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Debating Lapita: Distribution, chronology, society and subsistence

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Lapita has been a focus for archaeologists for generations. Initially inspired by the scattered reporting in the early twentieth century of highly decorated sherds (Meyer 1909; McKern 1929; Piroutet 1917), its increasing significance in terms of the human settlement of the Pacific began to build in the 1960s. The Lapita culture has been most clearly defined by its distinctive dentate-stamped decorated pottery and the design system represented on it and on further incised pots. It is defined earliest in the Bismarck Archipelago to the east of the large island of New Guinea, at some time in the centuries preceding 3000 cal. BP. At around that date the Lapita culture spread out from its Bismarck Archipelago 'homeland' to beyond previously inhabited regions of Near Oceania to establish the first human colonies in the western part of Remote Oceania, the present-day south-east Solomons, Vanuatu, New Caledonia, Fiji, Tonga, Samoa and Wallis and Futuna. At about the same time there was a push to the south-west out from the Bismarcks along the south coast of New Guinea, perhaps even as far as the Torres Straits (McNiven et al. 2006).

The broad overlapping themes of this volume, Lapita distribution and chronology, society and subsistence, relate to research questions that have long been debated in relation to Lapita. It is a substantial volume with 23 chapters, reflecting the increasing breadth and focus on different aspects of Lapita that have developed over several decades.

The distribution and chronology theme, as addressed in Chapters 2 to 9, connects to questions of its geographical spread, site location within that extent and its origins. The eastern and southern boundaries appear to be well established, having remained unchanged since the 1970s: Samoa the furthest east and New Caledonia the most southerly. However, it seems very unlikely the north-western boundaries of Lapita are yet fixed, with earlier and simpler dentate-stamping having been found in Island Southeast Asia (ISEA) (e.g. Hung et al. 2011 for Luzon). How these ISEA pottery traditions relate to dentate-stamped pottery in Micronesia and Lapita in the Bismarcks remains unresolved. Some have argued that the pottery follows a trail from ISEA to Micronesia and then on to the Bismarcks (Carson 2018; Carson et al. 2013). Clark and Winter (Chapter 2) address this question head-on with a detailed comparison of motif forms and designs from the two regions. In an expansion of the boundary, recent serendipitous discoveries and predictive modelling of the 3000 cal. BP south Papuan coastline have now extended the Lapita range westwards right up to the Fly River (Skelly et al. 2014). David et al. (Chapter 3) discuss one of these sites, Moiapu at Caution Bay near Port Moresby, and how it fits into the regional context and sequence, focusing particularly on its place at the end of Lapita. These discoveries on the south Papuan coast, along with later pottery from the Torres Strait (McNiven et al. 2006)

and on Lizard Island on Australia's Great Barrier Reef (Tochilin et al. 2012), suggest that the western and south-western boundaries of Lapita are not yet fixed. The implications of this are discussed by Lilley (Chapter 5), who suggests that coastal Aboriginal Australians were most likely much more connected to Lapita expansion than previously imagined, both linking to it and also involved in facilitating its extension.

The theme of distribution also connects with questions of site location and spread within the Lapita boundary. Sites are overwhelmingly found in coastal locales but can be found on large islands through to small islets, on back beaches or in intertidal situations. The evidence for the latter appears to be largely restricted to Near Oceania where Lapita populations were entering already populated islands (but see Burley 2016, Nunn and Heorake 2009 for suggested Tongan and Fijian examples). Two chapters address these different locales. Summerhayes et al. (Chapter 4) focus on the Near Oceanian site of Kamgot, an Early Lapita site in the Anir Group off southern New Ireland, once located in an intertidal zone. They outline the archaeological evidence and discuss the economic advantages of establishing a settlement in an intertidal situation. Burley et al. (Chapter 8) discuss an Early Lapita site in Fiji, on the small island of Kavewa in Vanua Levu. It is strategically positioned on a passage through the reef, a location that may have been chosen by founder colonies to facilitate exploration and settlement of the Vanua Levu mainland.

While the geographic distribution of Lapita dentate-stamped sites has been extended, there remain some persistent gaps within its current extension, namely the central Solomons, Samoa and American Samoa. There remains an ongoing debate whether these are real or perceived. In some cases, the geomorphological and post-depositional complexities make the search and discovery of Lapita sites extremely difficult. A lack of focused research is also a factor in some areas. This might be partly the case in the Vitiaz Strait where Lapita has been found only on the Siassi Islands to date, but it seems most likely that it may have been more widespread due to the strategic location between the Bismarcks and the New Guinea mainland. Gaffney et al. (Chapter 6) address this question in relation to Arop Island where recent fieldwork has been carried out. They present a range of evidence that points to a Lapita presence on that island. Sheppard (Chapter 7) revisits the Lapita gap in the main Solomons, arguing that earlier contentions for a leap-frog scenario of Early Lapita settlement remain robust. He adds new data that further support this scenario.

Lapita chronology is continually being addressed, and many of the chapters here touch on this aspect. Long gone are the days when Lapita was seen to continue in some areas for more than a thousand years, or that there was a pause in the Bismarcks for 400 years before people moved further east. Much more refined use of radiometric methods, the incorporation of ΔR offsets for marine shell samples, the identification of charcoal to species, or the specific targeting of short-lived samples such as nutshell have led to much more robust chronological delineation. The use of uranium–thorium dating (U/Th) on coral artefacts has also provided unprecedented chronological definition in the case of Tonga. What the dating of Lapita sites in Remote Oceania currently supports is a scenario where populations 'exploded out of the Bismarcks, and in a radiocarbon instant, occupied most of its ultimate range' (Sheppard 2010:107). The time period for the production of dentate-stamped pottery has also been generally reduced across the same region, with its demise now appearing to be no later than 2700–2500 cal. BP. The further delineation of the chronology for Lapita in Near Oceania remains to be completed. A major review of dates for that region is the focus of Chapter 9 (Specht and Gosden). The authors radically trim down the numbers of acceptable dates for the region under a chronometric hygiene exercise and also suggest a likely starting date for Lapita in the Bismarcks could be around 3250–3150 cal. BP. Kirch, in his closing commentary (Chapter 23), states that his own soon-to-be-published re-dating of Lapita in the Mussau group will present a similar time range for that part of the Lapita 'homeland' area as well.

Chapters 10 to 17 are situated under the broad category of Lapita society with a particular focus on aspects of the design system and its symbolism (Chapters 12 to 16). A range of comparative techniques and statistical analyses are employed, all of which tease out various aspects of the design system and its application. Results of these analyses also contribute to discussions relating to connectivity, colonisation strategies and chronology. Sand et al. (Chapter 10) revisit the eponymous Site 13, Lapita, following extensive rescue archaeology excavations carried out there in 2015. New dates and new data provide a much fuller picture of the history of the site's occupation over several hundred years. The results highlight the spatial complexity of the site, which is a cautionary tale for Lapita research in general, as summaries of sites and whole islands can be based on only a few test pits that may represent 5 per cent or less of a site overall. Moving east to Vanuatu, Bedford illustrates and discusses Lapita pottery, both vessel form and designs, recovered from the small islands of north-east Malakula (Chapter 11). While the sites clearly date to the colonising phase in this part of Vanuatu, the pottery displays very distinctive regional variation. This leads to questions both of ultimate origins and about the rates of change in any given ceramic sequence. The topics of the influence and origins of the Lapita design system are taken up by Ambrose in Chapter 12. Ambrose, who first illustrated Lapita sherds in a 1959 publication (Golson 1959), up-ends the argument that Lapita motifs influenced design systems on other media. He argues, rather, that plaiting and basketry were more likely to have been dominant and fundamental influences on Oceanic art, including the decoration of Lapita pottery (Chapter 12). Lapita 'faces' have long been argued as being an essential component of Lapita iconography. Spriggs, who first established this (Spriggs 1990), brings a totally new perspective to the debate (Chapter 13). Here he argues that what once were seen as faces are more likely to represent heads and masks, headdresses and skullcaps.

The chapter of LeBlanc et al. (Chapter 14) is the first of three that look at Lapita motifs and design structure in fine detail. LeBlanc et al. shift away from the more traditional element-motif approach by taking a structural approach to analysing the Lapita design system, targeting design density, layout and organisation. Their focus, using this approach, is on assessing how cohesive the Eastern Lapita Province is in terms of ceramic design. Chiu (Chapter 15) provides an update of her ongoing research into Lapita motifs, presenting data on motif similarity among 50 Lapita sites, highlighting social connections that may be traced through the distribution of motifs. Along similar lines of inquiry to those of Chiu, Noury (Chapter 16), who argues that there are two primary distinct sets of Lapita designs or group designs, uses them to track movement across Remote Oceania. Rather than focusing on Lapita design, Leclerc (Chapter 17) discusses the results of the chemical characterisation of Lapita and Post-Lapita ceramics. He argues that the shift from the compositional variability found in Lapita ceramics to a restricted compositional range found in Post-Lapita ceramics is an indication of significant societal change.

Chapters 18 to 21 focus on aspects of Lapita subsistence. The chapters highlight the radically different environments that were encountered by Lapita populations and the range of food sources that were available and exploited. Summerhayes et al. (Chapter 18) provide a detailed study of midden remains from the Early Lapita site of Kamgot and its distinctive intertidal location. Lebot and Sam (Chapter 19) review the availability of indigenous plants in Vanuatu that could have been consumed by Lapita colonists. They suggest that a whole range of plant food sources could potentially have been utilised on first arrival, weakening any argument that settlement in this part of Remote Oceania was hindered by a paucity of locally available flora. Ono et al. (Chapter 20) present a review of Lapita fishing, providing a case study from the small island of Uripiv adjacent to Malakula in Vanuatu and comparing it with all other published Lapita sites. Fish bone remains, fishhooks and capture methods are discussed. Hawkins and Worthy (Chapter 21) review avian extinctions across the Lapita distribution, highlighting the evidence for radical impact that humans had on a range of naïve and vulnerable species. The importance of taphonomic influence in assessing site preservation and thus impact is also highlighted.

Chapter 22 (Shing and Willie) moves beyond the strictly academic focus on Lapita to show how it has been accepted or not in wider educational and community awareness programs. The authors discuss how the long-running archaeology awareness programs in Vanuatu, coordinated by the Vanuatu Cultural Centre, have developed in different and sometimes unexpected directions.

Patrick Kirch first encountered Lapita sites in the field in 1971 on a visit to the Reef Islands in the south-east Solomons, and first excavated them on the island of Futuna in Western Polynesia in 1974. In the final chapter (Chapter 23), he reflects on four decades of Lapita research and what the priorities might be for the future.

Inventory of Lapita sites

The first tally of Lapita sites was compiled by Green in 1979. It included a map (1979: Figure 2.2), discussion of site stratigraphy and excavated areas, pottery recovered, a mere 24 radiocarbon dates (1979: Table 2.10) and relevant references (1979:49–57). There were 19 localities and around 60 sites. Kirch and Hunt (1988) followed 10 years later with similar detail and reached a figure of 79 sites. Another 10 years after that, Kirch estimated that there were around 100 sites, and described in some detail 32 of those where information was easily accessible (1997:263–276). He noted that for the remaining two-thirds of the inventory ‘very little is known indeed’ (Kirch 1997:263).

In 2001 the number of sites had increased to 184, and a full list and accompanying data and references were tabulated (Anderson et al. 2001). The last full tally, although not a full listing, was in 2007 where the number of sites had increased to 229 (Bedford and Sand 2007:8–9). As part of the overall preparation of this volume, we have compiled an updated inventory of all sites where dentate-stamped pottery has been found in the Western Pacific. We follow the historical pattern of such inventories in that we include sites where a dentate-stamped component of decoration is included in the ceramics recovered. There are two exceptions included where Lapita sites are indicated through other evidence. They are a site at Lamap, Malakula, Vanuatu, where a single piece of Talasea obsidian was collected on the surface and the site of Pouebo in New Caledonia where the very distinctive geology of this region has been identified in Lapita sherds found from other sites in New Caledonia (Chiu et al. 2016). Table 1.1 follows earlier formats and includes national site register codes if available, site name, a general description of locality, site extent, contents, the ceramic series in terms of the localised sequence, age in calendrical years BP (gleaned from relevant radiocarbon dates or comparison of design motifs) and key references.

Since the last tally of sites in 2007, we have added 64 sites to the inventory, providing now an overall total of 293 Lapita sites across its distribution. While this appears to be a substantial increase it is not all newly discovered sites. The new total has come about both through the addition of new sites (49) that have been identified since 2007, but also the addition of a number of old sites (15) from the Bismarcks (Kombe and Fissoa) and the south-east Solomons (Taumako and Reefs-Santa Cruz) that managed to slip through previous tallies. One site that was previously incorrectly listed was also removed (Loloma, New Georgia). Totals for each region are now as follows: 19 for New Guinea, 88 for the Bismarcks, 28 for the Solomons, 30 for Vanuatu, 38 for New Caledonia, 51 for Fiji, 34 for Tonga, one for Samoa, three for Wallis (East Uvea) and one for Futuna. We do not include sites in ISEA or the Marianas where dentate-stamped pottery is known or designs in incised or other techniques display complex ‘Lapita-like’ motifs whose exact relation to Western Pacific Lapita have yet to be established (see Anggraeni et al. 2014; Aoyagi et al. 1993; Azis et al. 2018; Bellwood and Koon 1989; Carson 2014; Chia 2003; Hung 2008; Lape 2000). Similarly, the early pottery sites in the Torres Strait and the undated finds on Lizard Island on Queensland’s Great Barrier Reef are not included because of the non-specific

nature of pottery found so far at these sites (see Lilley, Chapter 5, for a discussion of these sites). The new sites that have been identified since 2007 include 17 in New Guinea, two in the Bismarcks, three in the Solomons, five in Vanuatu, three in New Caledonia, seven in Fiji and 11 in Tonga. In most regions, the increase of new sites has been slowly incremental, as per the focus of archaeological research in any particular area, which is to be expected. The most striking addition is the extension of the distribution of Lapita further west along the south coast of New Guinea (David et al. 2011; Skelly et al. 2014). However, in arriving at a total of 16 sites for Caution Bay we have followed the definition used by the excavators, where an archaeological 'site' was defined as a location of cultural materials 15 m or more from its closest neighbour. This recording criteria tends to inflate occupational settlement site numbers in relation to other areas of the Lapita distribution.

Table 1.1. Currently known Lapita sites (293): Location, locale type, extent, content, ceramic series, age and references.

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
North New Guinea							
<i>Sandaun Province</i>							
No code	Aitape	unknown	-	surface pottery	?Middle	-	Swadling et al. 1988
<i>Sepik</i>							
RNJ	Tubungbale, Ali Island	coastal flat	-	surface pottery	?Late	-	Terrell and Welsch 1997
South New Guinea							
<i>Gulf Province</i>							
OJS	Hopo, Vailala River	inland ancient dune	-	pottery	Late	2668-2615	Skelly et al. 2014
<i>Caution Bay</i>							
ABEN	Bogi 1	coastal midden	1500	full range	Middle to Late	2900-2250	McNiven et al. 2011; David et al. 2011
ABHA	Tanamu 1	coastal midden	260	pottery and obsidian	Middle to Late	2900-2860	David et al. 2011; Mialanes et al. 2016
ABHD	Tanamu 3	coastal midden	-	pottery and obsidian	Late	2750-2350	
AAYN	Moiapu 1	inland low hill	-	pottery and obsidian	Late	2551-2470	David et al. 2011; Mialanes et al. 2016
AAYL	Moiapu 2	Inland low hill	-	pottery and obsidian	Late	2700-2250	Mialanes et al. 2016
AAZD	Moiapu 3	inland low hill	-	pottery and obsidian	Late	2630-2410	David et al. this volume
AAWA	Nese 1	inland low hill	-	pottery and obsidian	Late	2750-2550	McNiven et al. 2012a: Figure 2; Mialanes et al. 2016
ABAO	Edubu 1	inland low hill	300	full range	Late	2650-2350	McNiven et al. 2012b
ABAN	Edubu 2	inland low hill	-	pottery	Late	2850-2150	Mialanes et al. 2016
ABKL	ML 18	coastal midden	-	pottery and obsidian	Late	2850-2650	Mialanes et al. 2016
AAUJ	JA21	inland	-	pottery and obsidian	Late	2800-2550	Mialanes et al. 2016

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
AAIT	MLA14	inland low hill	-	pottery	Late	2750-2500	Mialanes et al. 2016
AAVM	Ataga 1	inland low hill	-	pottery and obsidian	Late	2650-2450	McNiven et al. 2011; Mialanes et al. 2016
-	JD17	coastal midden	-	pottery	Late	-	McNiven et al. 2011: Figure 5n
-	JD10	coastal midden	-	pottery	Late	-	McNiven et al. 2011
ABIV	JD14	coastal midden	-	pottery	Late	-	McNiven et al. 2011; McNiven et al. 2012a: Figure 2
Morobe Province							
KLK	Tuam Island, Siassi	coastal flat	2000	pottery	Middle to Late	3150-2750	Lilley 2002
West New Britain							
<i>Arawes</i>							
FNY	Paligmete	coastal midden	18 000	full range	Early	-	Summerhayes 2000a
FNZ	Winguru	coastal midden	18 000	full range	Late	-	Summerhayes 2000a
FOH	Magekur	coastal midden	10 000	full range	Early to Middle	3240-2750	Summerhayes 2000a
FOJ	Apalo	coastal midden	12 000	full range	Early to Late	3200-2520	Summerhayes 2000a
FOL	Amalut	coastal midden	3000	full range	Middle to Late	2770-2360	Specht and Gosden 1997
No code	Maklo	coastal midden	-	pottery and obsidian	-	-	Swadling 1992
FOR	Maklo	coastal midden	-	pottery and obsidian	-	-	Swadling 1992
FOF	Lolmo	offshore island cave	55	full range	Late	-	Gosden et al. 1994
	Agussak	offshore island	500	pottery and obsidian	-	-	Swadling 1992
<i>Kandrian</i>							
<i>Kandrian area</i>							
FLF	Alanglongromo	rock shelter	30	pottery and obsidian	Middle	3060-2750	Summerhayes 2000a
FLK	Aringilo	open site	-	pottery	-	-	Specht 1991a
FLX	Ngaikwo	open site	-	pottery	-	-	Specht 1991a
FYA	Narangpun	open site	-	pottery	-	-	Specht et al. 1992
FFT	Langpun	coastal midden	-	pottery	-	-	Specht et al. 1981
FFS	Auraruo	coastal midden	-	pottery	Middle to Late	-	Summerhayes 2000a
FNT	Kreslo	reef platform	2500	pottery	Middle to Late	-	Specht 1991b
<i>Talasea area</i>							
FCN/FCO	Point Mondu	beach	-	pottery and obsidian	-	-	Specht and Torrence 2007a
FCE/FCS	Lagenda plantation	beach	-	pottery obsidian	Early	-	Specht et al. 1988

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
FCT	Lagenda Island	beach	-	pottery	-	-	Specht and Torrence 2007a
FDK	Nariri Beach	beach	-	pottery and obsidian	-	-	Specht and Torrence 2007a
FCH	Nabodu beach	beach	-	pot sherd	-	-	Specht and Torrence 2007a
FRJ	Valahia	beach	-	pottery and obsidian	-	-	Specht and Torrence 2007a
FRI	Walindi	inland spur	-	pottery and obsidian	-	-	Specht and Torrence 2007a
<i>Garua Harbour</i>							
FEA	Boduna	islet	6000	pottery and obsidian	Early to Middle	2950-2720	Specht and Summerhayes 2007
FEM	Garala Island	offshore island	-	pottery and obsidian	-	-	Specht and Torrence 2007a
FQD	Langu, Binnen Island	offshore island	-	pottery and obsidian	-	-	Specht and Torrence 2007a
<i>Garua Island</i>							
FSZ	Scoria pit	coastal hill	1600	pottery and obsidian	Middle to Late	2800-2000	Summerhayes 2000a
FAO	unknown	coastal hill	1600	pottery and obsidian	Middle to Late	-	Specht and Torrence 2007a
FQY	Golas Gully	coastal hill	-	pottery and obsidian	-	-	Specht and Torrence 2007a
FAS	unknown	coastal stream	-	sherd	-	-	Specht and Torrence 2007a
FEK	Mt America	mudflats	-	sherd	Early	-	Specht and Torrence 2007a
FEL	unknown	coastal hill	-	pottery and obsidian	Early to Late	-	Specht and Torrence 2007a
FXO	unknown	coastal hill	-	pottery and obsidian	Late	-	Torrence and Stevenson 2000
FYS	unknown	beach	-	pottery	-	-	Specht and Torrence 2007a
FCY	unknown	beach	-	pottery and obsidian	Late	-	Specht and Torrence 2007a
FAAN/D5-7	unknown	coastal plain	-	pottery and obsidian	Early to Late	2700	Specht and Torrence 2007a
FAAJ	unknown	coastal plain	-	pottery and obsidian	-	-	Specht and Torrence 2007a
FAAQ	unknown	inland hill	-	pottery and obsidian	-	-	Specht and Torrence 2007a
<i>Willaumez Peninsula</i>							
FAAH	Numundo plantation	coastal hill	-	pottery and obsidian	-	3200-2960	Torrence et al. 1999
FABH	Numundo plantation	inland hill	-	pottery and obsidian	Late	-	Torrence et al. 1999
FABN	Garu plantation	inland hill	-	surface pottery	-	-	Torrence et al. 1999
FACU	unknown	hill on divide	-	surface pottery	-	-	Specht and Torrence 2007b

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
FACZ	Foothill of Mt Krummel	inland foothill	-	surface pottery	-	-	Specht and Torrence 2007b
FACR	Whiteman range foothills	low spurs	-	surface pottery	Late	2800	Specht and Torrence 2007b
<i>Kombe Coast</i>							
FCL	Poi Mission	coastal midden	-	full range	-	3000-2700	Lilley 1991
FPA	Kautaga Island	coastal midden	-	full range	-	3000-2700	Lilley 1991
FPB	Kou Island	midden	—	pottery	—	—	Lilley 1991
FPN	Rudiger Point	midden	-	pottery	—	—	Lilley 1991
FPR	Poi Island	coastal midden	—	pottery	—	—	Lilley 1991
FPE	Kalapia Island	midden	—	pottery	—	—	Lilley 1991
FPF	Kalapia Island	midden	—	pottery	—	—	Lilley 1991
East New Britain							
<i>Duke of Yorks</i>							
<i>Duke of York Island</i>							
SDN	Piuka	coastal midden	-	pottery and obsidian	-	-	White and Harris 1997
SDK	Urkuk	coastal midden	-	pottery	-	-	White 2007
SDP	Kabilomo	coastal midden	-	pottery and obsidian	-	-	White 2007
SES/SET	Nakukur 1 and 2	coastal midden	75 000?	pottery and obsidian	-	-	White 2007
<i>Mioko</i>							
SDQ	Mioko Island	coastal midden	-	pottery	-	-	White 2007
SFB/SFA	Palpal village	coastal midden	30 000	pottery	-	-	White 2007
<i>Kabakon</i>							
SEE	Kabakon Island	coastal midden	8100	full range	Early	3090	White 2007
<i>Utuan</i>							
SFF	unknown	coastal midden	-	pottery and obsidian	-	-	White 2007
<i>Kerawara</i>							
SEF	unknown	coastal midden	-	pottery and obsidian	-	-	White 2007
<i>Makada</i>							
SEO	unknown	coastal midden	-	pottery and obsidian	-	-	White 2007
SEP	Uraputput Point	coastal midden	-	pottery and obsidian	-	>2780	White 2007
<i>Watom</i>							
<i>Reber Mission and Rakival</i>							
SAC	Kainapirina	coastal midden	-	full range	Middle to Late	2200-2000	Anson et al. 2005

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
SDI	Vunavaung	coastal midden	-	full range	Middle to Late	2800-1800	Anson et al. 2005
SAD	Maravot	coastal midden	-	full range	Middle to Late	2300-1900	Anson et al. 2005
SAU	Vunailau	coastal hill/cliff	-	surface pottery, obsidian	-	-	Specht 1968; Anson pers. comm. 2017
<i>Pomio- Jacquinot Bay</i>							
No code	Liton River	river	-	pottery	Late?	-	Leavesley and Sarar 2013
New Ireland							
<i>New Ireland mainland</i>							
EFY	Lemau	coastal midden	-	pottery, obsidian, stone	-	-	White 1992
EAA	Lossu	coastal midden	-	pottery	-	-	White and Downie 1980
ELS/ELT	Lasigi	coastal midden	-	pottery	Late	2980-2690	Golson 1992
No code	Bagail Kavieng	coastal midden	-	pottery, obsidian	Late?	-	Summerhayes and Leavesley pers. comm.
ENX	Fissoa	coastal midden	-	pottery	Late?	-	White and Murray-Wallace 1996
<i>Lambon Island</i>							
EPE	Lambon Island	unknown	-	pottery	-	-	White 1996
<i>Anir Islands</i>							
EAQ	Malekolon	coastal midden	10 000	pottery, obsidian, vol. stone	Middle	2900-2300	Summerhayes 2000b
ERA	Kamgot	coastal midden	24 000	full range	Early	3200-2900	Summerhayes 2000b
ERB	Mission	coastal midden	-	pottery, obsidian, vol. stone	Middle	2900-2300	Summerhayes 2000b
No code	Naliu	coastal midden	-	pottery and obsidian	Middle/Late	2900-2300	Summerhayes 2000b
ERC	Balbalankin	coastal midden	15 000	full range	Middle	2900-2300	Summerhayes 2000b
<i>Mussau</i>							
ECA	Talepakemalai	coastal midden	72 500	full range	Early	3300-2770	Kirch 1997; Kirch 2001
ECB	Etakosarai	coastal midden	2700	full range	Early?	3500-3300	Kirch et al. 1991
EHB	Etapakengaroasa	coastal midden	1150	full range	-	3500-2400	Kirch et al. 1991
EKQ	Epakapaka	rock shelter	90	full range	Middle?	3100-2800	Kirch et al. 1991
<i>Emira Island</i>							
EQS	Tamuarawai	coastal flat	22 500	full range	Early	3300-3000	Summerhayes et al. 2010

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
<i>Tanga Island</i>							
ETM	Angkitkita	coastal flat	-	pottery and lithics	Late	2750	Garling 2003; Cath-Garling 2017
Admiralties							
<i>Manus</i>							
GDN	Kohin Cave	cave	-	pottery	-	3900-2450	Kennedy 1981
GLT	Mouk	coastal flat	-	pottery	-	-	McEldowney and Ballard 1991
GFR	Paemasa (Baluan)	coastal flat	-	pottery	-	-	McEldowney and Ballard 1991
SOLOMONS							
North Solomons							
<i>Nissan</i>							
DFF	Lebang Halika	rock shelter	-	full range	Early	-	Spriggs 1991
DGD/2	Unknown	rock shelter	40	full range	Early	>2730	Spriggs 1991
DES	Tarmon	reef flat	5110	pottery and adzes	Late	-	Spriggs 1991
<i>Buka and Sohano</i>							
DJQ	Kessa	reef flat	10 000	pottery, obsidian, vol. stone, adzes	Middle	-	Wickler 2001
DAF	Sohano	reef flat	39 000	pottery, obsidian, vol. stone, adzes	Middle	-	Wickler 2001
DAA	Sohano	rock shelter	-	pottery and obsidian	Middle	-	Wickler 2001
DKC	Sohano Primary School	rock shelter	100	pottery	Middle	-	Wickler 2001
New Georgia							
<i>Roviana Lagoon</i>							
Site 97	Honiavasa, Honiavasa Island	intertidal	1800	pottery	Late	-	Felgate 2001, 2003
Site 96	Nusa Roviana (Zoroka)	intertidal	1750	pottery	Late	-	Felgate 2001, 2003
<i>Kolombangara</i>							
No code	Poitete, Kolombangara Island	intertidal	-	surface sherds	Late	-	Summerhayes and Scales 2005
SE SOLOMONS							
Taumako							
SE-DF-19	Te Ana Tavatava, Lakao Island	rock shelter	-	full range	Late	2950-2350	Leach and Davidson 2008
Reef-Santa Cruz							
SE-RF-2	Nenumbo, Te Motu Taibä, Ngaua, Reef Islands	coastal midden	1000	full range	Middle	3185-2639	Green 1976; Sheppard et al. 2015

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
SE-RF-4	Te Motu Taibä, Ngaua, Reef Islands	coastal beach	—	surface scatter pottery	—	—	Green 1979
SE-RF-5	Laki, Te Motu Taibä, Ngaua, Reef Islands	surface	—	surface pottery	—	—	Doherty 2007
SE-RF-6	Ngamanie, Lomlom, Reef Islands	coastal midden	2400	pottery and midden, obsidian, chert	Middle	2910-2470	Green 1976; Green and Jones 2007
SE-RF-7	Te Motu Taibä, Ngaua, Reef Islands	small surface scatter	—	pottery	—	—	Green 1979
SE-RF-8	Fenualoa, Reef Islands	surface scatter	2400	pottery	—	—	Green 1979
SE-SZ-8	Nanggu, Nendö [traditional name for Santa Cruz] Santa Cruz	coastal midden	14 000	pottery and midden, obsidian, chert	Middle	2920-2729	Green 1976; Green et al. 2008; Sheppard et al. 2015
SE-SZ-10	Tömotu Noi Island, Santa Cruz	coastal midden	—	surface collected mainly plain, 1 piece of obsidian	—	—	Green 1976; Green et al. 2008
SE-SZ-23	Malu, Tömotu Neo Island, Santa Cruz	coastal midden	3000	pottery, chert, obsidian	Middle	-	McCoy and Cleghorn 1988
SE-SZ-33	Mdailu, Santa Cruz	coastal midden	—	pottery	—	—	McCoy and Cleghorn 1988
SE-SZ-42	Luenemba River, Santa Cruz	ceramics in stream cut	—	pottery	—	—	Green et al. 2008
SE-SZ-45	Bianga Mepala, Wia Island, Santa Cruz	coastal midden	10 000	pottery, obsidian, adze	Middle	-	McCoy and Cleghorn 1988
SE-SZ-50	Bonati, Tömotu Noi, Santa Cruz	surface	—	pottery	Middle?	—	Green et al. 2008
Vanikoro							
No code	Ngae	-	-	pottery	-	-	Noury and Galipaud 2011
No code	Milu	-	-	pottery	-	-	Noury and Galipaud 2011
No code	Lavaka	-	-	pottery	-	-	Noury and Galipaud 2011
Tikopia							
TK 4	Kiki	coastal midden	4500	full range	Late	2900-2800	Kirch and Yen 1982; Kirch and Swift 2017
VANUATU							
<i>Mota Lava, Banks Islands</i>							
No code	Nerenugman	back beach	3000	full range	Middle to Late	-	Bedford and Spriggs 2014

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
<i>Santo</i>							
No code	Big Bay Matantas	back beach	3500	pottery and obsidian	Late	2900-2800	Bedford and Spriggs 2008
No code	Port Olry	back beach	3000	pottery and obsidian	Middle to Late	2900-2800	Bedford and Spriggs 2008; Bedford fieldnotes
No code	Shograon	back beach	—	pottery	Middle to Late	2500	Galipaud 2010; Noury and Galipaud 2011
<i>Aore</i>							
No code	Makué	back beach	-	full range	Early to Late	3150-2950	Galipaud and Swete Kelly 2007; Galipaud et al. 2014
No code	west coast	back beach	-	surface pottery	-	-	Galipaud 2001
No code	SDA Mission	back beach	-	surface pottery	-	-	Galipaud 2001; Noury and Galipaud 2011
<i>Tutuba</i>							
No code	east coast	back beach	-	surface pottery	-	-	Galipaud 2001
No code	south-east coast	back beach	-	surface pottery	-	-	Galipaud 2001
<i>Mavea</i>							
No code	north-east coast	coastal flat	-	pottery	-	-	Galipaud and Vienne 2005
No code	east coast	coastal flat	-	pottery	-	-	Galipaud and Vienne 2005; Bedford and Galipaud 2010
<i>Malo</i>							
MA 8-20	Batuni-urunga	coastal flat	>3000	full range	Middle	3000-2800	Hedrick n.d.
MA 8-38	Avunatari	coastal flat	>3000	full range	Middle	3000-2800	Galipaud 1998
MA 8-39	Naone	coastal flat	>3000	full range	Middle	3000-2800	Hedrick n.d.
MA 8-40	Atanoasao	coastal flat	-	full range	Middle	3000-2800	Galipaud 1998; Bedford and Galipaud 2010
No code	Avnambulu	coastal flat	-	pottery	-	-	Hedrick 1971
No code	Alawara	coastal flat	-	-	-	-	Hedrick 1971
<i>Malakula</i>							
No code	Malua Bay	back beach	10-100	full range	Late	2800-2600	Bedford 2006a
No code	Uripiv Island	back beach	2000	full range	Late	2850-2600	Bedford 2003; Horrocks and Bedford 2005; Bedford et al. 2011; Kinaston et al. 2014
No code	Wala Island	back beach	1000	full range	Late	2800-2600	Bedford 2003
No code	Atchin Island	back beach	2000	full range	Late	2800-2600	Bedford 2003
No code	Vao Island	back beach	3000	full range	Middle to Late	3000-2600	Bedford 2003, 2006b; Bedford et al. 2011
No code	Lamap	surface	-	Talasea obsidian	-	-	Bedford fieldnotes
No code	Port Stanley	surface	-	dentate sherd	Middle	-	Bedford fieldnotes

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
<i>Efate</i>							
No code	Teouma	back beach promontory	2000	full range	Early to Late	3000-2800	Bedford et al. 2010; Petchey et al. 2014, 2015
No code	Teouma west	surface	—	dentate sherd	Early	3000-2800	Shing and Willie this volume
No code	Erueti	back beach	1000-2000	full range	Middle to Late	3000-2800	Garanger 1972; Bedford and Spriggs 2014
<i>Eromango</i>							
No code	Ifo	coastal flat	1000-2000	full range	Middle to Late	3000-2800	Bedford 2006a
No code	Ponamla	back beach	100-500	full range	Late	2800	Bedford et al. 1998; Bedford 2006a
<i>Aneityum</i>							
No code	Anelghuat	back beach	3000	full range	Late	2800	Bedford et al. 2016
NEW CALEDONIA							
<i>North coast</i>							
NKM001	Boirra	coastal flat	10 000	full range	Early to Late	3000-2750	Galipaud 1988
NAR098	Arama	coastal flat	-	pottery	? Late	-	Galipaud 1988
NPL001	Pam	mangrove	-	pottery	? Late	-	Sand et al. 2001
<i>West coast</i>							
WKO027	Oundjo	coastal flat	-	pottery	?Late	-	Baret et al. 2000
WKO013	Lapita	coastal flat	500	full range	Early to Late	-	Gifford and Shutler 1956
WKO013A	Lapita	coastal flat	20 000	full range	Early to Late	3000-2750	Sand 1998a; Sand et al. this volume
WKO013B	Lapita	coastal flat	250	full range	Early to Late	3000-2750	Sand 1998a
WKO014	Podtanean	coastal flat	-	pot sherd	?Late	-	Gifford and Shutler 1956
WKO028	Konienne	coastal flat	-	pottery	?Late	-	Sand 1996
WKO141	Podtanean	coastal flat	-	pottery	?Late	-	Galipaud 1988
WNP003	Franco	coastal sand	-	pot sherd	?Late	-	Galipaud 1988
WNP038	Pindai	coastal sand	-	pottery	?Late	-	Sand 1996
WBR001	Nessadiou	coastal sand	-	full range	Early to Late	3000-2750	Sand 1996
WBR009	Île Verte	coastal dune	-	pot sherd	?Late	-	Frimigacci and Siorat 1988
WBR006	Temroc	coastal flat	-	pottery	?Late	-	Frimigacci 1975
WPT055	Naïa	coastal flat	-	pottery	?Late	-	Smart n.d.
WPT055	Naïa	coastal flat	-	pottery	?Early to Late	-	Frimigacci 1975
WPT148	Ongoué	coastal flat	10 000	pottery	?Early to Late	-	Sand 1994
V8	Vavouto	coastal flat	10 000	full range	Early to Late	2900-2750	Sand 2010
GD 2006-042	Deva	coastal flat	no estimate	pottery	?Late	-	Barp et al. 2006

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
WBR040	Deva	coastal flat	no estimate	pot sherd	Late	2750	Sand et al. 2013
<i>South coast</i>							
SNA019	Anse Vata	coastal flat	-	pot sherd	?Late	-	Frimigacci 1975
<i>Ile des Pines</i>							
KV0001	Kapume	coastal dune	-	pot sherd	?Late	-	Golson 1962
KV0003	St Maurice-Vatcha	coastal dune	18 000	full range	Early to Late	2950-2700	Sand 1999
KGJ004	Gadji (1)	coastal flat	-	pot sherd	?Late		Frimigacci 1975
<i>East coast</i>							
EHI050	Dowalwoue	coastal sand	-	pot sherd	?Late	-	Gifford and Shutler 1956
SUN014	Witpwe	coastal flat	-	pot sherd	Late	-	Sand and Ouetcho 1992
STY007	Pwekina	coastal flat	5000	pottery	Late	-	Sand and Ouetcho 1992
STY015	Goro	coastal flat	>10 000	full range	Early to Late	-	Sand et al. 2000
No code	Kouaoua	coastal flat	no estimate	pottery	?Late	-	Sand 2010
No code	Pouebo	unknown	no estimate	pottery	Early	-	Chiu et al. 2016
<i>Loyalty Islands</i>							
LPO020	Patho	coastal flat	>2000	full range	?Early to Late	-	Sémah and Galipaud 1992
LPO023	Kurin	coastal flat	>5000	full range	Early to Late	-	Sand et al. 2002
LLI002	Hnaeo	coastal dune	-	full range	Early to Late	-	Sand et al. 1999b
LWT008	Hnajoisisi	rock shelter	50	full range	Late	2800-2750	Sand 1998b
LWT054	Keny	coastal dune	>20 000	full range	?Early to Late	2950-2750	Sand 1998b
LUV081	Wadrilla	coastal sand	-	pottery	-	-	Sand et al. 1999b
LTD825	Namara	coastal beach	-	pottery	-	-	Sand et al. 2010
FIJI ISLANDS							
<i>Western Islands</i>							
Y2-25	Yalobi, Waya Island	coastal flat	-	full range	Late	2800-2400	Hunt et al. 1999
K27-11	Tavua, Tavua Island	coastal flat	-	full range	Late	2850-2750	Cochrane et al. 2011
<i>Southern Islands</i>							
No code	Unlocalised, Vatulele Island	unknown	-	pottery	Late	-	Ewin 1995
BQ178A	Nadawa, Beqa Island	coastal flat	-	pottery	Late	-	Crosby 1988
BQ175A	Kulu, Beqa Island	coastal flat	<1000	full range	Late	-	Anderson and Clark 1999
93A	Melabe, Beqa Island	coastal flat	-	pottery	Late	-	Crosby 1988
BQ132	Beqa, Beqa Island	coastal flat	-	pottery	Late	-	Crosby 1988

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
UG1-2	Ugaga, Ugaga Island	islet	100-500	full range	Late	2800-2300	Clark 2009
No code	Nalotu Water Tank, Kadavu Island	inland, creek	-	pottery	Late	-	Burley and Balenaivalu 2012
No code	Tiliva Resort, Kadavu Island	back beach	500	pottery	Late	-	Burley and Balenaivalu 2012
No code	Waisomo Makawa, Ono Island	coastal flat	-	pottery	Late	-	Burley and Balenaivalu 2012
<i>Viti Levu Island</i>							
VL1/1	Natunuku	coastal dune	1000	full range	Middle to Late	2900-2300	Davidson et al. 1990
VL16/81	Yanuca	rock shelter	1000-3000	full range	Middle to Late	-	Hunt 1980
No code	Qara-I-Oso II	inland shelter	150	pot sherd	Late	-	Anderson et al. 2000
VL15/1	Natadola Bay		-	pot sherd	Late	-	Palmer 1966
VL16/22	Naqarai	coastal dune	-	pottery	Late	-	Hunt 1980
VL16/1	Sigatoka	coastal dune	-	pottery	Late	2550-2700	Petchey 1995; Burley and Connaughton 2010
No code	Bourewa	sandspit/ beach	12 500	full range	Middle to Late	3000-2700	Nunn 2007
No code	Rove Beach	coastal flat	-	pottery	Late	-	Kumar et al. 2004
No code	Waikereira Bay	coastal flat	-	surface sherds	Late	-	Nunn 2007
No code	Jugendars Farm Bay	coastal flat	-	surface sherds	Late	-	Nunn 2007
No code	Tomato Patch Bay	coastal flat	-	surface sherds	Late	-	Nunn 2007
No code	Qoqo Island	tombolo	5000	full range	Middle to Late	2850-2650	Nunn et al. 2006
No code	Navutulevu	coastal flat	-	surface sherds	-	-	Kumar et al. 2004
No code	Qaqaruku	rock shelter	-	surface sherds	Late	-	Kumar 2002
<i>Central Islands (Koro Sea)</i>							
No code	Saulevu, Moturiki Island	islet	-	pottery	Late	-	Nunn 1999
No code	Naitabale, Moturiki Island	back beach	300	full range	Middle to Late	2900-2700	Nunn et al. 2007
VL21/5	Naigani, Naigani Island	coastal flat	1000-3000	full range	Middle	2900-2700	Best 2002; Irwin et al. 2011
No code	Vagariki, Yadua Island	coastal flat	-	pottery	Late	2600	Nunn et al. 2005
No code	Taviya, Ovalau Island	coastal flat	-	surface sherds	-	-	Nunn et al. 2004
<i>Northern Islands</i>							
No code	Yacata, Yacata Island	unknown	-	pottery	Late	-	Parke 2000

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
No code	Vaturekuka, Vanua Levu Island	riverbank	-	pottery and lithics	Late	-	Parke 2000
No code	Nukubalavu, Vanua Levu Island	back beach	500	full range	Late	2800	Jones pers. comm.
No code	Vorovoro, Vorovoro Island	tombolo	500	full range	Middle	3000	Burley 2012
No code	Ligaulevu, Mali Island	coastal flat	-	pottery	Late	-	Burley notes
No code	Kavewa, Kavewa Island	coastal flat	750	full range	Middle	-	Burley et al. this volume
CIK006	Naselala, Cikobia-i-Ra Island	coastal flat	-	full range	Late	2800-2400	Sand et al. 1999a
<i>Lau Group</i>							
No code	Susui, Bureniwaqa	coastal flat	-	pottery	Late	-	Nunn and Matararaba 2000
No code	Cikobia-i-Lau, Cikobia-i-Lau Island	coastal flat	-	pottery	Late	-	Nunn and Matararaba 2000
No code	Votua, Mago Island	coastal flat	1000-3000	full range	Late	2800-2600	Clark 2009
No code	Sovanibeka, Mago Island	rock shelter	30	pottery	Late	2700-2300	Clark and Hope 1997
101/7/197	Lakeba, Lakeba Island	rock shelter	80	full range	Middle to Late	2800-2700	Best 1984
101/7/196	Qaranipuqa-Wakea, Lakeba Island	coastal flat	15 000	full range	Middle to Late	2800-2700	Best 1984
No code	Namuka, Namuka Island	unknown	-	pottery	-	-	Best pers. comm.
No code	Komo, Komo Island	unknown	-	pottery	-	-	Best pers. comm.
No code	Unlocalised (2), Moce Island	unknown	-	pottery	-	-	Best 1984
No code	Fulaga, Fulaga Island	unknown	-	pottery	-	-	Best 1984
To31/1	Udu, Totoya Island	coastal flat	-	pottery	Late	-	Clark and Cole 1997
To31/2	Lawaki Levu, Totoya Island	coastal flat	-	pottery	Late	-	Clark and Cole 1997
To31/3	Waroke, Totoya Island	coastal flat	-	pottery	Late	-	Clark and Cole 1997
No code	Ono-i-Lau (3), Oni-i-Lau Island	coastal flat	-	pottery	-	-	Best 1984
No code	Na Masimasi, Nayau Island	coastal flat	-	full range	Late	-	O'Day et al. 2004
No code	Vulago, Nayau Island	coastal flat	-	full range	Late	-	O'Day et al. 2004

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
TONGA							
<i>Tongatapu</i>							
To.2/TO-NK-2	Nukuleka	coastal flat	2500	full range	Middle/Late	2850-2650	Poulsen 1987; Burley et al. 2010, 2012
No code	Hopoate	coastal flat	2000	full range	Middle/Late	2850-2650	Burley 2016
No code	Talasiu	back beach ridge	450	full range	Late	2700-2650	Clark et al. 2015
No code	Tatakamotonga	back beach ridge	-	pottery	Late	-	Burley et al. 2001
No code	Captain Cook Landing	back beach ridge	-	pottery	Late	-	Burley notes
No code	Tinopai	coastal flat	-	pottery	Late	2750-2650	Burley notes
No code	Kauvai 1	coastal flat	-	pottery	?Middle/Late	-	Burley notes
No code	Kauvai 2	back beach ridge	500	full range	Late	2750-2650	Burley notes
No code	Nukuhetulu	back beach ridge	-	pottery	Late	-	Burley et al. 2001
No code	Kanatea Island	back beach ridge	-	pottery	Late	-	Burley notes
To.5/TO-Pe-5	Ha'ateiho	back beach ridge	-	full range	Late	2800-2650	Poulsen 1987; Burley et al. 2001
No code	Uluaki (Golf Course)	back beach ridge	750	full range	Late	2750-2650	Burley notes
To.3 & 4/TO-Pe-3	Pea, Taufa'ahau Road	coastal flat	2150	full range	Late	2750-2650	Poulsen 1987
To.1	Pea School Yard	coastal flat	4300	full range	Late	2800-2650	Poulsen 1987
To.6/TO-Pe-6	Tufu Mahina	back beach ridge	1500	full range	Late	2600-2300	Poulsen 1987
TO-Pe-28	Vaiola Hospital	back beach ridge	-	pottery	Late	-	Spennemann 1989; Burley et al. 2001
No code	Hofoa	back beach ridge	-	pottery	Late	-	Burley notes
TO-Nu-2	Fire Station	coastal flat	2500	full range	Late	2750-2650	Spennemann 1989; Burley et al. 2001
TO-Nu-12	Unga Road	coastal flat	-	pottery	Late	-	Spennemann 1989; Burley et al. 2001
TO-Nu-8	Mangaia Mound	coastal flat	500	full range	Late	2750-2650	Poulsen 1987
No code	Puke	back beach ridge	500	full range	Late	2700-2600	Burley notes
No code	Sia'atoutai Flats	coastal flat	-	pottery	Late	-	Burley notes
<i>Ha'apai Group</i>							
No code	Fakatafenga, Tungua	coastal flat	500	pottery	Late	-	Burley et al. 1999
No code	Ha'afeva, Mele Havea	coastal flat	750	pottery	Late	-	Burley et al. 1999
No code	Vaipuna, 'Uiha	coastal flat	750	pottery	Late	2800-2500	Burley et al. 1999
No code	Tongoleleka, Lifuka	back beach ridge	1500	full range	Late	2800-2600	Burley et al. 1999

Code	Location name	Locale type	Extent (sq m)	Content	Ceramic series	Age BP	References
No code	Faleloa, Foa	back beach ridge	750	full range	Late	2650-2550	Burley et al. 1999
No code	Pukotala, Ha'ano	back beach ridge	100	pottery	Late	2700-2600	Burley et al. 1999
<i>Vava'u Group</i>							
No code	Vuna, Pangaimotu Island	coastal dune	1500	full range	Late	2750-2600	Burley 2007; Burley and Connaughton 2007
No code	Ofu, Ofu Island	coastal flat	1500	full range	Late	2750-2600	Burley 2007; Burley and Connaughton 2007
No code	'Otea, Kapa Island	back beach ridge	800	full range	Late	2750-2600	Burley 2007; Burley and Connaughton 2007
No code	Falevai, Kapa Island	back beach ridge	500	full range	Late	2700-2600	Burley 2007; Burley and Connaughton 2007
No code	Mafana, Mafana Island	coastal flat	400	pottery	Late	-	Burley 2007
<i>Niuaotupapu</i>							
NT-90	Lolokoka	coastal flat	3000	pottery	Late	2750-2600	Kirch 1988
SAMOA							
Upolu							
No code	Mulifanua	submerged beach	6000	pottery	?Early	2750	Dickinson and Green 1998
WALLIS							
MU021	Utuleve	coastal sand	10 000	full range	Early to Late	2800-2750	Sand 1998c
MU046	Utuleve	coastal flat	1000	full range	Early to Late	-	Frimigacci 2000
HI012	Utupoa	coastal flat	-	pottery	Late	-	Frimigacci 2000
FUTUNA							
SI001	Asipani	coastal flat	>3000	full range	Late	-	Sand 1993

Source: See references throughout table.

References

- Anderson, A. and G. Clark 1999. The age of the Lapita settlement in Fiji. *Archaeology in Oceania* 34:31-39. doi.org/10.1002/j.1834-4453.1999.tb00424.x.
- Anderson, A., G. Clark and T. Worthy 2000. An inland Lapita site in Fiji. *Journal of the Polynesian Society* 109:311-316.
- Anderson, A., S. Bedford, G. Clark, I. Lilley, C. Sand, G. Summerhayes and R. Torrence 2001. An Inventory of Lapita sites containing dentate-stamped pottery. In G. Clark, A. Anderson and T. Sorovi-Vunidilo (eds), *The archaeology of Lapita dispersal in Oceania: Papers from the Fourth Lapita Conference, June 2000, Canberra, Australia*, pp. 1-14. Terra Australis 17. Pandanus Books, The Australian National University, Canberra.
- Anggraeni, T. Simanjuntak, P. Bellwood and P. Piper 2014. Neolithic foundations in the Karama Valley, West Sulawesi, Indonesia. *Antiquity* 88(341):740-756. doi.org/10.1017/s0003598x00050663.

- Anson, D., R. Walter and R.C. Green 2005. *A revised and redated event phase sequence for the Reber-Rakival Lapita site, Watom Island, East New Britain Province, Papua New Guinea*. University of Otago Studies in Prehistoric Anthropology 20. University of Otago, Dunedin.
- Aoyagi, Y., M.L. Aguilera, H. Ogawa and K. Tanaka 1993. Excavations of Hill Top Site, Magapit Shell Midden, in Lal-Lo Shell Middens, Northern Luzon, Philippines. *Man and Culture in Oceania* 9:127–155.
- Azis, N., C. Reepmeyer, G. Clark, Sriwigati and D.A. Tanudirjo 2018. Mansiri in North Sulawesi: A new dentate-stamped pottery site in Island Southeast Asia. In S. O'Connor, D. Bulbeck and J. Meyer (eds), *The archaeology of Sulawesi: Current research on the Pleistocene to the Historic period*, pp. 191–205. Terra Australis 48. ANU Press, Canberra. doi.org/10.22459/TA48.11.2018.
- Baret, D., J. Bole, A. Ouetcho and C. Sand 2000. Etude de potentiel et pré-inventaire des ressources patrimoniales du milieu. Unpublished. Projet Koniambo: Etude Environnemental de Base, Nouméa.
- Barp, F., D. Baret, S. Domergue and M.-K. Haluathr 2006. Projet Koniambo. Etude Archéologique Phase 3. Rapport Final d'Opération. Unpublished. Rapport interne Falconbridge, Nouméa.
- Bedford, S. 2003. The timing and nature of Lapita colonisation in Vanuatu: The haze begins to clear. In C. Sand (ed.), *Pacific archaeology: Assessments and prospects. Proceedings of the conference for the 50th anniversary of the first Lapita excavation, Kone-Nouméa, 2002*, pp. 147–158. Les cahiers de l'archéologie en Nouvelle-Calédonie 15. Département Archéologie, Service des Musées et du Patrimoine de Nouvelle-Calédonie, Nouméa.
- Bedford, S. 2006a. *Pieces of the Vanuatu puzzle: Archaeology of the north, south and centre*. Terra Australis 23. Pandanus Books, The Australian National University, Canberra. doi.org/10.22459/PVP.02.2007.
- Bedford, S. 2006b. The Pacific's earliest painted pottery: An added layer of intrigue to the Lapita debate and beyond. *Antiquity* 80:544–557. doi.org/10.1017/S0003598X00094023.
- Bedford, S. and J.-C. Galipaud 2010. Chain of islands: Lapita in the north of Vanuatu. In C. Sand and S. Bedford (eds), *Lapita: Ancêtres Océaniens/Oceanic ancestors*, pp. 122–137. Musée du quai Branly and Somogy, Paris.
- Bedford, S. and C. Sand 2007. Lapita and Western Pacific settlement: Progress, prospects and persistent problems. In S. Bedford, C. Sand and S.P. Connaughton (eds), *Oceanic explorations: Lapita and Western Pacific settlement*, pp. 1–16. Terra Australis 26. ANU E Press, Canberra. doi.org/10.22459/TA26.2007.
- Bedford, S. and M. Spriggs 2008. Northern Vanuatu as a Pacific crossroads: The archaeology of discovery, interaction, and the emergence of the 'ethnographic present'. *Asian Perspectives* 47(1):95–120. doi.org/10.1353/asi.2008.0003.
- Bedford, S. and M. Spriggs 2014. The archaeology of Vanuatu: 3000 years of history across islands of ash and coral. In E. Cochrane and T. Hunt (eds), *The Oxford handbook of prehistoric Oceania*. Oxford University Press, Oxford. doi.org/10.1093/oxfordhb/9780199925070.013.015.
- Bedford, S., M. Spriggs, M. Wilson and R. Regenvanu 1998. The Australian National University–National Museum of Vanuatu Archaeology Project, 1994–7: A preliminary report on the establishment of cultural sequences and rock art research. *Asian Perspectives* 37(2):165–193. doi.org/10.1002/j.1834-4461.1999.tb02986.x.
- Bedford, S., M. Spriggs, H. Buckley, F. Valentin, R. Regenvanu and M. Abong 2010. A cemetery of first settlement: The site of Teouma, South Efate, Vanuatu. In C. Sand and S. Bedford (eds), *Lapita: Ancêtres Océaniens/Oceanic ancestors*, pp. 140–161. Musée du quai Branly and Somogy, Paris.

- Bedford, S., H. Buckley, F. Valentin, N. Tayles and N. Longga 2011. Lapita burials, a new Lapita cemetery and Post-Lapita burials from Malakula, northern Vanuatu, Southwest Pacific. *Journal of Pacific Archaeology* 2(2):26–48.
- Bedford, S., M. Spriggs and R. Shing 2016. 'By all means let us complete the exercise': The 50-year search for Lapita on Aneityum, southern Vanuatu and implications for other 'gaps' in the Lapita distribution. *Archaeology in Oceania* 51:122–130. doi.org/10.1002/arco.5100.
- Bellwood, P. and P. Koon 1989. 'Lapita colonists leave boats unburned!' The question of Lapita links with Island Southeast Asia. *Antiquity* 63(240):613–622. doi.org/10.1017/S0003598X00076572.
- Best, S. 1984. Lakeba: The prehistory of a Fijian island. Unpublished PhD thesis, University of Auckland, Auckland.
- Best, S. 2002. *Lapita: A view from the east*. New Zealand Archaeological Association Monograph 24. New Zealand Archaeological Association, Auckland.
- Burley, D.V. 2007. In search of Lapita and Polynesian plainware settlements in Vava'u, Kingdom of Tonga. In S. Bedford, C. Sand and S.P. Connaughton (eds), *Oceanic explorations: Lapita and Western Pacific settlement*, pp. 187–198. Terra Australis 26. ANU E Press, Canberra. doi.org/10.22459/TA26.2007.
- Burley, D.V. 2012. Exploration as a strategic process in the Lapita settlement of Fiji: The implications of Vorovoro Island. *Journal of Pacific Archaeology* 3(1):22–34.
- Burley, D.V. 2016. Reconsideration of sea level and landscape for first Lapita settlement at Nukuleka, Kingdom of Tonga. *Archaeology in Oceania* 51:84–90. doi.org/10.1002/arco.5087.
- Burley, D.V. and J. Balenaivalu 2012. Kadavu archaeology: First insights from a preliminary survey. *Domodomo* 25(1 and 2):13–36.
- Burley, D.V. and S.P. Connaughton 2007. First Lapita settlement and its chronology in Vava'u, Kingdom of Tonga. *Radiocarbon* 49(1):131–137. doi.org/10.1017/S0033822200041965.
- Burley, D.V. and S.P. Connaughton 2010. Completing the story: A Late Lapita dentate stamped pot from Sigatoka, Fiji. *Archaeology in Oceania* 45:130–132. doi.org/10.1002/j.1834-4453.2010.tb00090.x.
- Burley, D.V., D.E. Nelson and R. Shutler Jr 1999. A radiocarbon chronology for the Eastern Lapita frontier in Tonga. *Archaeology in Oceania* 34(2):59–70. doi.org/10.1002/j.1834-4453.1999.tb00429.x.
- Burley, D.V., W.R. Dickinson, A. Barton and R. Shutler 2001. Lapita on the periphery: New data on old problems in the Kingdom of Tonga. *Archaeology in Oceania* 36(2):89–104. doi.org/10.1002/j.1834-4453.2001.tb00481.x.
- Burley, D.V., A. Barton, W.R. Dickinson, S.P. Connaughton and K. Taché 2010. Nukuleka as a founder colony for west Polynesian settlement: New insights from recent excavations. *Journal of Pacific Archaeology* 1(2):128–144.
- Burley, D.V., M.I. Weisler and J.-x. Zhao 2012. High precision U/Th dating of first Polynesian settlement. *PLoS ONE* 7(11):e48769. doi.org/10.1371/journal.pone.0048769.
- Carson, M.T. 2014. *First settlement of Remote Oceania: Earliest sites in the Mariana Islands*. Springer, Heidelberg. doi.org/10.1007/978-3-319-01047-2.
- Carson, M.T. 2018. *Archaeology of Pacific Oceania: Inhabiting a sea of islands*. Taylor and Francis, Abingdon.

- Carson, M.T., H.-C. Hung, G.R. Summerhayes and P. Bellwood 2013. The pottery trail from Southeast Asia to Remote Oceania. *The Journal of Island and Coastal Archaeology* 8(1):17–36. doi.org/10.1080/15564894.2012.726941.
- Cath-Garling, S. 2017. *Evolutions or revolutions? Interaction and transformation at the 'transition' in Island Melanesia*. University of Otago Studies in Archaeology 27. University of Otago, Dunedin.
- Chia, S. 2003. *The prehistory of Bukit Tengkorak as a major pottery making site in Island Southeast Asia*. Sabah Museum Monograph 8. Sabah Museum, Kota Kinabalu.
- Chiu, S., D. Killick, C. Sand and W.R. Dickinson 2016. Connection and competition: Some early insights gained from petrographic studies of New Caledonian Lapita pottery. *Archaeology in Oceania* 51(2):141–149. doi.org/10.1002/arco.5093.
- Clark, G. 2009. Ceramic assemblages from excavations on Viti Levu, Beqa-Ugaga and Mago Island. In G. Clark and A. Anderson (eds), *The early prehistory of Fiji*, pp. 259–306. Terra Australis 31. ANU E Press, Canberra. doi.org/10.22459/TA31.12.2009.11.
- Clark, G. and G. Hope 1997. Preliminary report on archaeological and palaeoenvironmental investigations in Northern Lau (Mago, Yacata-Kaibu and Vatuvava). Unpublished report to the Fiji Museum, Suva.
- Clark, G., E. Grono, E. Ussher and C. Reepmeyer 2015. Early settlement and subsistence on Tongatapu, Kingdom of Tonga: Insights from a 2700–2650 cal. BP midden deposit. *Journal of Archaeological Science: Reports* 3:531–524. doi.org/10.1016/j.jasrep.2015.08.005.
- Clark, J.T. and A.O. Cole 1997. Environmental change and human prehistory in the Central Pacific: Archaeological and palynological investigations on Totoya Island, Fiji. Unpublished report to the Fiji Museum, Suva.
- Cochrane, E., I.C. Rivera-Collazo and E. Walsh 2011. New evidence for variation in colonization, cultural transmission and subsistence from Lapita (2900 BP) to the historic period in southwestern Fiji. *Journal of Pacific Archaeology* 2(1):40–55.
- Crosby, A. 1988. Beqa: Archaeology, structure and history in Fiji. Unpublished MA thesis, University of Auckland, Auckland.
- David, B., I.J. McNiven, T. Richards, S.P. Connaughton, M. Leavesley, B. Barker and C. Rowe 2011. Lapita sites in the Central Province of mainland Papua New Guinea. *World Archaeology* 43(4):576–593. doi.org/10.1080/00438243.2011.624720.
- Davidson, J., E. Hinds, S. Holdaway and B.F. Leach 1990. The Lapita site of Natunuku, Fiji. *New Zealand Journal of Archaeology* 12:121–155.
- Dickinson, W.R. and R.C. Green 1998. Geoarchaeological context of Holocene subsidence at the Ferry Berth Lapita site, Mulifanua, Upolu, Samoa. *Geoarchaeology* 13(3):239–263. doi.org/10.1002/(SICI)1520-6548(199802)13:3<239::AID-GEA1>3.0.CO;2-5.
- Doherty, M. 2007. Post-Lapita developments in the Reef-Santa Cruz Islands, Southeast Solomon Islands. Unpublished PhD thesis, University of Auckland, Auckland.
- Ewin, R. 1995. Proto-Polynesian art? The cliff paintings of Vatulele. *Journal of the Polynesian Society* 104:23–73.
- Felgate, M. 2001. A Roviana ceramic sequence and the prehistory of Near Oceania: Work in progress. In G.R. Clark, A.J. Anderson and T. Sorovi-Vunidilo (eds), *The archaeology of Lapita dispersal in Oceania. Papers from the Fourth Lapita Conference, June 2000, Canberra, Australia*, pp. 39–60. Terra Australis 17. Pandanus Books, The Australian National University, Canberra.

- Felgate, M. 2003. Reading Lapita in Near Oceania: Intertidal and shallow-water pottery scatters, Roviana Lagoon, New Georgia, Solomon Islands. Unpublished PhD thesis, University of Auckland, Auckland.
- Frimigacci, D. 1975. La préhistoire Néo-Calédonienne. Unpublished thèse de troisième cycle, Université Paris 1, Paris.
- Frimigacci, D. 2000. La préhistoire d'Uvea (Wallis). Chronologie et périodisation. *Journal de la Société des Océanistes* 111:135–163. doi.org/10.3406/jso.2000.2131.
- Frimigacci, D. and J.-P. Siorat 1988. L'Ilot Vert site archéologique des périodes Koné et Naïa de Nouvelle-Calédonie. *Journal de la Société des Océanistes* 86:3–20. doi.org/10.3406/jso.1988.2839.
- Galipaud, J.-C. 1988. La poterie préhistorique Néo-Calédonienne et ses implications dans l'étude du processus de peuplement du Pacifique Occidental. Unpublished PhD thesis, Université Paris 1, Paris.
- Galipaud, J.-C. 1998. *The Lapita site of Atanoasao Malo, Vanuatu*. Field Report No. 8. ORSTOM, Port Vila.
- Galipaud, J.-C. 2001. Survey of prehistoric sites in Aore. Preliminary assessment. Unpublished report to Vanuatu Cultural Centre, Port Vila.
- Galipaud, J.-C. 2010. Makué and Shokraon: Earliest arrivals and cultural transformations in northern Vanuatu. In C. Sand and S. Bedford (eds), *Lapita: Ancêtres Océaniens/Oceanic ancestors*, pp. 138–139. Musée du quai Branly and Somogy, Paris.
- Galipaud, J.-C. and M.C. Swete Kelly 2007. Makué (Aore Island, Santo, Vanuatu): A new Lapita site in the ambit of New Britain obsidian distribution. In S. Bedford, C. Sand and S.P. Connaughton (eds), *Oceanic explorations: Lapita and Western Pacific settlement*, pp. 151–162. Terra Australis 26. ANU E Press, Canberra. doi.org/10.22459/TA26.2007.
- Galipaud, J.-C. and B. Vienne 2005. Chronologie du peuplement et réseaux d'échanges dans le Nord du Vanuatu. Mission Santo 2005. Unpublished. Rapport Préliminaire. IRD, Nouméa.
- Galipaud, J.-C., C. Reepmeyer, R. Torrence, S. Kelloway and P. White 2014. Long-distance connections in Vanuatu: New obsidian characterisations for the Makué site, Aore Island. *Archaeology in Oceania* 49:110–116. doi.org/10.1002/arco.5030.
- Garanger, J. 1972. *Archéologie des Nouvelles-Hébrides: Contribution à la connaissance des Iles du Centre*. Publications de la Société des Océanistes, No. 30. ORSTOM, Paris. doi.org/10.4000/books.sdo.859.
- Garling, S. 2003. Tanga takes to the stage: Another model 'transitional' site? New evidence and a contribution to the 'Incised and Applied Relief Tradition' in New Ireland. In C. Sand (ed.), *Pacific archaeology: Assessments and prospects. Proceedings of the conference for the 50th anniversary of the first Lapita excavation, Kone-Nouméa, 2002*, pp. 213–233. Les cahiers de l'archéologie en Nouvelle-Calédonie 15. Département Archéologie, Service des Musées et du Patrimoine de Nouvelle-Calédonie, Nouméa.
- Gifford, E.W. and D. Shutler Jr 1956. *Archaeological excavations in New Caledonia*. Anthropological Records 18(1). University of California Press, Berkeley and Los Angeles.
- Golson, J. 1959. L'archéologie du Pacifique Sud: Résultats et perspectives. *Journal de la Société des Océanistes* 15:5–54.
- Golson, J. 1962. Rapport sur les fouilles effectuées à l'Île des Pins (Nouvelle-Calédonie), de décembre 1959 à février 1960. *Etudes Mélanésiennes* 14–17:11–23.
- Golson, J. 1992. The ceramic sequence from Lasigi. In J.-C. Galipaud (ed.), *Poterie Lapita et peuplement: Actes du Colloque Lapita*, pp. 155–168. ORSTOM, Nouméa.

- Gosden, C., J. Webb, B. Marshall and G.R. Summerhayes 1994. Lolmo Cave: A mid to late Holocene site, the Arawe Islands, West New Britain Province, Papua New Guinea. *Asian Perspectives* 33(1):97–119.
- Green, R.C. 1976. Lapita sites in the Santa Cruz group. In R.C. Green and M.M. Cresswell (eds), *Southeast Solomon Islands cultural history: A preliminary survey*, pp. 245–265. Royal Society of New Zealand Bulletin 11. Royal Society of New Zealand, Wellington.
- Green, R.C. 1979. Lapita. In J.D. Jennings (ed.), *The prehistory of Polynesia*, pp. 27–60. Harvard University Press, Cambridge, Mass. doi.org/10.4159/harvard.9780674181267.c3.
- Green, R.C. and M. Jones 2007. The absolute age of SE–RF–6 (Ngamanie) and its relation to SE–RF–2 (Nenumbo): Two decorated Lapita sites in the southeast Solomon Islands. *New Zealand Journal of Archaeology* 29:5–18.
- Green, R.C., M. Jones and P.J. Sheppard 2008. The reconstructed environment and absolute dating of SE–SZ–8 Lapita site on Nendö, Santa Cruz, Solomon Islands. *Archaeology in Oceania* 43(2):49–61. doi.org/10.1002/j.1834-4453.2008.tb00030.x.
- Hedrick, J.D. 1971. Lapita style pottery from Malo Island. *Journal of the Polynesian Society* 80(1):5–19.
- Hedrick, J.D. n.d. Archaeological investigation of Malo prehistory: Lapita settlement strategy in the northern New Hebrides. Unpublished draft PhD thesis, University of Pennsylvania, Philadelphia, PA.
- Horrocks, M. and S. Bedford 2005. Microfossil analysis of Lapita deposits in Vanuatu reveals introduced Araceae (aroids). *Archaeology in Oceania* 40:67–74. doi.org/10.1002/j.1834-4453.2005.tb00587.x.
- Hung, H.-C. 2008. Migration and cultural interaction in Southern Coastal China, Taiwan and the Northern Philippines, 3000 BC to AD 100: The early history of the Austronesian-speaking populations. Unpublished PhD thesis, The Australian National University, Canberra.
- Hung, H.-C., M.T. Carson, P. Bellwood, F.Z. Campos, P.J. Piper, E. Dizon, M.J.L.A. Bolunia, M. Oxenham and Z. Chi 2011. The first settlement of Remote Oceania: The Philippines to the Marianas. *Antiquity* 85:909–926. doi.org/10.1017/S0003598X00068393.
- Hunt, T.L. 1980. Toward Fiji's past: Archaeological research on Southwestern Viti Levu. Unpublished MA thesis, University of Auckland, Auckland.
- Hunt, T.L., K.F. Aronson, E. Cochrane, J. Field, L. Humphrey and T.M. Rieth 1999. A preliminary report on archaeological research in the Yasawa Islands, Fiji. *Domodomo* 12:5–43.
- Irwin, G., T.H. Worthy, S. Best, S. Hawkins, J. Carpenter and S. Matararaba 2011. Further investigations at the Naigani Lapita site (VL 21/5), Fiji: Excavation, radiocarbon dating and palaeofaunal extinction. *Journal of Pacific Archaeology* 2(2):66–78.
- Kennedy, J. 1981. Lapita colonisation of the Admiralty Islands. *Science* 213:757–759. doi.org/10.1126/science.213.4509.757.
- Kinaston, R., S. Bedford, M. Richards, S. Hawkins, A. Gray, K. Jaouen, F. Valentin and H. Buckley 2014. Diet and human mobility from the Lapita to the Early Historic Period on Uripiv Island, Northeast Malakula, Vanuatu. *PLoS ONE* 9(8):e104071. doi.org/10.1371/journal.pone.0104071.
- Kirch, P.V. 1988. *Niuatoputapu: The prehistory of a Polynesian chiefdom*. Thomas Burke Memorial Washington State Museum Monograph 5. Burke Museum, Seattle.
- Kirch, P.V. 1997. *The Lapita peoples: Ancestors of the Oceanic world*. Blackwell, Oxford.
- Kirch, P.V. (ed.) 2001. *Lapita and its transformations in Near Oceania: Archaeological investigations in the Mussau Islands, Papua New Guinea, 1985–88. Volume I: Introduction, stratigraphy, chronology*. Archaeological Research Facility Contribution No 59. University of California, Berkeley.

- Kirch, P.V. and T. Hunt 1988. The spatial and temporal boundaries of Lapita. In P.V. Kirch and T. Hunt (eds), *Archaeology of the Lapita Cultural Complex: A critical review*, pp. 9–32. Thomas Burke Memorial Museum Research Report No. 5. Burke Museum, Seattle.
- Kirch, P.V. and J. Swift 2017. New AMS radiocarbon dates and a re-evaluation of the cultural sequence of Tikopia Island, southeast Solomon Islands. *Journal of the Polynesian Society* 126(3):313–336. doi.org/10.15286/jps.126.3.313–336.
- Kirch, P.V. and D.E. Yen 1982. *Tikopia: The prehistory and ecology of a Polynesian Outlier*. Bernice P. Bishop Museum Bulletin 238. Bishop Museum Press, Honolulu.
- Kirch, P.V., T.L. Hunt, M.I. Weisler, V.L. Butler and M.S. Allen 1991. Mussau Islands prehistory: Results of the 1985–86 excavations. In J. Allen and C. Gosden (eds), *Report of the Lapita Homeland Project*, pp. 144–163. Occasional Papers in Prehistory 20. Department of Prehistory, RSPaCS, The Australian National University, Canberra.
- Kumar, R. 2002. *Discovery of a Lapita sherd inland of the northeast coast of Viti Levu Island, Fiji: Insights and implications*. The University of the South Pacific, Institute of Applied Sciences Technical Report 2002/6. USP, Suva.
- Kumar, R., P.D. Nunn and W.R. Dickinson 2004. The emerging pattern of earliest human settlement in Fiji: Four new Lapita sites on Viti Levu Island. *Archaeology in New Zealand* 47:108–117.
- Lape, P. 2000. Political dynamics and religious change in the late pre-colonial Banda Islands, Eastern Indonesia. *World Archaeology* 32(1):138–155. doi.org/10.1080/004382400409934.
- Leach, B.F. and J.M. Davidson 2008. *The archaeology of Taumako: A Polynesian Outlier in the Eastern Solomon Islands*. New Zealand Journal of Archaeology Special Publication, Dunedin.
- Leavesley, M. and A. Sarar 2013. Diving for pottery: Lapita in Jacquinot Bay, East New Britain, Papua New Guinea. In G.R. Summerhayes and H. Buckley (eds), *Pacific archaeology: Documenting the past 50,000 years*, pp. 171–174. University of Otago Studies in Anthropology 25. University of Otago, Dunedin.
- Lilley, I. 1991. Lapita and Post-Lapita developments in the Vitiaz Straits–West New Britain Area. *Bulletin of the Indo-Pacific Prehistory Association* 11:313–322. doi.org/10.7152/bippa.v11i0.11395.
- Lilley, I. 2002. Lapita and Type Y pottery in the KKK site, Siassi, Papua New Guinea. In S. Bedford, C. Sand and D. Burley (eds), *Fifty years in the field: Essays in honour and celebration of Richard Shutler Jr's archaeological career*, pp. 79–90. New Zealand Archaeological Association Monograph 25. New Zealand Archaeological Association, Auckland.
- McCoy, P.C. and P.L. Cleghorn 1988. Archaeological excavations on Santa-Cruz (Nendö), Southeast Solomon Islands: Summary report. *Archaeology in Oceania* 23:104–115. doi.org/10.1002/j.1834-4453.1988.tb00197.x.
- McEldowney, H. and C. Ballard 1991. The Mouk Island site: Manus as paradox or parable in reconstructions of the Lapita cultural complex? In J. Allen and C. Gosden (eds), *Report of the Lapita Homeland Project*, pp. 92–102. Occasional Papers in Prehistory 20. Department of Prehistory, RSPaCS, The Australian National University, Canberra.
- McKern, W.C. 1929. *Archaeology of Tonga*. Bernice P. Bishop Museum Bulletin 60. Bishop Museum Press, Honolulu.
- McNiven, I.J., W.R. Dickinson, B. David, M. Weisler, F. Von Gnielinski, M. Carter and U. Zoppi 2006. Mask Cave: Red-slipped pottery and the Australian-Papuan settlement of Zenadh Kes (Torres Strait). *Archaeology in Oceania* 41:49–81. doi.org/10.1002/j.1834-4453.2006.tb00610.x.

- McNiven, I.J., B. David, T. Richards, K. Aplin, B. Asmussen, J. Mialanes, M. Leavesley, P. Faulkner and S. Ulm 2011. New direction in human colonisation of the Pacific: Lapita settlement of south coast New Guinea. *Australian Archaeology* 72:1–6. doi.org/10.1080/03122417.2011.11690525.
- McNiven, I.J., B. David, T. Richards, C. Rowe, M. Leavesley, J. Mialanes, S.P. Connaughton, B. Barker, K. Aplin, B. Asmussen, P. Faulkner and S. Ulm 2012a. Lapita on the south coast of Papua New Guinea: Challenging new horizons in Pacific archaeology. *Australian Archaeology* 75:16–22. doi.org/10.1080/03122417.2012.11681946.
- McNiven, I.J., B. David, K. Aplin, J. Mialanes, B. Asmussen, S. Ulm, P. Faulkner, C. Rowe and T. Richards 2012b. Terrestrial engagements by terminal Lapita maritime specialists on the southern Papuan coast. In S.G. Haberle and B. David (eds), *Peopled landscapes: Archaeological and biogeographic approaches to landscapes*, pp. 121–156. Terra Australis 34. ANU E Press, Canberra. doi.org/10.22459/TA34.01.2012.05.
- Meyer, O. 1909. Funde prähistorischer Töpferei und Steinmesser auf Vuatom, Bismarck-Archipel. *Anthropos* 4:1093–1095.
- Mialanes, J., B. David, A. Ford, T. Richards, I.J. McNiven, G.R. Summerhayes and M. Leavesley 2016. Imported obsidian at Caution Bay, south coast of Papua New Guinea: Cessation of long-distance procurement c. 1,900 cal. BP. *Australian Archaeology* 82(3):248–262. doi.org/10.1080/03122417.2016.1252079.
- Noury, A. and J.-C. Galipaud 2011. *Les Lapita: Nomades du Pacifique*. IRD Éditions, Marseille. doi.org/10.4000/books.irdeditions.653.
- Nunn, P.V. 1999. Lapita pottery from Moturiki Island, Central Fiji. *Archaeology in New Zealand* 42:309–313.
- Nunn, P.V. 2007. Echoes from a distance: Research into the Lapita occupation of the Rove Peninsula, Southwest Viti Levu, Fiji. In S. Bedford, C. Sand and S.P. Connaughton (eds), *Oceanic explorations: Lapita and Western Pacific settlement*, pp. 163–176. Terra Australis 26. ANU E Press, Canberra. doi.org/10.22459/TA26.2007.
- Nunn, P. and T.A. Heorake 2009. Understanding the place properly: Palaeogeography of selected Lapita sites in the western tropical Pacific islands and its implications. In P. Sheppard, G.R. Summerhayes and T. Thomas (eds), *Lapita: Ancestors and descendants*, pp. 235–254. New Zealand Archaeological Association Monograph 28. New Zealand Archaeological Association, Auckland.
- Nunn, P.D. and S. Matararaba 2000. New finds of Lapita pottery in northeast Fiji. *Archaeology in Oceania* 35:92–93. doi.org/10.1002/j.1834-4453.2000.tb00459.x.
- Nunn, P.D., R. Kumar, S. Matararaba, T. Ishimura, J. Seeto, S. Rayawa, S. Kuruyawa, A. Nasila, B. Oloni, A. Rati Ram, P. Saunivalu, P. Singh and E. Tegu 2004. Early Lapita settlement site at Bourewa, southwest Viti Levu Island, Fiji. *Archaeology in Oceania* 39:139–143. doi.org/10.1002/j.1834-4453.2004.tb00571.x.
- Nunn, P.D., S. Matararaba, T. Ishimura, R. Kumar and E. Nakoro 2005. Reconstructing the Lapita-era geography of northern Fiji: A newly-discovered Lapita site on Yadua Island and its implications. *New Zealand Journal of Archaeology* 26 (2004):41–55.
- Nunn, P.D., S. Matararaba, R. Kumar, C. Pene, L. Yuen and M.R. Pastorizo 2006. Lapita on an island in the mangroves? The earliest human occupation at Qoqo Island, southwest Viti Levu, Fiji. *Archaeology in New Zealand* 49:205–212.
- Nunn, P.D., T. Ishimura, W.R. Dickinson, K. Katayama, F. Thomas, R. Kumar, S. Matararaba, J. Davidson and T. Worthy 2007. The Lapita occupation of Naitabali, Moturiki Island, Central Fiji. *Asian Perspectives* 46:96–132. doi.org/10.1353/asi.2007.0009.

- O'Day, S., P. O'Day and D. Steadman 2004. Defining the Lau Context: Recent findings on Nayau, Lau Islands, Fiji. *New Zealand Journal of Archaeology* 25(2003): 31–56.
- Palmer, B. 1966. Lapita style potsherds from Fiji. *Journal of the Polynesian Society* 75:373–377.
- Parke, A. 2000. Coastal and inland Lapita sites in Vanua Levu, Fiji. *Archaeology in Oceania* 35:116–119. doi.org/10.1002/j.1834-4453.2000.tb00464.x.
- Petchey, F.J. 1995. The archaeology of Kudon: The archaeological analysis of Lapita ceramics from Mulifanua, Samoa and Sigatoka, Fiji. Unpublished MA thesis, University of Auckland, Auckland.
- Petchey, F., M. Spriggs, S. Bedford, F. Valentin and H.R. Buckley 2014. Radiocarbon dating of burials from the Teouma Lapita cemetery, Efate, Vanuatu. *Journal of Archaeological Science* 50:227–242. doi.org/10.1016/j.jas.2014.07.002.
- Petchey, F., M. Spriggs, S. Bedford and F. Valentin 2015. The chronology of occupation at Teouma, Vanuatu: Use of a modified chronometric hygiene protocol and Bayesian modeling to evaluate midden remains. *Journal of Archaeological Science: Reports* 4:95–105. doi.org/10.1016/j.jasrep.2015.08.024.
- Piroutet, M. 1917. *Etude stratigraphique sur la Nouvelle-Calédonie*. Imprimerie Protat frères, Mâcon.
- Poulsen, J. 1987. *Early Tongan prehistory: The Lapita period on Tongatapu and its relationships*. Two volumes. Terra Australis 12. Department of Prehistory, RSPacS, The Australian National University, Canberra.
- Sand C. 1993. Données archéologiques et géomorphologiques du site ancien d'Asipani, Futuna (Polynésie occidentale). *Journal de la Société des Océanistes* 96(2):117–144. doi.org/10.3406/jso.1993.2928.
- Sand, C. 1994. *Entre mer et montagne. Inventaire archéologique de la Commune de Païta (Province Sud)*. Les cahiers de l'archéologie en Nouvelle-Calédonie 4. Département Archéologie, Service des Musées et du Patrimoine de Nouvelle-Calédonie, Nouméa.
- Sand, C. 1996. *Le début du peuplement Austronésien de la Nouvelle-Calédonie*. Les cahiers de l'archéologie en Nouvelle-Calédonie 6. Département Archéologie, Service des Musées et du Patrimoine de Nouvelle-Calédonie, Nouméa.
- Sand, C. 1998a. Archaeological report on localities WKO013A and WKO013B of the site of Lapita (Koné, New Caledonia). *Journal of the Polynesian Society* 107(1):7–33.
- Sand, C. 1998b. Recent archaeological research in the Loyalty Islands of New Caledonia. *Asian Perspectives* 37(2):194–223.
- Sand, C. 1998c. Archaeological research on Uvea Island, Western Polynesia. *New Zealand Journal of Archaeology* 18(1996):91–123.
- Sand, C. 1999. The beginning of Southern Melanesian Prehistory: The St Maurice-Vatcha Lapita site, New Caledonia. *Journal of Field Archaeology* 26(3):307–323. doi.org/10.1179/jfa.1999.26.3.307.
- Sand, C. 2010. *Lapita Calédonien: Archéologie d'un premier peuplement Insulaire Océanien*. Collection Travaux et Documents Océanistes 2. Société des Océanistes, Paris. doi.org/10.4000/books.sdo.1128.
- Sand, C. and A. Ouetcho 1992. *Bwede ko-tchon tchuvan-vare kein (Des Rivières Déviées par les Ancêtres)*. Premier inventaire archéologique de la Commune de Yaté, Province Sud de la Nouvelle-Calédonie. Les cahiers de l'archéologie en Nouvelle-Calédonie 1. Département Archéologie, Service des Musées et du Patrimoine de Nouvelle-Calédonie, Nouméa. doi.org/10.4000/books.editionsmsmsh.2782.
- Sand, C., F. Valentin, T. Sorovi-Vunidilo, J. Bole, A. Ouetcho, S. Matararaba, J. Naucabalavu, D. Baret and L. Lagarde 1999a. *Cikobia-I-Ra, Archaeology of a Fijian Island*. Les cahiers de l'archéologie en Nouvelle-Calédonie 9. Département Archéologie, Service des Musées et du Patrimoine de Nouvelle-Calédonie, Nouméa. doi.org/10.4000/books.editionsmsmsh.2782.

- Sand, C., J. Bole and A. Outecho 1999b. Fichier d'inventaire des sites archéologiques et traditionnels de la Province des Iles Loyauté: Programme 1992–1997. Unpublished. Département Archéologie du Service des Musées et du Patrimoine de Nouvelle-Calédonie, Nouméa.
- Sand, C., J. Bole, A. Outecho and D. Baret 2000. Recherches archéologiques sur le site Lapita de Goro (Yaté, Province Sud). Unpublished, Département Archéologie du Service des Musées et du Patrimoine de Nouvelle-Calédonie, Nouméa.
- Sand, C., J. Bole, A. Outecho and D. Baret 2001. Nouvelles données sur le Lapita en Province Nord (Nouvelle-Calédonie). Unpublished. Département Archéologie du Service des Musées et du Patrimoine de Nouvelle-Calédonie, Nouméa.
- Sand, C., J. Bole, A. Outecho and D. Baret 2002. Site LP0023 of Kurin: Characteristics of a Lapita settlement in the Loyalty Islands (New Caledonia). *Asian Perspectives* 41:129–147. doi.org/10.1353/asi.2002.0010.
- Sand, C., I. Lilley, F. Valentin, J. Bolé, B. Gony, and D. Baret 2010. Tiga (Iles Loyauté). Préhistoire et Ethno-archéologie d'une île Mélanésienne en marge. In F. Valentin and M. Hardy (eds), *Hommes, milieux et traditions dans le Pacifique Sud*, pp. 33–46. De Boccard, Paris.
- Sand, C., M. Terebo and L. Lagarde 2013. *Le passé de Deva. Archéologie d'un Domaine Provincial Calédonien*. Archeologia Pasifika 2. Institut d'archéologie de la Nouvelle-Calédonie et du Pacifique (IANCP), Nouméa.
- Sémah, A.-M. and J.-C. Galipaud 1992. La fouille du site LAPITA de Patho (Ile de Maré, Nouvelle-Calédonie). Rapport d'Activités, Sciences Sociales, Archéologie No. 5. ORSTOM, Nouméa.
- Sheppard, P.J. 2010. Into the great ocean: Lapita movement into Remote Oceania. In C. Sand and S. Bedford (eds), *Lapita: Ancêtres Océaniens/Oceanic ancestors*, pp. 105–117. Musée du quai Branly and Somogy, Paris.
- Sheppard, P.J., S. Chiu and R. Walter 2015. Re-dating Lapita movement into Remote Oceania. *Journal of Pacific Archaeology* 6(1):26–36.
- Skelly, R., B. David, F. Petchey and M. Leavesley 2014. Tracking ancient beach-lines inland: 2600-year-old dentate-stamped ceramics at Hopo, Vailala River region, Papua New Guinea. *Antiquity* 88(340):470–487. doi.org/10.1017/S0003598X00101127.
- Smart, C. n.d. [1969]. Notes on the pottery sequence obtained from Southern New Caledonia. Unpublished. The Australian National University, Canberra.
- Specht, J. 1968. Preliminary report of excavations on Watom Island. *Journal of the Polynesian Society* 77(2):117–134.
- Specht, J. 1991a. Report on fieldwork in West New Britain Province, January 1991. Unpublished. Australian Museum, Sydney.
- Specht, J. 1991b. Kreslo: A Lapita pottery site in southwest New Britain, Papua New Guinea. In J. Allen and C. Gosden (eds), *Report of the Lapita Homeland Project*, pp. 189–204. Occasional Papers in Prehistory 20. Department of Prehistory, RSPacS, The Australian National University, Canberra.
- Specht, J. and C. Gosden 1997. Dating Lapita pottery in the Bismarck Archipelago, Papua New Guinea. *Asian Perspectives* 36(2):175–199.
- Specht, J. and G.R. Summerhayes 2007. The Boduna Island (FEA) Lapita site, Papua New Guinea. In J. Specht and V. Attenbrow (eds), *Archaeological studies of the middle and late Holocene, Papua New Guinea*, Part II, pp. 51–103. Technical Reports of the Australian Museum 20. Australian Museum, Sydney. doi.org/10.3853/j.1835-4211.20.2007.1474.

- Specht, J. and R. Torrence 2007a. Pottery of the Talasea area, West New Britain Province, In J. Specht (ed.), *Archaeological studies of the Middle and Late Holocene, Papua New Guinea*, pp. 131–196. Technical Reports of the Australian Museum 20. Australian Museum, Sydney. doi.org/10.3853/j.1835-4211.20.2007.1476.
- Specht, J. and R. Torrence 2007b. Lapita all over: Land-use on the Willaumez Peninsula, Papua New Guinea. In S. Bedford, C. Sand and S.P. Connaughton (eds), *Oceanic explorations: Lapita and Western Pacific settlement*. pp. 71–96. Terra Australis 26. ANU E Press, Canberra. doi.org/10.22459/TA26.2007.
- Specht, J., J. Hollis and C. Pain 1981. Report on archaeological fieldwork West New Britain, Papua New Guinea. Unpublished. The Australian Museum, Sydney.
- Specht, J., R. Fullagar, R. Torrence and N. Baker 1988. Prehistoric obsidian exchange in Melanesia: A perspective from the Talasea sources. *Australian Archaeology* 27:3–16.
- Specht, J., C. Gosden, J. Webb, W. Boyd and I. Lilley 1992. Report on archaeological research in West New Britain Province, PNG January–February 1992. Unpublished. The Australian Museum, Sydney.
- Spennemann, D.H.R. 1989. 'Ata 'a Tonga mo 'Ata o Tonga: Early and later prehistory of the Tongan Islands. Unpublished PhD thesis, The Australian National University, Canberra.
- Spriggs, M. 1990. The changing face of Lapita: Transformation of a design. In M. Spriggs (ed.), *Lapita design, form and composition: Proceedings of the Lapita Design Workshop, Canberra, December 1988*, pp. 83–122. Occasional Papers in Prehistory 19. Department of Prehistory, RSPacS, The Australian National University, Canberra.
- Spriggs, M. 1991. Nissan: The island in the middle. Summary report on excavations at the north end of the Solomons and south end of the Bismarcks. In J. Allen and C. Gosden (eds), *Report of the Lapita Homeland Project*, pp. 222–243. Occasional Papers in Prehistory 20. Department of Prehistory, RSPacS, The Australian National University, Canberra.
- Summerhayes, G.R. 2000a. *Lapita interaction*. Terra Australis 15. Department of Archaeology and Natural History and the Centre for Archaeological Research, The Australian National University, Canberra.
- Summerhayes, G.R. 2000b. Recent archaeological investigations in the Bismarck Archipelago, Anir, New Ireland Province, Papua New Guinea. *Bulletin of the Indo-Pacific Prehistory Association* 19:167–174.
- Summerhayes, G.R. and I. Scales 2005. New Lapita pottery finds from Kolombangara, Western Solomon Islands. *Archaeology in Oceania* 40:14–20. doi.org/10.1002/j.1834-4453.2005.tb00575.x.
- Summerhayes, G.R., L. Matisoo-Smith, H. Mandui, J. Allen, J. Specht, N. Hogg and S. McPherson 2010. Tamuarawai (EQS): An Early Lapita site on Emirau, New Ireland, PNG. *The Journal of Pacific Archaeology* 1:62–75.
- Swadling, P. (ed.) 1992. Places of cultural and natural heritage significance in West New Britain: A report for West New Britain Provincial Tourist Bureau. Unpublished. PNG National Museum, Boroko.
- Swadling, P., B. Hauser Schäublin, P. Gorecki and F. Tiesler 1988. *The Sepik–Ramu: An introduction*. PNG National Museum, Boroko.
- Terrell, J. and R. Welsch 1997. Lapita and the temporal geography of prehistory. *Antiquity* 71:548–572. doi.org/10.1017/S0003598X0008532X.
- Tochilin, C., W.R. Dickinson, M.W. Felgate, M. Pecha, P. Sheppard, F.H. Damon, S. Bickler and G.E. Gehrels 2012. Sourcing temper sands in ancient ceramics with U–Pb ages of detrital zircons: A Southwest Pacific test case. *Journal of Archaeological Science* 39:2583–2591. doi.org/10.1016/j.jas.2012.04.002.

- Torrence, R. and C. Stevenson 2000. Beyond the beach: Changing Lapita landscapes on Garua Island, Papua New Guinea. In A. Anderson and T. Murray (eds), *Australian archaeologist: Collected papers in honour of Jim Allen*, pp. 324–345. Coombs Academic Publishing, The Australian National University, Canberra.
- Torrence, R., J. Specht and B. Boyd 1999. Archaeological fieldwork on Numundo and Garu Plantations, West New Britain, PNG. Report submitted to the West New Britain Provincial Government and the National Museum and Art Gallery, Papua New Guinea. Unpublished. Australian Museum, Sydney.
- White, J.P. 1992. New Ireland and Lapita. In J.-C. Galipaud (ed.), *Poterie Lapita et peuplement: Actes du Colloque Lapita, Nouméa, Janvier 1992*, pp. 83–90. ORSTOM, Nouméa.
- White, J.P. 1996. Archaeological survey in southern New Ireland. *Journal de la Société des Océanistes* 105: 141–146. doi.org/10.3406/jso.1997.2023.
- White, J.P. 2007. Ceramic sites on the Duke of York Islands. In J. Specht (ed.), *Archaeological studies of the Middle and Late Holocene, Papua New Guinea*, pp. 3–50. Technical Reports of the Australian Museum No. 20, Sydney. doi.org/10.3853/j.1835-4211.20.2007.1473.
- White, J.P. and J. Downie 1980. Excavations at Lesu, New Ireland. *Asian Perspectives* 23:193–220.
- White, J.P. and M.N. Harris 1997. Changing sources: Early Lapita period obsidian in the Bismarck Archipelago. *Archaeology in Oceania* 32:97–107. doi.org/10.1002/j.1834-4453.1997.tb00375.x.
- White, J.P. and C.V. Murray-Wallace 1996. Site ENX (Fissoa) and the incised and applied pottery tradition in New Ireland, Papua New Guinea. *Man and Culture in Oceania* 12:31–46.
- Wickler, S. 2001. *The prehistory of Buka: A stepping stone island in the Northern Solomons*. Terra Australis 16. Department of Archaeology and Natural History and the Centre for Archaeological Research, The Australian National University, Canberra.