

house old vacuum cleaners or cans of asparagus or piles of new clothes, and the bed might be placed in the hall. Although rubbish rarely continues to be routinely removed from the house, the intentions of most people in the form of endless plastic rubbish bags is usually clear. With the addition of dementia to the picture there are additional signs which would not always remain for long in the archaeological record. The one we have noticed most is cut up paper, material or clothes, neatly tied into bundles and stacked in all sorts of places, but it can manifest itself in all sorts of odd and repetitive ways. This is not to say that these houses are chaos. In nearly every place it is easy to discern some sort of system, it's just not always what you expect.

I have numerous stories like this but what is the point of it? However, a number of thoughts spring to mind. Firstly it is increasingly clear to me that changing social conditions have a marked effect on archaeological assemblages and with an increasingly aging population and often extended periods of isolation these effects are likely to increase. Secondly, the nature of the materials which survive are changing, with materials such as solid Bovril and chocolate wrappers out lasting all manner of mere clothing and walls and furniture. These items and others like them might one day join ceramic and glass as the new standards of historical archaeology. There are masses of new materials whose decay patterns are little known. Thirdly, and what I haven't even mentioned yet, is the obvious fact that in sorting out these houses we are part of the process of decay, part of the series of taphonomic events which influence the archaeological assemblage of the future. This process is not new, the material remains of any house are usually passed on, given away, sold or recycled. A new element is the loss of objects from the house with the only remains the spilling from rubbish skips and scattered leftovers from demolition trucks. I think blissfully of the historical archaeology I know and love with those neat little artefacts under floor spaces, reflecting neat spatial variations in the activities above, and I think of neatly dug backyard rubbish tips, deep wells and long drops where rubbish from just one house is deposited in beautifully reversed stratigraphic layers. Yet what I see when I get the chance to look under floors is not very much and the days of backyard rubbish are on the decline. Tongue and groove floorboards, wall to wall carpet and linoleum, cement floors and especially high rise, mean the evidence is changing and archaeological practices will need to change too.

Finally, I find that it helps to be reminded that although the assumptions made by archaeologists are based on the little bit which does survive and this is undoubtedly thin at times, the essence of archaeology, being that you can tell a great deal about a person by their objects and where they put them, is basically sound.

NEW EVIDENCE FOR THE EARLIEST HUMAN OCCUPATION IN TORRES STRAIT, NORTHEASTERN AUSTRALIA

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This paper reports the results of radiocarbon determinations on marine shell and charcoal excavated from archaeological sites on Mer and Dauar Islands in the eastern Torres Strait, Queensland. Commonly known as the Murray Islands, the group consists of the three small volcanic islands of Mer (Murray), Dauar and Waier (Fig. 1).

The Murray Islands Archaeological Project (MIAP) was initiated in 1998 and is being undertaken in collaboration with the Mer Island Community Council and traditional Meriam landowners. MIAP forms the basis of the author's doctoral research, with a major focus on determining the antiquity of human occupation of the islands, and the identification and timing of the development of the prehistoric horticultural economy (Carter et al. in press a,b). The dates reported here are the first to be recorded for the eastern Torres Strait region, and represent the first, reliable archaeological sequence of this antiquity in the wider Torres Strait (see Table 1). Dates are reported and discussed using uncalibrated radiocarbon ages.

Sokoli is a patrilineally owned garden plot located on the northern foreshore of Dauar that was excavated during the initial 1998 field season. Apparent amongst the vegetation at the site were scattered surface shells, with subsurface deposit indicated by an eroded beach section at the mean high water mark (MHW), containing an assemblage of the edible reef species *Lambis lambis*, *Strombus luhuanus* and *Trochus niloticus*. The 2 m x 1 m excavation yielded an extensive cultural assemblage of shellfish and vertebrate remains, including fish and turtle, in a complex colluvial stratigraphy that was over 2 m in depth (see Carter et al. in press a,b for stratigraphic sections). A high proportion of the excavated shells displayed fracturing typical of 'roasting holes'; deliberate cracking of the shell to remove the flesh after roasting. This feature is also observed on the islands today as a result of contemporary marine shell processing strategies. Two artefacts recovered during the excavation at *Sokoli* included an intricately carved hollow bone implement (probably a lime spatula for betel nut), and a single sherd of earthen pottery ware, the first pottery ever recorded in Torres Strait (see Carter in prep. for more details).

Two sites on the island of Mer were also excavated during the initial 1998 field season. *Kurkur Weid* is a small rockshelter located on the northern coastline, and *Pitkik* is an open foreshore profile located several meters from *Kurkur Weid*. The 1 m x 1 m rockshelter excavation revealed stratigraphic units of beach sand and colluvium interspersed amongst a dense deposit of roof fall and rubble. The archaeological assemblage recovered included a sparse deposit of *Lambis lambis*, *Strombus luhuanus*, and *Trochus niloticus* shells, and also the rocky shore species *Nerita undata* and the bivalve *Asaphis violascense*. The 1 m wide section excavated at *Pitkik* contained similar species of shell, but also revealed vertebrate remains including rodent and dog. The diagnostic roasting holes described above were also observed on the majority of shells excavated from

Kurkur Weid and *Pitkik*, and are therefore thought to represent cultural rather than natural accumulations.

Two samples taken in the field earlier in 1998 were dated prior to the submission of the excavated samples. This was done to make a preliminary assessment of the dating potential of the sites and to gauge their likely antiquity. These included marine shells from eroding beach profiles on the northern coast of Dauar at *Sokoli*, and on its southern coast at *Ormi* (Wk 6096 and Wk 6098) (Veth pers. comm.). From the three excavations conducted in 1998 a total of six marine shell samples were submitted to the University of Waikato Radiocarbon Dating Laboratory

During the recent 2000 field season, further excavations were conducted on Dauar, this time along the southern coastline at *Ormi*. The preliminary dating of the site (Wk 6096) suggested an antiquity in the order of 1500 years. Much like *Sokoli*, *Ormi* displayed a surface shell scatter with dense subsurface deposits indicated by an eroded beach profile at the MHW. A 2 m x 1 m excavation carried out several meters behind the MHW (Squares 1 and 2) confirmed the presence of dense subsurface shell to approximately 2.30 m below surface level (bsl),

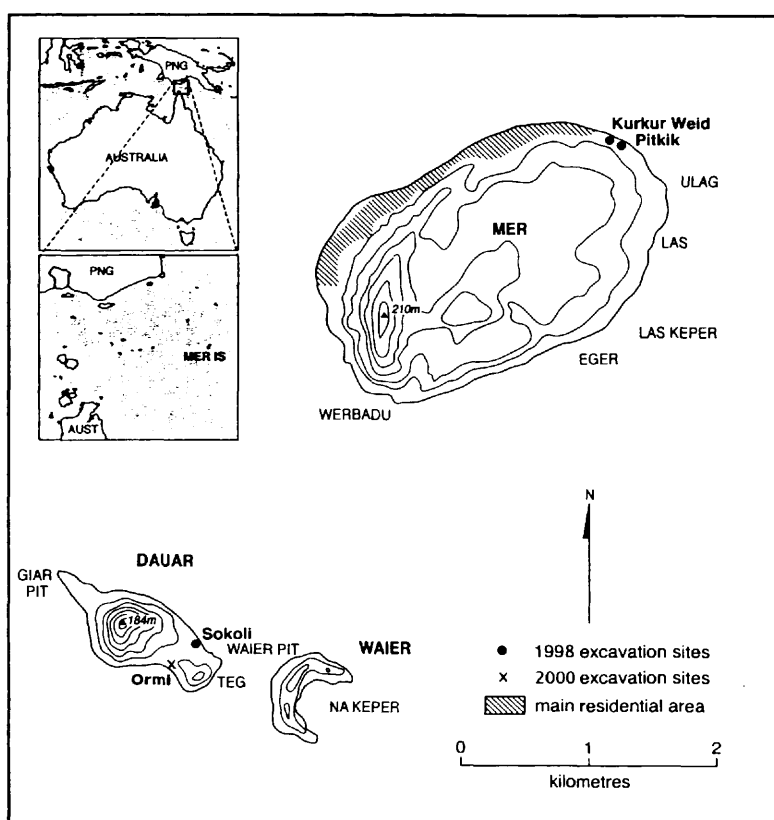


Figure 1 Location of excavation sites on the Islands of Mer, Dauar and Waier, eastern Torres Strait.

Site/Location	Unit (XU)	Sample Number	Sample	Depth (cm below surface)	Context	$\delta^{13}\text{C}$ (‰)	^{14}C Age (yrs BP)
DAUAR IS.							
Ormi, beach section	NA	<i>Lambis lambis</i>	Wk 6096	-	Sample from eroded beach section (southern coast of Dauar)	1.4 +/- 0.2	1870 ± 50
Sokoli, beach section	NA	<i>Strombus luhuanus</i>	Wk 6098	-	Sample from eroded beach section (northern side of Dauar)	2.0 +/- 0.2	1920 ± 50
Sokoli Sq SE (1,21)	7	<i>Strombus luhuanus</i>	Wk 7444	33	Pottery sherd recovered from unit	2.8 +/- 0.2	1180 ± 45
Sokoli Sq SE (1,21)	25	<i>Stombus luhuanus</i>	Wk 7445	235	Base of excavation	2.3 +/- 0.2	2840 ± 50
Sokoli Sq SE (1,21)	11	<i>Srombus luhuanus</i>	Wk 7480	70	Carved bone artefact recovered from unit	2.6 +/- 0.2	2280 ± 50
Sokoli Sq SE (1,21) 23		<i>Strombus luhuanus</i>	Wk 7481	195	Sample from lower, dense shell and bone deposit	2.8 +/- 0.2	2230 ± 50
Ormi Sq 1	7	<i>Lambis lambis</i>	Wk 8885	40	Pottery sherd recovered from unit	1.4 +/- 0.2	2370 ± 50
Ormi Sq 1	16	Charcoal	Wk 8917	110	Excavation unit above level of pottery sherd (recovered from XU17)	-25.7 +/- 0.2	2050 ± 80
Ormi Sq 1	24	<i>Conus sp.</i>	Wk 8918	210	Base of excavation	2.3 +/- 0.2	2840 ± 60
Ormi Sq 3	6	<i>Lambis lambis</i>	Wk 8884	50	Base of excavation	0.5 +/- 0.2	2090 ± 50
MER IS.							
Kurkur Weid Sq SE (1,2,7)	17	<i>Srombus luhuanus</i>	Wk 6749	130	Base of excavation	2.8 +/- 0.2	1290 ± 50
Pitkik 1	8	<i>Lambis lambis</i>	Wk 6750	110	Base of excavation	3.1 +/- 0.2	1270 ± 50

Table 1 Radiocarbon dates from Mer and Dauar Islands, eastern Torres Strait, Queensland, Australia. All dates are uncalibrated and reported as conventional radiocarbon ages.

with many specimens displaying the distinctive processing fracturing. Small quantities of fish and turtle bone also occurred throughout the excavations and appeared to increase with depth. Artefacts recovered from Square 1 included two small stone fish sinkers, one from the uppermost excavation unit and the other from 2 m below surface level. Significantly, three pottery sherds were also recovered from Square 1, ranging from depths of approximately 50 cm to 1.10 m bsl. Square 3 at *Ormi* was located further inland from both the MHWM and Squares 1 and 2. No surface shell was present at this excavation, although dense subsurface shell commenced at approximately 40 cm bsl.

Five samples (including four marine shells and one charcoal sample) from the excavations at *Ormi* were submitted to the University of Waikato for radiocarbon dating. One shell sample (Wk 8886, not included in Table 1) was rejected owing to probable contamination by re-crystallised carbonate, indicating an active chemical environment within the site. The rejected sample was from XU17 in Square 1 (approximately 1.20 m bsl), representing the excavation unit in which the third pottery sherd was recovered. Wk 8917 represents the date of a charcoal sample taken from XU16, the unit directly above the pottery sherd.

Both Wk 6096 and Wk 6098 samples indicated exploitation of marine resources on Dauar from around 1500 BP. The excavation at *Sokoli* produced an extensive archaeological assemblage of marine subsistence remains dating from at least 2500 BP (Wk 7445), as well as items of material culture dating from around 2000 BP (Wk 7480), confirming the human use and occupation of the island. The more recent excavations at *Ormi*, produced a similar chronological sequence to *Sokoli*, and serve to further confirm the 2500 years of human use and occupation of Dauar (Wk 8918).

The two dates obtained from the excavations at *Kurkur Weid* and *Pitkik* on Mer (Wk 6749 and WK 6750) suggest the initial use of marine resources at these sites from around 1000 BP. The complex stratigraphy and likelihood of slumping and removal of deposits at these sites, particularly at *Pitkik*, makes this an estimate of minimum age only. Although the dates are clearly more recent than the chronological sequence obtained from *Sokoli* and *Ormi* on Dauar, they do not imply a later occupation of nearby Mer, but merely reflect local geomorphology and archaeological characteristics of the area.

These results confirm occupation and the establishment of marine subsistence strategies in the eastern Torres Strait Islands from at least 2500 BP. Furthermore, they provide the earliest evidence of human occupation anywhere in the Torres Strait region, which had been previously established as a more recent event occurring around 1500 BP (Barham and Harris 1983, 1985; Rowland 1985, see also Barham and Harris 1985 and Barham 1999 for discussion on a chronologically anomalous date of 2540 ± 60 BP obtained from Saibai Island). The recovery of the bone artefact from *Sokoli*, and the pottery sherds from both excavations on Dauar, represent two previously unrecorded items of material culture in the Torres Strait. Importantly, these artefacts suggest ethnohistorically recorded stylistic affinities between indigenous Torres Strait peoples and material culture of other Melanesian peoples in the region,

and that such affinities may have considerable prehistoric time-depth. Future research by the author will be focused on undertaking mineralogical and sourcing analysis of the pottery sherds, further radiocarbon dating, and identification of evidence for prehistoric horticulture through a series of sediment analyses and examination of macrofloral remains.

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