic units and based on the preliminary radiocarbon dating sequence constructed for this deposit, the deposition of ceramics ranges from initial occupation dated at 1880–1610 calBP (WK24901) (SUIII) to the recent historic past (106 calBP, WK24898) (SUI) when the site was abandoned (all dates were obtained from excavated marine shell samples and were calibrated using Oxcal v.3.10 (Bronk Ramsey 2005) with an applied ΔR value of −6 ± 27 years).

A more substantial pottery assemblage, numbering 205 sherds in total, was recently recovered from archaeological contexts at the hill fort site of Lokiha (Figure 2). The presence of pottery at this site was first identified in 2009 by JK during a survey of the hill-top prior to the proposed commencement of logging activities at the base of the hill. In 2011 a series of test excavations of archaeological deposits across the Lokiha site complex was conducted by MC and JK. The majority of the archaeological ceramics were recovered from a 1 m × 1 m excavation (Lokiha 001) located immediately adjacent to a large boulder at the northwestern end of the hill fort complex where surface sherds were initially observed by JK. The excavation ceased at 60 cm bsl where sterile deposit was reached.The entire excavated deposit was stratigraphically uniform, comprising dark brown densely consolidated sediment with very high clay content. Pottery, flaked chert artefacts and oven stones comprised the entire excavated cultural assemblage.

A total of 143 sherds were recovered from the upper deposit (0–20 cm bsl), and based on obvious similarities in sherd thickness, colour and fabric texture, this assemblage is interpreted as possibly belonging to a single thin-walled (1–3 mm) vessel with an estimated rim diameter of ~25 cm. Rim sherds have impressed decoration with profiles suggesting an inverted incurvate rim (Figure 4). Although more detailed morphological analysis of sherds is required, this vessel may have been similar to the vessel shown in Figure 5. The vessel shown in this figure is a cooking pot made on Choiseul (see inset Figure 1) during the mid-20th century. Thirty-five sherds were excavated from the middle section of the deposit (20–35 cm bsl) and may represent the remains of an additional five different vessel types (based on comparison of physical characteristics). A total of 27 sherds were recovered from test excavations of three other archaeological contexts (Lokiha 002, 005 and 006)

Figure 4. Rim sherds from Lokiha 001, NW Isabel.

Figure 5. Choiseul cooking pot *c*. Mid-20th century. Solomon Islands National Museum collection, photograph by Melissa Carter.

across the Lokiha site complex. Differences in sherd colour and fabric texture suggest this assemblage may represent remains of at least 10 different vessels in addition to the estimated six vessel types present at Lokiha 001.

During the 2011 fieldwork in NW Isabel, the first intertidal pottery assemblage was also recorded on Santa Isabel. The pottery had actually been identified the previous year by a local villager who had participated in the 2008 excavations on Rofe Hill. In 2011 arrangements with the area's landowner were made and a brief site inspection was undertaken. The pottery was recorded at Kusira, located on the northeastern facing side of Barora Fa Island, approximately 22 km northwest of Kia village (Figure 2). The site is situated in a small, sheltered intertidal inlet which at low tide is characterised by exposed mudflats resulting from the clearance of mangrove stands during the 1950s (Figure 6). The site inspection (undertaken at low tide) revealed the distribution of ceramics over the entire mudflat, coincident with a considerably higher density of flaked chert artefacts. To gain a more accurate understanding of artefact density, a controlled sample of surface pottery sherds and flaked chert within a 3m × 3m square was collected. A total of 12 small pottery sherds and over 100 pieces of flaked chert were recovered. All sherds from the sample square are water worn and represent a range of colours and thicknesses, although most have a coarse fabric.

In addition to the controlled surface collection, a single decorated sherd demonstrating a crenulated rim with a single row of punctates underneath was also collected from the mudflat at Kusira (Figure 7). Based on a comparison with illustrated pottery sherds/styles from the Western Solomons, the decorated Kusira sherd shares stylistic affinities with Kopo style sherds from Roviana Lagoon (see Figure 4 in Felgate 2007:128), and sherds from Tan'huka on Kolombangara (see Figure 5:c in Summerhayes and Scales 2005:16). The ceramic assemblages from the intertidal sites of Roviana and Kolombangara are interpreted as consistent with late- and post-Lapita pottery (Summerhayes and Scales 2005 and Felgate 2007:128). Although a more detailed review of the late- and post-Lapita ceramic series constructed for Roviana Lagoon by Felgate (2003) has not been undertaken at this stage, we consider it plausible that the intertidal ceramics from Santa Isabel, as demonstrated by the decorated Kusira sherd, may at some point overlap with the Roviana ceramic sequence.

DISCUSSION AND CONCLUSION

We highlight several major implications of the recent recoveries of archaeological pottery on Santa Isabel. Firstly, this discovery expands the area of known ceramic distribution in the Solomon Islands. Santa Isabel must now be included with the pottery-bearing islands west of the linguistic division known as the Tryon-Hackman Line – with Bougainville, Choiseul, Buka, the New Georgia Group and the Shortland Islands – filling somewhat of a geographical gap created by its previous classification as 'aceramic' (refer Figure 2, Sheppard and Walter 2006:54). As part of their occupation model for the Solomon Islands, Sheppard and Walter (2006:48) claim that the Northern and Western Solomons Islands 'were settled by Austronesian-speaking, food producing, ceramic-making populations moving from the west over a NAN substrate in the Later Lapita period'. We suggest that the emerging scenario of coastal ceramic distribution on Santa Isabel and its potential stylistic affinities with late/post Lapita ceramics from the Western Solomons provide evidence to support the inclusion of Santa Isabel in this late Holocene occupation model.

Although dating of the Lokiha 001 deposit has not yet been undertaken, similarities between this assemblage and the thin plainware historic pots from Choiseul sug-

Figure 6. Kusira mudflat, NW Isabel.

Figure 7. Decorated Kusira rim sherd.

gest a possible late prehistoric – early historic antiquity for this hill-top settlement. The preliminary radiocarbon sequence for Rofe Hill suggests deposition of midden remains, including pottery, occurred earlier and signals initial occupation of this mainland site around 1800 years BP. The evidence from Lokiha and Rofe Hill is thus interpreted as confirming a pattern of inland hill-top occupation in NW Isabel during the last two millennia (until the establishment of the current Kia village by missionaries in 1913). The presence of ceramics on the intertidal mudflat at Kusira is interpreted as evidence of a possible earlier tradition of coastal settlement in NW Isabel. Felgate (2003: 491) concluded that the most likely scenario for formation of intertidal deposits in Roviana Lagoon was 'stilt dwellings over shallow water, with piles set in soft sediment now removed by swash processes as a result of uplift…'. Importantly, this interpretation also highlights the need for consideration of past environmental processes in the formation of inter-tidal sites in the Solomon Islands, as recently outlined in detail by Sheppard and Walter (2009). Any firm conclusions regarding the timing and nature of the deposition of ceramics and other cultural materials at Kusira must await the outcomes of further archaeological investigations at the site.

The second implication of the presence of pottery on Santa Isabel concerns the question of the origin of the ceramics. There is no recorded tradition of pottery manufacture on Santa Isabel, and knowledge of pottery use is absent from oral history (as documented through

informant interviews undertaken in Kia village and Sepi by the authors). Early Spanish explorers observed two clay pots on the island of San Jorge off the eastern end of Santa Isabel in 1568, noting 'the Indians said they had brought them from another land far off' (Amherst and Thompson 1901:173). This confirms the historic presence of ceramics on Santa Isabel and provides evidence to suggest that at least in the southwest, the island's occupants were acquiring pottery vessels through inter-island trade. The manufacture of pottery is historically documented for Choiseul (Ratliff 1979), Bouganville (Guppy 1887; Chikamori 1967), Buka (Specht 1972) and the Shortland Islands (Irwin 1972); each of these is concluded to provide a possible source locale for the Isabel ceramics. Significantly, the widespread distribution of ceramics on Isabel – from the northern end of Barora Fa to Vitora Island off the southeastern coast – also suggests that pots may have originated from multiple locales.

Petrographic analyses of the Santa Isabel ceramics is currently underway and aims to identify the possible geological source of materials used in pottery manufacture and to differentiate temper groups and vessels. Previous petrographic examinations of archaeological ceramics from the Western Solomon Islands have allowed unique insights into the origin and production of pottery throughout the late- and post-Lapita settlement periods. The results have provided characterisation of the mineralogical make-up of temper suites from Roviana Lagoon (Felgate and Dickinson 2001) and Kolombangara (Findlater *et al.* 2009; Summerhayes and Scales 2005), and have led to interpretations of local ceramic production in the Western Solomons as well as evidence of 'exotic' ceramics. According to Dickinson (2009a; 2009b), one place of production for the exotic wares from intertidal contexts in Roviana Lagoon is Choiseul. Although there is some debate over the origin of so-called anomalous temper sands in some Western Solomons ceramics (Findlater *et al.* 2009; Felgate and Dickinson 2001), the results of petrographic analyses have confirmed the likelihood of inter-island ceramic transfer throughout the Western and Central Solomon Islands during the late Holocene.

The third implication resulting from the recent pottery discoveries on Santa Isabel concerns debate about the distribution (and identification) of archaeological ceramics in the Solomon Islands. This debate has offered many theories for explaining variability in the archaeological record of mid- to late-Holocene ceramic distribution throughout the archipelago, outlined previously by Sheppard and Walter (2006) and most recently by Sheppard (2011) in his comprehensive synthesis of linguistic, biological and archaeological evidence from the Solomon Islands. Sheppard and Walter (2006:53) state that the probability of finding ceramic sites '…would seem to be related more directly to the number of archaeological person-days spent in an area and the increasing knowledge by local people of the archaeologist's interest in ceramics'. The identification of pottery sherds on the mudflat at Kusira was a direct result of a local villager understanding both what a pottery sherd looks like, and the relevance of pottery to the archaeological project.

The discovery of pottery at Kusira also speaks to the issue of site visibility as a contributing factor to the current pattern of ceramic distribution throughout the Solomon Islands. During the 2006 and 2008 field seasons in NW Isabel, surveys of small offshore islands and low-lying coastal areas failed to reveal any archaeological evidence of past occupation. It was concluded that the dense and prolific mangrove forests that dominate the littoral landscapes of the study region severely restrict site visibility, as well as hinder access for conducting surveys. The presence of pottery on the mudflat at Kusira has confirmed the archaeological potential of some intertidal landscape contexts in NW Isabel. It also demonstrates that future archaeological surveys in the region may need to focus on areas where similar clearance or removal of mangrove stands has been undertaken.

Finally, the two previous points draw attention to Sheppard's (2011) leapfrog hypothesis for explaining the absence of Lapita sites throughout much of the island archipelago. This model is largely based on the view that as a geographic region the Solomon Islands has been subject to sufficient archaeological investigation. The research outcomes presented here demonstrate that the (previous) absence of ceramics on Santa Isabel was primarily due to a lack of archaeological research on this island. Ceramics have been recovered during each archaeological field season conducted on Santa Isabel as part of the current research project. The recently discovered coastal ceramics at Kusira are most relevant to Sheppard's (2011) argument, but as possible evidence of immediate post-Lapita colonisation in the Central Solomon Islands, this suspected occupation deposit offers tentative support for the leapfrog settlement model.

Here we have described the pottery and the archaeological context of ceramics recently recovered on Santa Isabel in the Central Solomon Islands. This important assemblage and the forthcoming results of mineralogical analyses promise to improve our present understanding of the timing and pattern of human settlement in a region previously regarded as 'aceramic', and also shed new light on pottery production and transfer in the Solomon Islands. Most significantly, the recovery of ceramics on Santa Isabel contributes new knowledge to assist in the decipherment of mid-late Holocene ceramics distribution throughout the Solomon Islands.

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