

7

Rosemary Island Rock Art and Stone Structures

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While Rosemary Island had not been the focus of previous systematic survey, the West Australian Museum made some targeted visits around its coast in 1979 (see DPLH 2022). Elizabeth Bradshaw also targeted the coastal margins in the 1990s, recording (and collecting from) several coastal middens on the fringing dunes. She also undertook a test excavation at Wadjuru Pool (Bradshaw 1994, 1995).

A rapid photographic survey during the National Heritage Listing process used a helicopter to investigate two central parts of the island (McDonald and Veth 2006). One site with two archaic face motifs, originally recorded by Warwick Dix (1977), was included in Mulvaney's (2010) development of Dampier Archipelago artistic phases. Megan Berry's PhD research (Berry 2018) undertook a preliminary survey of rock art on the western side of the island and analysed the excavations at Wadjuru Pool and Rosemary 8 assisted by the Murujuga Linkage Project.

As a result of the previous island visits, 23 registered sites and one other heritage place (with lodged status) were known on Rosemary Island (Figure 7.1). Just over a third (37.5%; n = 9) of these were re-examined during the

MLP, and their boundaries audited and where necessary revised (Figure 7.1). Throughout this chapter we use the DPLH site number for reference. The CRAR+M database holds all DPLH numbers and names for these features. One site listed on the DPLH Aboriginal Heritage Inquiry System has incorrect spatial information: it is located ~230 km south-east, near Hooley Station (DPLH 11328). The boundaries of all unvisited sites have been refined, based on information in the original DPLH site files, to better facilitate future relocation. The MLP recorded 154 sites in addition to those previously known across Rosemary Island, recording 163 sites in detail (Figure 7.1 and Table 7.1).

SITE TYPE	COUNT	%
Art	49	30.1
Structure	22	13.5
Art; structure	17	10.4
Artefacts	17	10.4
Art; grinding	16	9.8
Art; structure; grinding	10	6.1
Art; structure; artefacts	8	4.9
Art; structure; artefacts; grinding	6	3.7
Art; artefacts	4	2.5
Structure; artefacts	4	2.5
Art; artefacts; grinding	2	1.2
Art; artefacts; grinding; midden	2	1.2
Art; artefacts; grinding; midden; archaeological deposit	1	0.6
Art; structure; artefacts; grinding; midden; archaeological deposit	1	0.6
Art; structure; artefacts; grinding; archaeological deposit	1	0.6
Art; structure; artefacts; grinding; midden; archaeological deposit	1	0.6
Artefacts; archaeological deposit	1	0.6
Artefacts; midden	1	0.6
<i>Total</i>	<i>163</i>	<i>100.0</i>

Table 7.1. Rosemary Island site types.

Four field seasons (totalling 273 person days) were spent by the MLP team on Rosemary Island, including the excavation work undertaken for Berry's PhD research (see Table 2.1) in 2014. Six sample areas were the focus of our rock art and stone feature recording (Figure 7.2) and a total of 163 sites were recorded between 2014

and 2018 (Table 7.1). One season each was completed in 2016, 2017 and 2018 (Figure 7.2) utilising two camping locations, one on the eastern side of the island (2016) and the other years from a base on the western coast. Tracklogs indicate that our pedestrian transects covered a total of c. 262 hectares (c. 24% sample of the land

mass which is c. 1,130 ha).

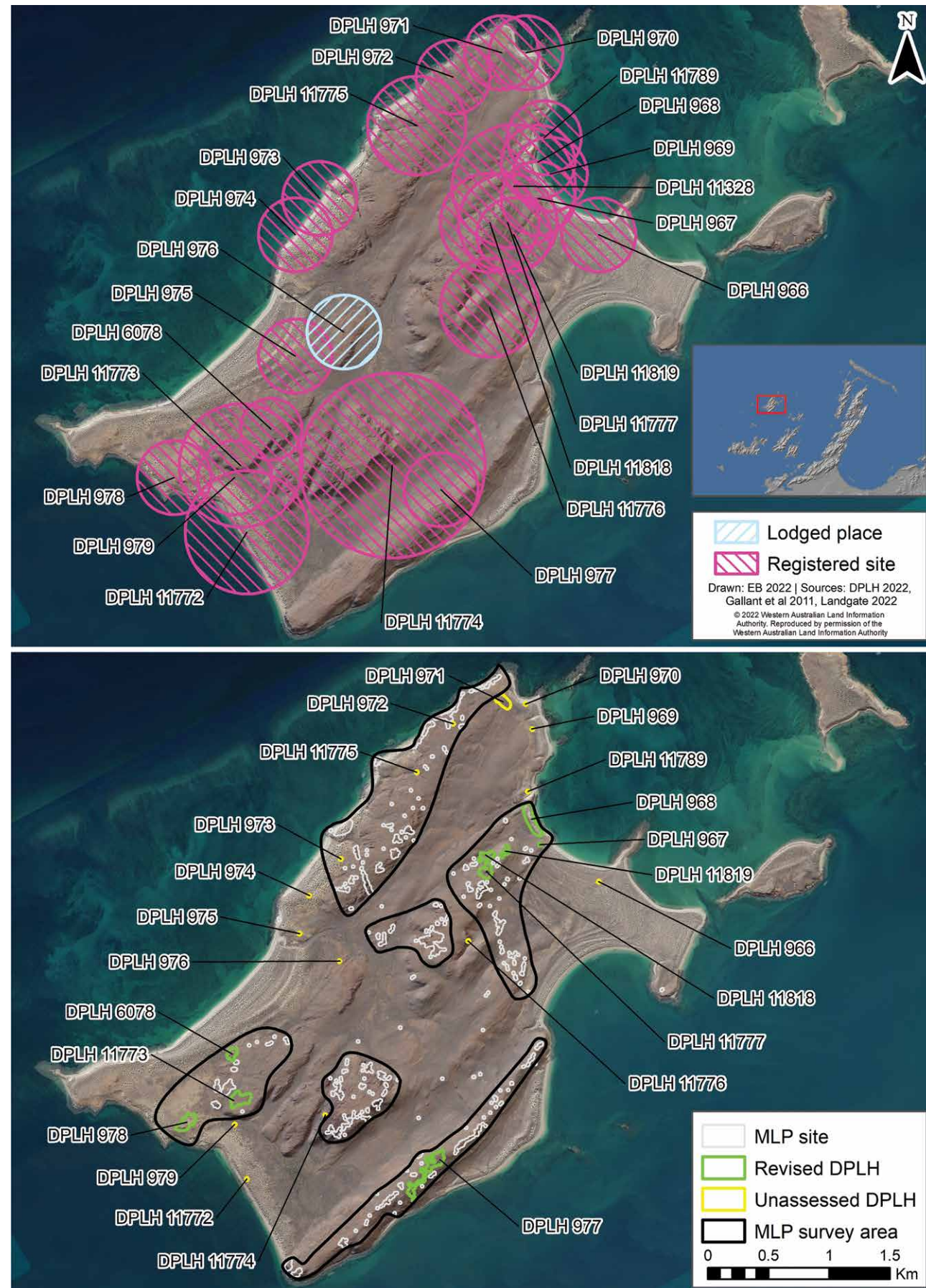


Figure 7.1. Rosemary Island sites: (top) registered DPLH sites; (bottom) the sample areas and sites recorded during this fieldwork.



Figure 7.2. Rosemary Island showing location of sample areas and generalised tracklog (only one team member per team wore GPS trackers at all times).

Survey and excavation in Area 1 and Area 5 was completed in 2017. A lightning strike and widespread grassfire in January 2018 meant that our access and visibility for the 2018 season was considerably improved (Figure 7.3). The 2018 focus was on the accurate recording of the standing stones, first observed in Area 3 in 2017. At this time we also undertook sample collections for John Fairweather’s (2019) Honours research, which was focused on producing an accurate geological map of Rosemary Island (Figure 7.4).

Around 30% of the 163 sites contain rock art only, while 42% are rock art combination sites. While our intended focus of survey work on Rosemary Island

was the rock art, it was important to also study the stone structures due to their quantity and variety, and these have been analysed by Emma Beckett (2021). Around 13% of the sites on Rosemary Island had stone structures only while 29% of the island’s combination sites include stone structures. Our survey did not consistently record stone artefact scatters as these are relatively continuous across the landscape. Exceptions were made where these indicated quarrying and/or other focused activities. These site-type proportions are an under-representation of stone scatters and midden deposits across Rosemary Island.

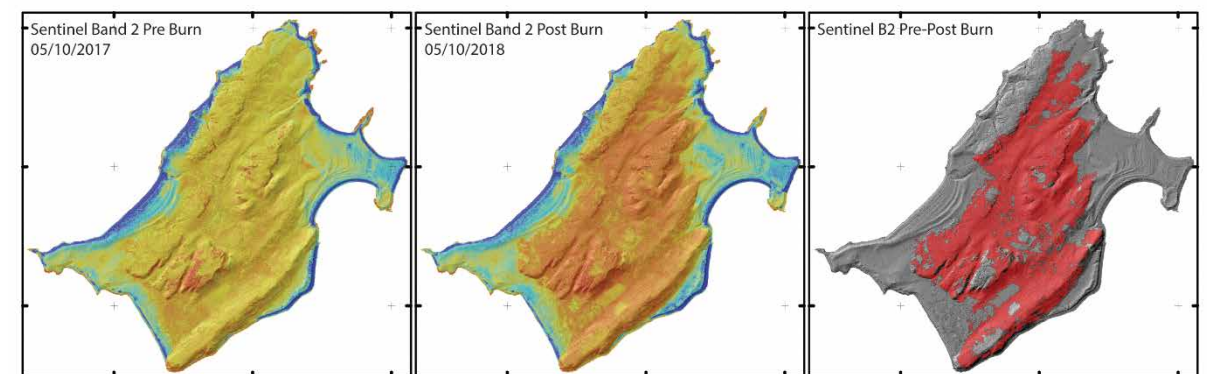


Figure 7.3. Three methods for demonstrating firing on Rosemary Island: (left) airborne LiDAR (20 cm pixels); (middle) aerial RGB-mosaic (14 cm pixels); (right) Sentinel 2 satellite imagery (10 cm pixels) (from McDonald et al. 2020: Figure 4).

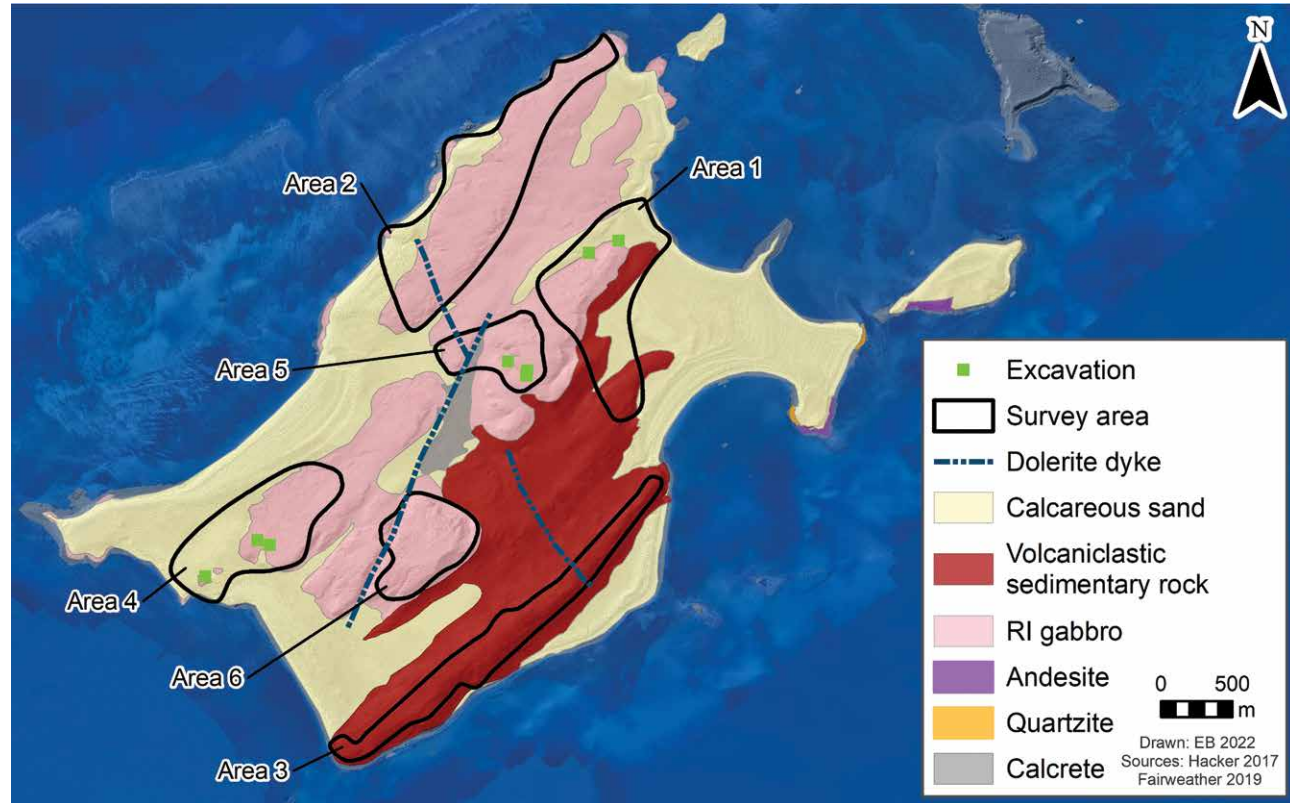


Figure 7.4. Geological map created after sample collections in 2018 and pXRF and thin-section analysis (based on Fairweather 2019: Figure 21).

Initially, the north-western corner of the island was separated into two sample areas (Area 2 and Area 7) but these were merged as sites were found to be continuous along this ridgeline. A total of 118 sites with engravings

here had 2,486 panels and 4,801 motifs (Table 7.3). Isolated sites encountered while traversing the island to reach the different sample areas were also recorded.

Area 1

Sample Area 1 is in the central north of the islands mostly on gabbro geology, but with some volcaniclastic sedimentary geology along its eastern side. The transect focus originally was on the high central gabbro ridgeline and the slopes draining east and west from this, as we had observed a concentration of motifs here

during our helicopter visit in 2006. This includes areas recorded by Dix (1977), Mulvaney (2010) and Berry (2018). We expanded the sample transect when our survey encountered a variety of sites en route from the camp (Figure 7.2). Two excavation squares were placed in this area (see Chapter 8).

Rock art

Thirty-nine sites here include 29 rock art sites with 265 panels and 532 motifs (Figure 7.5, Table 7.3 and Table

7.4). Fourteen of the sites have 30 stone structures, most of these found in combination with other site components.

SITE TYPE	COUNT	%
Art	9	23.1
Artefacts	6	15.4
Art; grinding	5	12.8
Art; structure	3	7.7
Art; structure; artefacts	3	7.7
Art; structure; artefacts; grinding	3	7.7
Art; structure; grinding	3	7.7
Art; artefacts	2	5.1
Art; artefacts; grinding	1	2.6
Artefacts; archaeological deposit	1	2.6
Artefacts; midden	1	2.6
Structure	1	2.6
Structure; artefacts	1	2.6
Total	39	100

Table 7.2. Rosemary Island Area 1: site types.

SITE NAME	MOTIFS	SITE NAME	MOTIFS
DPLH 11777 (MLP-RI001)	133	MLP-RI122	3
DPLH 11818 (MLP-RI100)	83	MLP-RI124	3
MLP-RI128	64	MLP-RI137	3
DPLH 11819 (MLP-RI101)	55	MLP-RI102	2
MLP-RI111	49	MLP-RI121	2
MLP-RI131	33	MLP-RI125	2
MLP-RI134	26	DPLH 967 (MLP-RI120)	2
MLP-RI110	17	MLP-RI105	1
MLP-RI136	17	MLP-RI106	1
MLP-RI103	9	MLP-RI107	1
MLP-RI104	6	MLP-RI109	1
MLP-RI133	6	MLP-RI123	1
MLP-RI116	4	MLP-RI126	1
MLP-RI108	3	MLP-RI135	1
MLP-RI113	3	Total	532

Table 7.3. Rosemary Island Area 1: rock art sites and assemblage sizes.

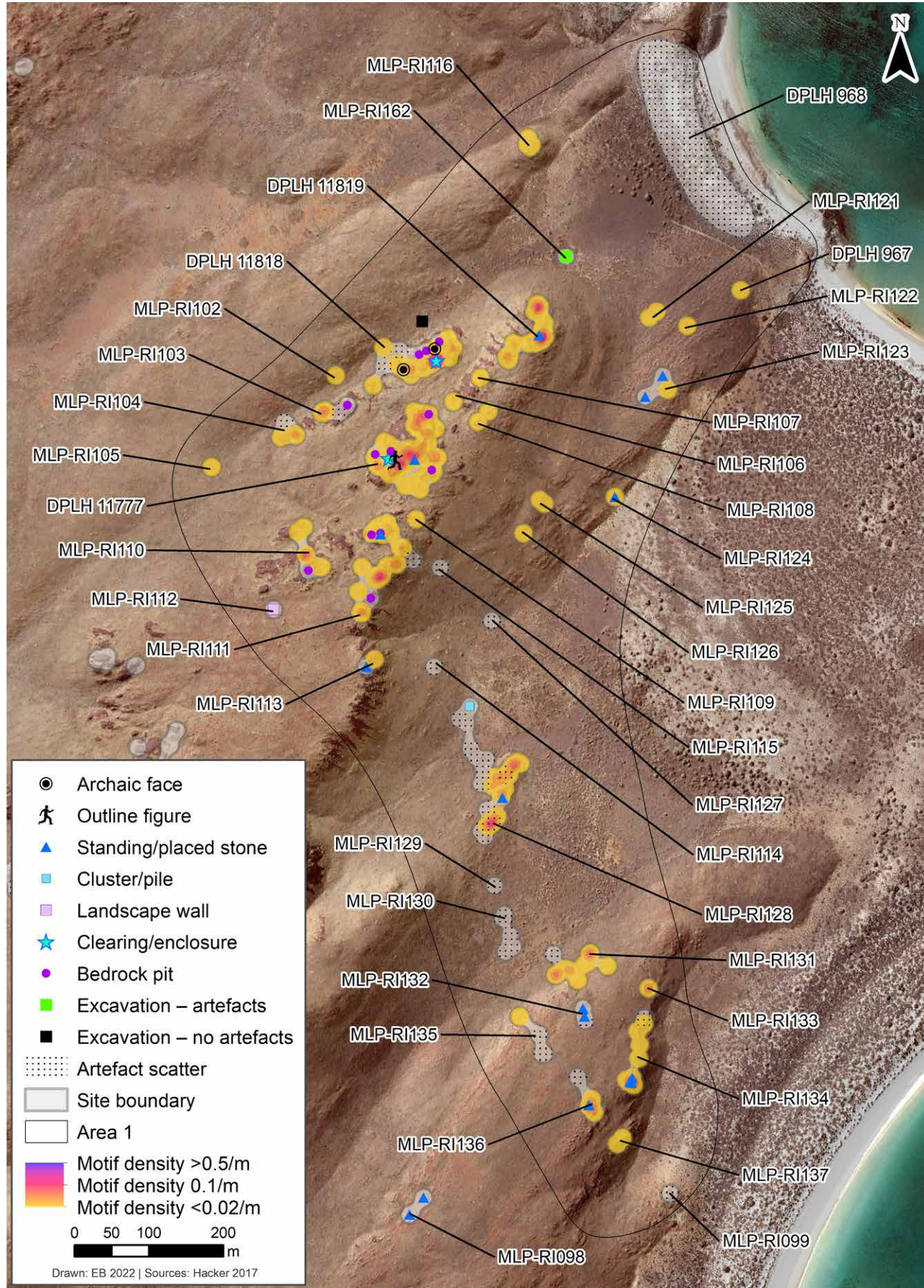


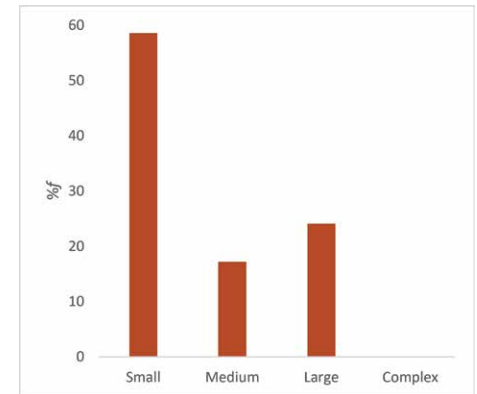
Figure 7.5. Rosemary Island Area 1 showing site locations and the two excavation squares.

Most of the assemblages in this sample are small and there are no site complexes recorded in this landscape (Table 7.4). The assemblage at site DPLH

11777 (MLP-RI001) is large although petroglyphs are widely dispersed.

SITE ASSEMBLAGE	COUNT	%
Small	17	58.6
Medium	5	17.2
Large	7	24.1
Total	29	100

Table 7.4. Rosemary Island Area 1 rock art sites: assemblage size proportions.



Almost 38% of the assemblage in Area 1 is geometric, with a large proportion (27%) being classed as 'other'. When these other, non-depictive markings are removed, geometrics account for over 51% of this assemblage, followed by zoomorphs, tracks and then anthropomorphs

(Table 7.5). The 'other' categories include one group of 50 cupules, 35 random peckings and 25 grinding patches (Table 7.7). No graffiti was encountered in this sample area.

CLASS	TOTAL	%F	DEPICTIVE	%F
Anthropomorphic	44	8.3	44	11.3
Geometric	201	37.8	201	51.5
Other	142	26.7		
Tracks	53	10.0	53	13.6
Zoomorphic	92	17.3	92	23.6
Total	532	100	390	100.0

Table 7.5. Rosemary Island Area 1: class proportions.

Ovals and linear motifs are the most common geometrics here (Table 7.6), while turtles (and marine motifs generally) dominate the zoomorphs. Macropods and land animals are rare. Tracks are dominated by bird tracks, followed by human tracks. Human figures are dominated by linear forms, but there is one interesting very large (>2 m long) outlined anthropomorph which has dots in its body, a spear in its side and three fish on its head (Figure 7.6). This was initially interpreted by WAM staff as a contact motif ('a Malay wearing buttons and turban'). There are two archaic faces in this sample area (Mulvaney 2010), including the original one recorded by Dix (1977).

The most common form of petroglyph in Area 1 is linear, followed by scattered marks and solid and then outlined form (Table 7.8). There is a lot of variation in the forms created here, and a relatively high proportion of patterned infill used with other forms (6%).

The predominant technique in this area is pecking (c. 57%), followed by scratching (14%) and abrasion (Table 7.9). Combination forms account for around 16% of this assemblage. The dominance of pecking reflects that most of the art in this area is located on the RI gabbro, with scratching found more commonly on the siltstone geology on the eastern side of this sample area (see standing stone Figure 7.7 e, f).



Figure 7.6. Rosemary Island Area 1 motifs: (a) human tracks and (b) landscape view with fish motif in foreground; (c) a heavily weathered macropod and (d-e) two unusual turtle carapace designs; (f) speared bird shown with short neck; (g) scratched/incised lizard; (h) a hunting scene showing a group of small anthropomorphs with large snake; and (i) scratched fish and barbed spear on fine-grained sedimentary rock (also in g).

SUBJECT	COUNT	%	SUBJECT	COUNT	%
<i>Anthropomorphs</i>			<i>Tracks</i>		
Face	2	0.5	Bird track	38	9.7
Linear figure	35	9.0	Human foot	12	3.3
Outline figure	2	0.5	Human hand	2	0.5
Profile figure	3	0.8	Macropod track	1	0.3
Solid figure	2	0.5	<i>Zoomorphs</i>		
<i>Geometric</i>			Animal part	3	0.8
Angular	10	2.6	Bird	8	2.0
Arc	23	5.9	Dugong	1	0.3
Circular	12	3.1	Fish	12	3.1
Complex	3	0.8	Lizard	12	3.1
Dot	15	3.8	Macropod	2	0.5
Dot and line	2	0.5	Snake	1	0.3
Linear	75	19.2	Stingray	2	0.5
Oval	51	13.0	Turtle	46	11.8
Rayed	10	2.6	Unknown marine	5	1.3
			<i>Total</i>	<i>390</i>	<i>100</i>

Table 7.6. Rosemary Island Area 1: subject proportions for identifiable motifs.

OTHER MARKS	TOTAL	%F
Amorphous area	3	2.1
Cupule	50	35.2
Grinding patch	25	17.6
Linear other	20	14.1
Random lines	9	6.3
Random pecking	35	24.6
<i>Total</i>	<i>142</i>	<i>100</i>

Table 7.7. Rosemary Island Area 1: other categories.

FORM	COUNT	%
Linear	164	30.8
Scattered marks	97	18.2
Solid	92	17.3
Outline	64	12.0
Linear; solid	39	7.3
Linear; outline	20	3.8
Outline; pattern	11	2.1
Linear; outline; pattern	10	1.9
Linear; scattered marks	9	1.7
Outline; solid	9	1.7
Other combination forms	17	3.2
<i>Total</i>	<i>532</i>	<i>100.0</i>

Table 7.8. Rosemary Island Area 1: form of identified motif classes.

TECHNIQUE	COUNT	%
Pecked	303	57.0
Scratched	77	14.5
Abraded; pecked	64	12.0
Abraded	33	6.2
Incised	29	5.5
Pecked; scratched	6	1.1
Gouged	5	0.9
Combination techniques	15	2.8
<i>Total</i>	<i>532</i>	<i>100.0</i>

Table 7.9. Rosemary Island Area 1: techniques used in all motifs.

SIZE RANGE	COUNT	%
1-10	66	16.7
11-20	134	33.8
21-30	90	22.7
31-40	51	12.9
41-50	28	7.1
51-60	11	2.8
61-70	7	1.8
91-100	1	0.3
171-180	1	0.3
201-210	1	0.3
<i>Total</i>	<i>390</i>	<i>100</i>

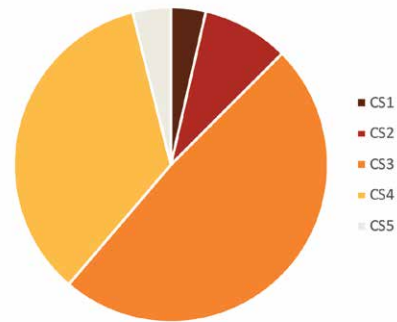
Table 7.10. Rosemary Island Area 1: size of the motif assemblage (excluding 'other' marks).

The vast majority (73.2%) of this motif assemblage is smaller than 30 cm in size and 99% are under 70 cm maximum length (Table 7.10). Only two motifs are larger than 100 cm: one is a snake (172 cm) and the other (at 204 cm) is the outlined anthropomorph with fish-head gear (see Figure 7.6).

Most (45%) of the motif assemblage is contrast state 3 (CS3) and the second highest colouration is CS4 (32%). Other categories are excluded from these calculations. About the same proportion of the engraved motifs fall within the earliest and latest phases of contrast (Table 7.11). Around 8% of the assemblage has mixed patination, meaning that their weathering state cannot be accurately or meaningfully judged.

CONTRAST STATE	COUNT	%
CS1	13	3.3
CS2	32	8.2
CS3	174	44.6
CS4	125	32.1
CS5	14	3.6
NA	32	8.2
<i>Total</i>	<i>390</i>	<i>100.0</i>

Table 7.11. Rosemary Island Area 1: contrast state of the assemblage (excluding 'other' marks).



Stone structures

Almost half of the structures recorded within Area 1 (Table 7.12) were identified within the three largest rock art complexes (DPLH 11777, DPLH 11818 and MLP-RI111). The dominant structure types within these sites were bedrock pits (n = 10) with clearing/enclosures (n = 2) also found amongst these complex assemblages. These two structure types are assessed as being more utilitarian in function, that is, used for shelter, raw material acquisition and subsistence (Beckett 2021).

In contrast, the standing stones were more frequently associated with smaller rock art sites to the east and the south of the locations where people have created the most rock art. Standing stones are generally thought to represent more symbolic or signalling behaviours, and in Area 1 these are placed in spatially different locations to the rock art. One of the standing stones in site MLP-RI124 (Figure 7.5 and Figure 7.7) was engraved, a rare (but not unique) occurrence. Only seven other examples of engraved standing stones were identified during the MLP, and this is the most impressive, being a fish in a net (Figure 7.7f).

Three discrete placed stones (10%) were identified in Area 1. This structure type is relatively infrequently recorded. Only 17 examples were recorded during the MLP and three of these were recorded on Rosemary Island.

STRUCTURE TYPE	COUNT	%
Bedrock pit	12	40.0
Standing stone	11	36.7
Discrete placed stone	3	10.0
Clearing/enclosure	2	6.7
Cluster/pile	1	3.3
Landscape wall	1	3.3
<i>Total</i>	<i>30</i>	<i>100.0</i>

Table 7.12. Rosemary Island Area 1: stone structures.



Figure 7.7. Rosemary Island Area 1: (a) extensive open midden facing Chookie Bay, (b) with intact living floors and site furniture; and some variety of the stone structures, showing (c-d) placed stones; (e) engraved standing stone with (f) sketch of motif, affected by bird guano; (g) standing stone; and (h) clearing/enclosure and (i) cluster/pile.

Area 2

Large horizontal open platforms are unusual for the Dampier Archipelago, but this sample area in the north-western corner of the island contains many of these. The geology here is mostly RI gabbro but includes a dolerite dyke towards its southern extent (Fairweather 2019). Initially our sampling focused on a 400 m section of the dolerite dyke and the northern rocky beach fronts along the north-western coast (Figure 7.4). As the survey continued, especially once the grass fire after the lightning strike increased surface visibility, it became clear that the entire north-western area contained almost continuous archaeological evidence. There remain areas within this sample transect that have not been systematically surveyed (Figure 7.2).

A third of the recorded sites contain only petroglyphs, while 23% of this area's sites have no art at all (Table 7.13). Around half of the sites have art recorded in combination with other characteristics. Stone structures are found at 15 sites in Area 2: four of these have no other associated features.

SITE TYPE	COUNT	%
Art	13	34.2
Art; artefacts	1	2.6
Art; artefacts; grinding	1	2.6
Art; artefacts; grinding; midden	1	2.6
Art; grinding	2	5.3
Art; structure	4	10.5
Art; structure; artefacts	2	5.3
Art; structure; artefacts; grinding	1	2.6
Art; structure; grinding	4	10.5
Artefacts	4	10.5
Structure	4	10.5
Structure; artefacts	1	2.6
Total	38	100

Table 7.13. Rosemary Island Area 2: site types.

Rock art

Just under half of the 28 rock art assemblages in this sample are small and there are three site complexes recorded in this northern part of the island: two abutting the northern beaches (MLP-RI007 and MLP-RI160) and the third along the southern portion of the dyke (MLP-RI002). There is a relatively high proportion of sites (32.1%) with large assemblages here (Table 7.15).

Just over a third of the assemblage of 1,169 motifs in Area 2 is geometric, with a relatively small proportion (10.2%) classed as 'other' (Table 7.16). These non-depictive markings include 59 grinding patches, which are

distributed mostly along the coastal platform (Figure 7.9), 22 random peckings and a single cluster of 27 cupules (Table 7.17). When these non-depictive art productions are removed, geometric motifs account for almost 40% of this assemblage, followed by tracks, zoomorphs and then anthropomorphs. Only one item of historic graffiti was encountered in this sample area (GV 1923; possibly the initials of George Vincent, associated with a pearling vessel motif and inscription on Dolphin Island (see chapter 12).

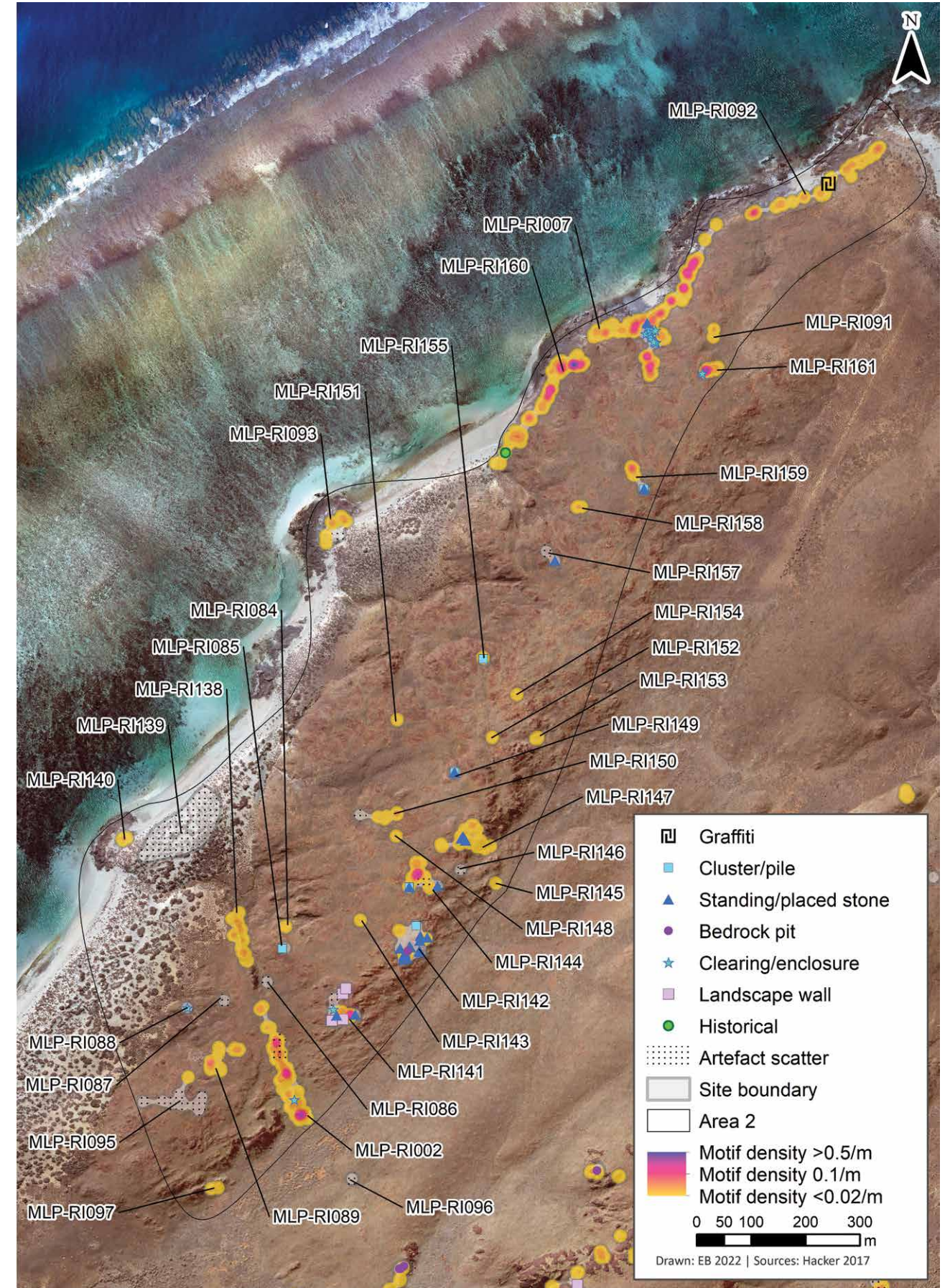
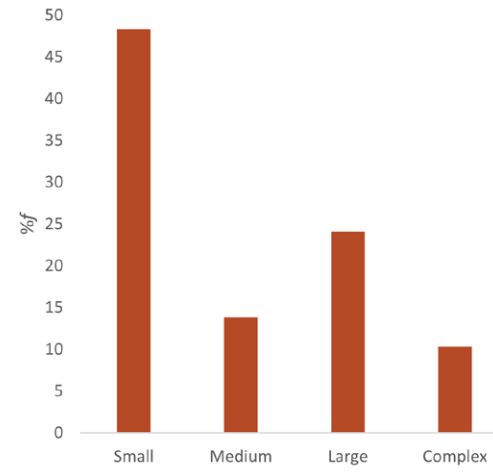


Figure 7.8. Rosemary Island Area 2 showing location of all sites.

SITE NAME	MOTIFS	SITE NAME	MOTIFS
MLP-RI007	328	MLP-RI091	5
MLP-RI160	240	MLP-RI140	5
MLP-RI002	190	MLP-RI158	5
MLP-RI092	80	MLP-RI097	3
MLP-RI144	59	MLP-RI152	3
MLP-RI161	58	MLP-RI153	3
MLP-RI141	38	MLP-RI151	2
MLP-RI138	35	MLP-RI084	1
MLP-RI089	29	MLP-RI095	1
MLP-RI147	29	MLP-RI143	1
MLP-RI093	16	MLP-RI145	1
MLP-RI159	16	MLP-RI148	1
MLP-RI150	10	MLP-RI154	1
MLP-RI142	9	MLP-RI155	1
Total		1,169	

Table 7.14. Rosemary Island Area 2: rock art sites and assemblage sizes.



ASSEMBLAGE SIZE	COUNT	%
Small	14	48.3
Medium	4	13.8
Large	7	24.1
Complex	3	10.3
Total	29	100

Table 7.15. Rosemary Island Area 2: assemblage size proportions.

Some class proportions differ from those found in Area 1. Ovals and linear motifs are still the most common geometrics here (Table 7.18) while turtles, fish (and marine motifs generally) are even more dominant amongst the zoomorphs than in Area 1. Macropods and land animals are rare; birds are common (Figure 7.10). Bird tracks are again dominant but are almost matched by human tracks (Figure 7.9). More macropod tracks are

found here than in Area 1 – as are turtle tracks (missing in the former). Site MLP-RI007 has a particularly high proportion of tracks (41%, n = 129). Human figures are dominated by linear forms, but there are also quite a few solid figures (Table 7.18). One archaic face with a body was recorded on the dyke at MLP-RI002. This assemblage contains several headdress figures but no decorative infill figures.

CLASS	COUNT	%F	DEPICTIVE MOTIFS	%F
Anthropomorphic	133	11.4	133	12.7
Geometric	412	35.2	412	39.3
Other	120	10.3		
Tracks	315	26.9	315	30.0
Zoomorphic	189	16.2	189	18.0
Total	1,169	100.0	1,049	100.0

Table 7.16. Rosemary Island Area 2: class proportions.

TYPE OF MARK	TOTAL	%F
Amorphous area	2	1.7
Cupule	27	22.5
Fragments	2	1.7
Graffiti	1	0.8
Grinding patch	59	49.2
Incised line set	1	0.8
Linear other	6	5.0
Random pecking	22	18.3
Total	120	100.0

Table 7.17. Rosemary Island Area 2: other types of mark.

SUBJECT	COUNT	%	SUBJECT	COUNT	%
<i>Anthropomorphic</i>			<i>Tracks</i>		
Combination figure	2	0.2	Bird track	131	12.5
Face	1	0.1	Human foot	123	11.7
Linear figure	88	8.4	Human hand	14	1.3
Outline figure	2	0.2	Macropod track	15	1.4
Profile figure	8	0.8	Other track	2	0.2
Solid figure	32	3.0	Turtle trail	29	2.8
<i>Geometric</i>			<i>Zoomorphs</i>		
Angular	26	2.5	Bird	24	2.3
Animal part	16	1.5	Dugong	8	0.8
Arc	86	8.2	Fish	58	5.5
Circular	9	1.0	Human foot	1	0.1
Complex	2	0.2	Lizard	12	1.1
Dot	20	1.9	Macropod	4	0.4
Dot and line	2	0.2	Quadruped	1	0.1
Dumb-bell	3	0.3	Snake	2	0.2
Linear	80	7.6	Stingray	1	0.1
Material culture	21	2.0	Terrestrial other	4	0.4
Oval	154	14.7	Turtle	50	4.8
Phytomorph	1	0.1	Unknown marine	8	0.8
Rayed	10	1.0	Total	1,049	100

Table 7.18. Rosemary Island Area 2: subject proportions.

Linear forms (29.3%) are the most produced in RAI02, followed by solid and then outlined forms (Table 7.19). There are multiple combination forms created here, but only 19 motifs have patterned infill (1.5%). Pecking is the predominant technique in this area (84%), while

abrasion and abrasion + pecking (7.5%, 5% respectively) are the next most frequent (Table 7.20). In this sample area scratched motifs are rare (1.5%) and sometimes found in combination with pecking (0.6%).

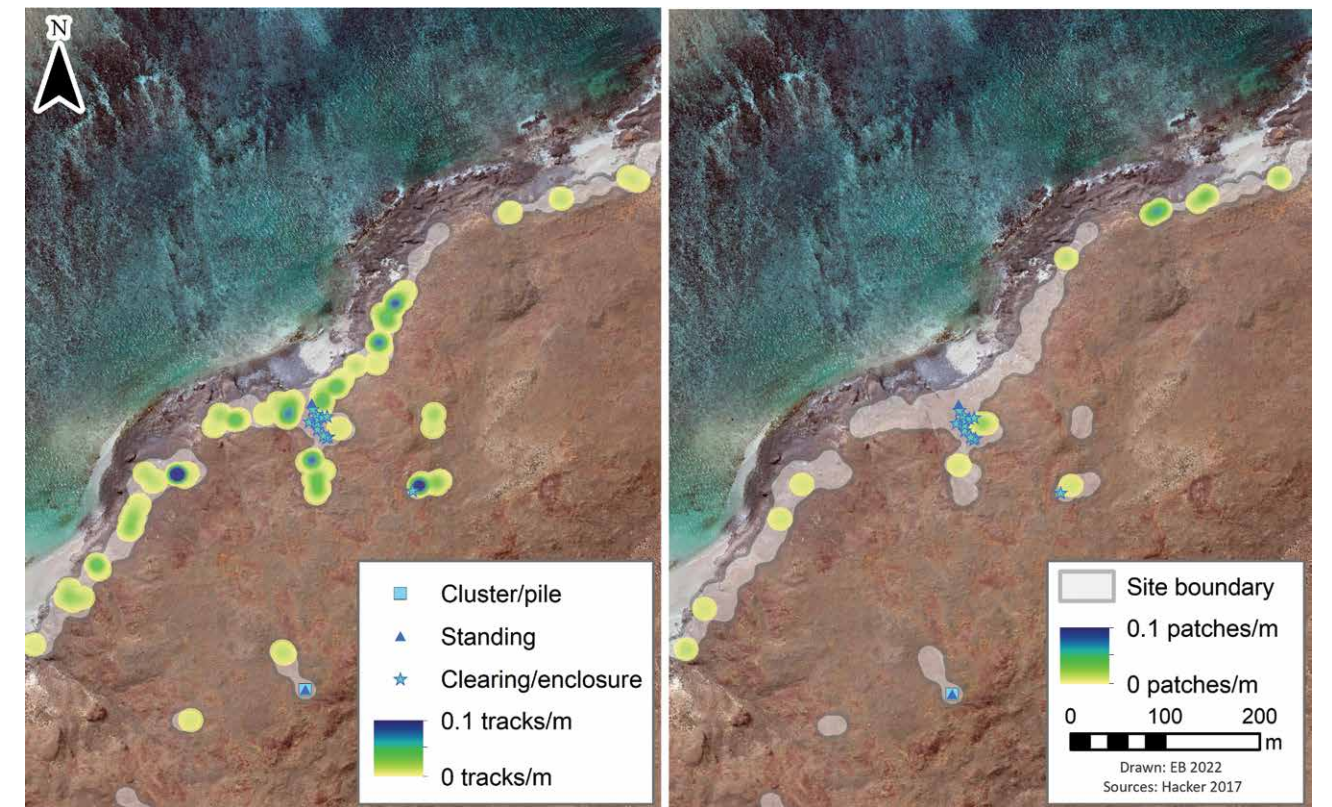


Figure 7.9. North-west corner of Rosemary Island showing density of track motifs and grinding patches in MLP-RI007 and their relationship to the identified structures.

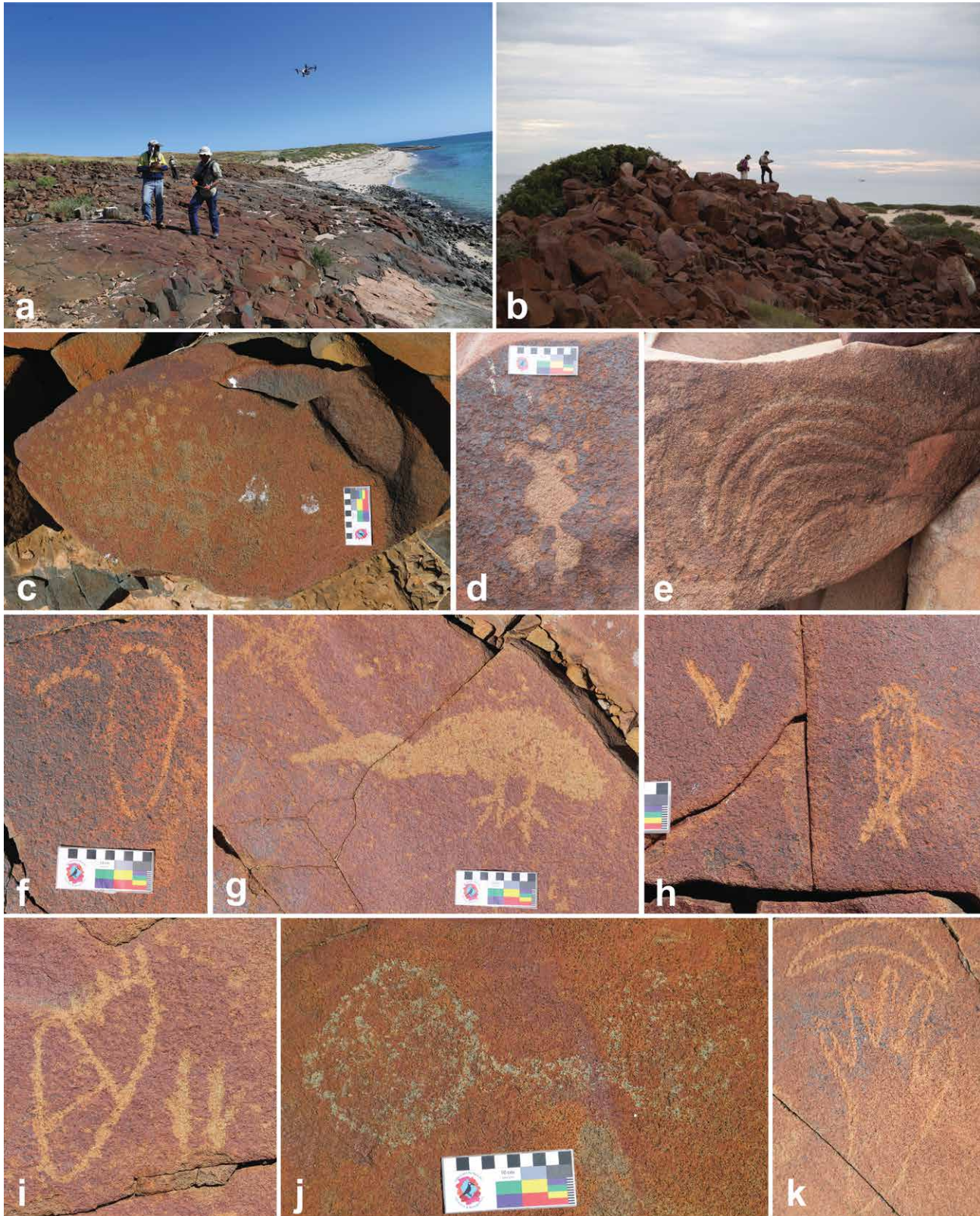


Figure 7.10. Rosemary Island Area 2 showing (a) the large horizontal gabbro platforms that dominate here and (b) the dolerite dyke; plus examples of some common and unusual motifs, many with fresh contrast state, including c) dot clusters, (d) a disarticulated dot head figure; (f and i) feet with more than six toes and sandal design; and (k) outlined human hand with arc.

FORM	COUNT	%F
Linear	342	29.3
Solid	268	22.9
Outline	225	19.2
Linear; outline	131	11.2
Linear; solid	110	9.4
Outline; solid	43	3.7
Scattered marks	11	0.9
Linear; outline; pattern	9	0.8
Linear; outline; solid	7	0.6
Other combination forms*	23	2.0
Total	1,169	100.0

Table 7.19. Rosemary Island Area 2: form of all motifs. * Other combinations with n = < 5 counts.

TECHNIQUE	COUNT	%
Pecked	984	84.2
Abraded	88	7.5
Abraded; pecked	58	5.0
Scratched	18	1.5
Pecked; scratched	7	0.6
Combination techniques	14	1.2
Total	1,169	100

Table 7.20. Rosemary Island Area 2: technique used for motifs.

Most (69.3%) of the assemblage is smaller than 30 cm in size, but only a relatively small proportion of motifs is < 10 cm in size (Table 7.21). There are, however, 31 motifs larger than 1 m and six of these are larger than 2 m

in size. This different size range appears to relate to the available canvas sizes on the large horizontal bedrock platforms in this north-western corner of the island.

SIZE (CM)	COUNT	%	SIZE (CM)	COUNT	%
1-10	148	14.1	131-140	1	0.1
11-20	354	33.7	141-150	1	0.1
21-30	225	21.4	151-160	2	0.2
31-40	138	31.2	161-170	1	0.1
41-50	73	7.0	171-180	2	0.2
51-60	31	3.0	211-220	1	0.1
61-70	17	1.6	261-270	1	0.1
71-80	14	1.3	271-280	1	0.1
81-90	9	0.9	411-420	1	0.1
91-100	9	0.9	451-460	1	0.1
101-110	9	0.9	591-600	1	0.1
111-120	4	0.4	NA	2	1.0
121-130	3	0.3	Total	1,049	100.0

Table 7.21. Rosemary Island Area 2: size increments of depictive motifs.

Almost half of the assemblage (48%) here is contrast state 4 (CS4); the second highest colouration differential is CS3 (28%). About the same proportion of petroglyphs fall within the lowest and highest conditions

of contrast (Table 7.22), suggesting that both early and late productions have occurred here. Around 5% of the assemblage has mixed patination and/or staining (NA), meaning that their weathering state cannot be assessed.

CONTRAST STATE	COUNT	%F
CS1	53	5.1
CS2	85	8.1
CS3	296	28.2
CS4	500	47.7
CS5	60	5.7
NA	55	5.2
Total	1,049	100.0

Table 7.22. Rosemary Island Area 2: contrast state of the assemblage.



Figure 7.11. (a) Clearing/enclosures in MLP-RI007; (b) arc-shaped structures on the beach at MLP-RI160; (c, e) clusters/piles; and (d) lines from MLP-RI142 and MLP-RI085.

Stone structures

Fifty-eight structures were recorded in Area 2 and this is likely an under-representation of the total number: more were observed, but there was insufficient time to record all in detail. Most (66.6% or $n = 38$) of the structures here were on high, rocky bare ground in the south-east of the survey area. Almost half of the structures (42%) were standing stones (Table 7.23).

A high proportion ($n = 15$) of clearings/enclosures were identified in the site complex MLP-RI007 (Figure 7.8). These structures are excellent examples of this site type and demonstrate their likely utilitarian nature – located above the platforms with the rock art assemblage and close to the many grinding patches recorded here. Grinding patches are focused near the clearings/enclosures as well as further to the north on the large coastal platforms adjacent to the sea (Figure 7.9). It is interesting to speculate on what was being processed in these locations: was it spinifex for fishing nets?

Eight clusters/piles were found distributed across the surveyed area (Figure 7.11). Four of these structures comprise a single cluster of stones, two of which have an embedded standing stone within the pile (sites MLP-RI159 and MLP-RI149) and two without (MLP-RI144 and MLP-RI155). Two clusters/piles located on the southern end of MLP-RI160 were arc shaped and were initially interpreted as being try pot hearths (Figure 7.11c). There is, however, no other evidence of whaling in this vicinity – and the shallow draft between the reef and beach makes landing even small boats here difficult. Another structure (on MLP-RI085) has a well-defined circular construction, while another on site MLP-RI142 has two parallel lines (see Figure 7.11d and e).

Four landscape walls were identified towards the south-east of Area 2 within MLP-RI141 (Figure 7.8). These structures were only partially recorded due to time constraints and require further investigation.

STRUCTURE TYPE	COUNT	%
Standing stone	25	43.1
Clearing/enclosure	15	25.9
Discrete placed stone	5	8.6
Cluster/pile	4	6.9
Landscape wall	4	6.9
Historical cluster/pile	2	3.4
Standing stone with cluster/pile	2	3.4
Bedrock pit	1	1.7
Total	58	100

Table 7.23. Stone structures recorded in Area 2.

Area 3

This sample area is focused on the high ridgeline along the south-eastern margin of the island (Figure 7.12). The bedrock here is of volcanoclastic sedimentary origin, which presents as smooth-surfaced rounded blocks, mostly along the top of the ridge but also distributed down the hillslopes. A dyke of more coarse-grained dolerite runs perpendicular to the main ridgeline (near site MLP-RI028, Figure 7.4). There are many standing stones along this ridgeline. The apparent gap at the southern end of the sample is not real; it is currently unsurveyed. Rock art recording was also not completed in the kilometre gap between sites MLP-RI009 and MLP-RI010 (on Thring Point) and MLP-RI015 (Figure 7.12), and there is a continuation of rock art around the eastern cliff-top near MLP-RI009 which is also unrecorded.

represent only 12.5% of these sites. The stone structure sites were recorded in detail by Emma Beckett for her PhD research (Beckett 2021).

SITE TYPE	COUNT	%
Art	4	12.5
Art; artefacts	1	3.1
Art; structure	4	12.5
Art; structure; artefacts	3	9.4
Art; structure; artefacts; grinding	2	6.3
Art; structure; grinding	1	3.1
Artefacts	3	9.4
Structure	13	40.6
Structure; artefacts	1	3.1
Total	32	100.0

Table 7.24. Rosemary Island Area 3: site types.

The dominant site type here is stone structures (40.6%). Most sites are a combination of rock art and stone structure (Table 7.24). Sites with art alone

Rock art

The 15 sites with rock art are distributed along this ridgeline and its adjacent slopes. Two of the three site-complex sized assemblages are on Thring Point (MLP-RI009 and MLP-RI010), overlooking the water and coastal platforms at the southern end of the ridge. The gap between these two sites is real, but the art continues below the cliff line and onto some smooth

vertical panels adjacent to the rocky coastline. The other complex-sized assemblage is found in the centre of this ridgeline transect and is associated with extensive quarrying and stone structures (DPLH 977). Two of the large assemblages have slightly more than 100 motifs; there are relatively few small, isolated assemblages here (Table 7.25 and Table 7.26).

SITE NAME	MOTIFS	SITE NAME	MOTIFS
MLP-RI010	370	MLP-RI031	14
MLP-RI009	311	MLP-RI019	7
DPLH 977 (MLP-RI003)	235	MLP-RI036	5
MLP-RI030	107	MLP-RI029	4
MLP-RI015	101	MLP-RI020	1
MLP-RI032	30	MLP-RI024	1
MLP-RI023	22	MLP-RI037	1
MLP-RI039	16	<i>Total</i>	<i>1,225</i>

Table 7.25. Rosemary Island Area 3: rock art sites and assemblage sizes.

ASSEMBLAGE SIZE	COUNT	%
Small	5	33.3
Medium	3	20.0
Large	4	26.7
Complex	3	20.0
<i>Total</i>	<i>15</i>	<i>100.0</i>

Table 7.26. Rosemary Island Area 3: assemblage size proportions.

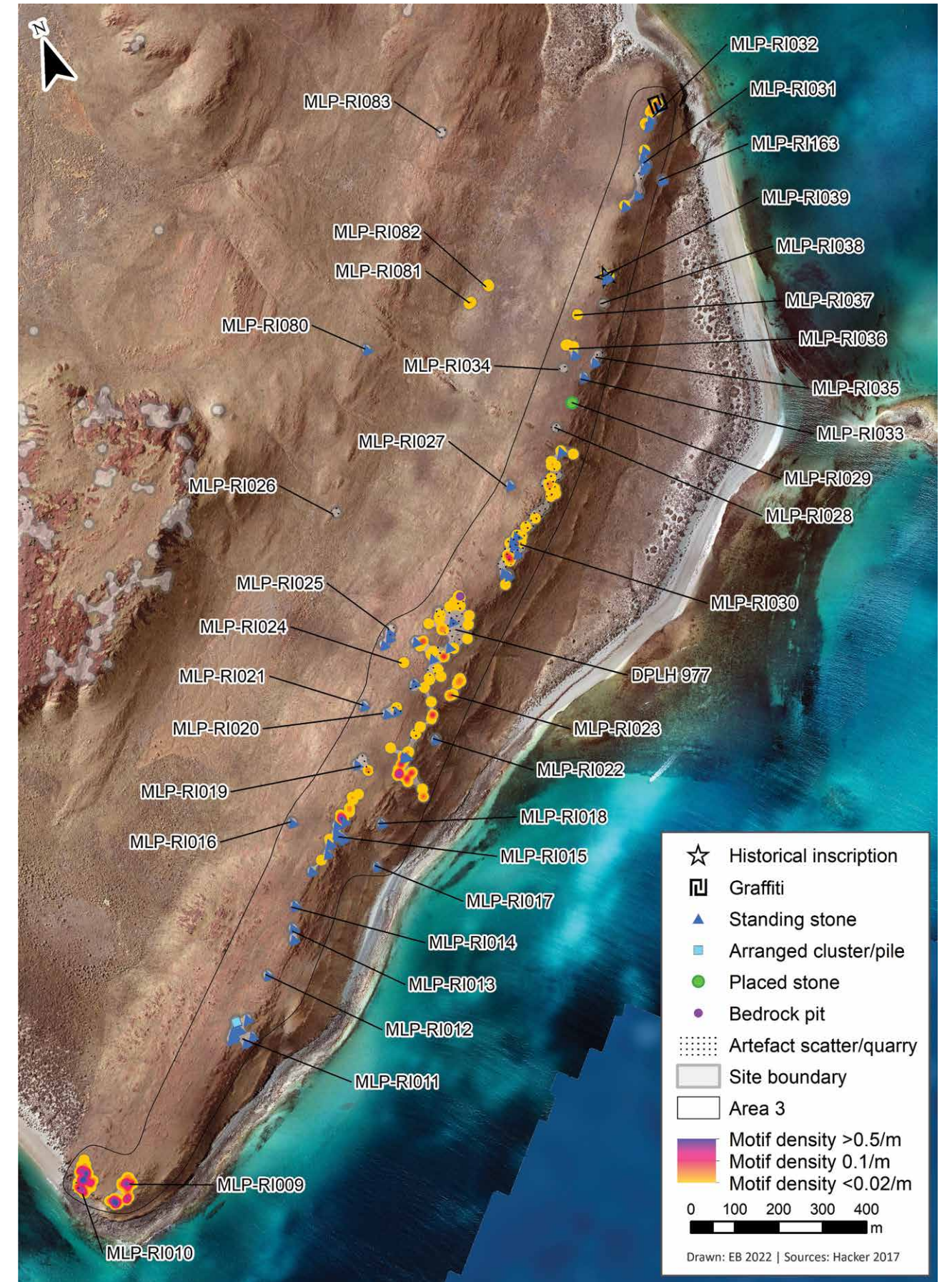
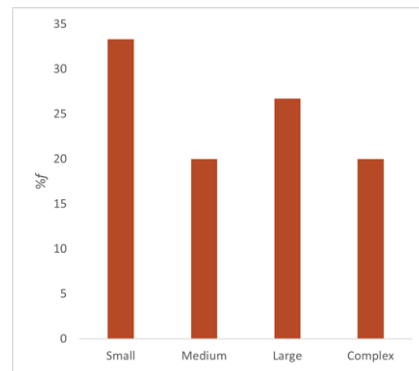


Figure 7.12. Rosemary Island Area 3 showing the distribution of all site types.

The Area 3 site complexes are not located around permanent water sources but represent lookout landscapes. There is a significant amount of tool-stone quarrying along this ridgeline, and many of these engraved motifs are associated with a phenomenal amount of quarried lithic material. This was only fully apparent after the lightning strike fire removed spinifex, increasing ground surface visibility. This quarrying evidence has not been recorded in detail or systematically. More detailed recording of this material could result in several sites being merged. This ridgeline has enormous scientific potential.

CLASS	COUNT	%	COUNT	%
Anthropomorphic	64	5.2	64	6.6
Geometric	640	52.5	640	65.6
Other	250	20.4	-	-
Tracks	122	10.0	122	12.5
Zoomorphic	149	12.2	149	15.3
Total	1,225	100	975	100

Table 7.27. Rosemary Island Area 3: class proportions.

The proportions of the various classes differ here from other Rosemary Island sample areas (Figure 7.11) and this could be in part due to the basal geology. Ovals are present in similar proportions, but there is a sharp increase in linear geometrics here (Table 7.28), particularly grid patterns (n = 122) and parallel line sets (n = 66). There is a small number of phytomorphs (fern designs = 4, pods = 1). Turtles are less dominant in the zoomorphic class, but fish dominate (n = 53) along with several other marine-themed motifs. Marine tails dominate the animal parts, and there is one liver. Macropods and land animals

Just over half of the Area 3 assemblage of 1,225 motifs is geometric, with a relatively high proportion (20.4%) classed as 'other' (Table 7.27). Only three grinding patches were recorded in this sample transect: the 'other' motifs are predominantly directional linear line sets (n = 157) or random scratching (n = 50) and 34 areas of random pecking. There are no incised line sets and no cupules. There are two instances of historical inscriptions and some graffiti at the northern end of this sample area, close to the sheltered Norbel Bay, which is popular with the local boating community.

are almost completely absent. Bird tracks are the most dominant tracks (both four-toed and three-toed), followed by human feet (and one human hand), with relatively few macropod tracks, and a single turtle track. These are very different proportions to those found in Area 2 on the island's north-west coast). Human figures here are dominated by linear forms. There are no images associated with the earlier phases in the Murujuga rock art, such as archaic faces or decorative infill figures, in this assemblage.

SUBJECT	COUNT	%	SUBJECT	COUNT	%
<i>Anthropomorphic</i>			<i>Tracks</i>		
Linear figure	52	4.2	Bird track	99	8.1
Solid figure	12	1.0	Human foot	17	1.4
<i>Geometric</i>			Human hand	1	0.1
Angular	48	3.9	Macropod track	4	0.3
Arc	66	5.4	Turtle trail	1	0.1
Circular	2	0.2	<i>Zoomorphic</i>		
Complex	4	0.3	Animal part	19	1.6
Dot	9	0.7	Bird	12	1.0
Dot and line	1	0.1	Dugong	6	0.5
Dumb-bell	1	0.1	Fish	53	4.3
Linear	309	25.2	Lizard	4	0.3
Material culture	16	1.3	Macropod	1	0.1
Oval	161	13.1	Marine other	7	0.6
Phytomorph	5	0.4	Stingray	3	0.2
Rayed	18	1.5	Terrestrial other	1	0.1
			Turtle	43	3.5
			Total	975	100

Table 7.28. Rosemary Island Area 3: subject proportions.

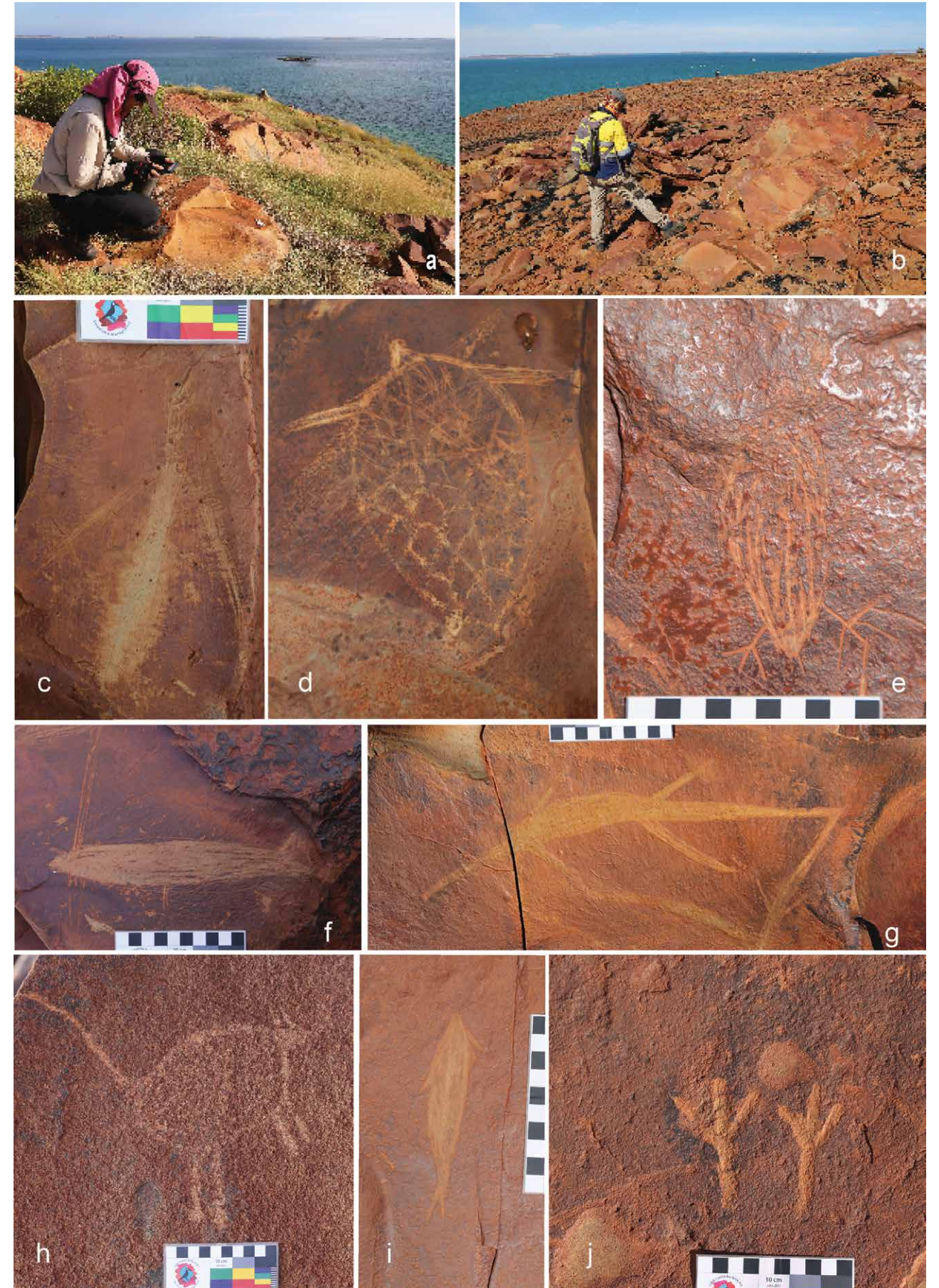


Figure 7.13. Rosemary Island Area 3: landscape (a) before and (b) after grass fire; motifs showing a range of techniques, predominantly scratching and incising (c, e, i) with some pecking (h, j); and some mixed incising and pecking (d). Art was found on many standing stones, including (g) fallen and broken ones.

A historic whaling inscription in this area was made by Jacob Anderson from the North American whaleship *Connecticut* in 1842. Details of this have been published previously (see Paterson et al. 2019a). At first we thought that the historic inscription had been subsequently erased by Aboriginal people who had seen it (Figure 7.14), but use of a DinoLite (digital microscope) indicated that the fine lines of the words and dates of the historic inscription, probably made with a scrimshaw tool, are on top of two incised grid patterns created earlier. Grids as part of the linear geometric component are a common motif type in this area.

The superimposition of the historical inscription over an earlier set of markings requires comment. Given there are other suitably smooth and unmarked surfaces on the same rock surface (and in the vicinity), why was this place chosen by Jacob Anderson? The inscription is skilfully etched in legible script – possibly by two hands, given stylistic difference in lettering. The placement of the inscription over the older grids would have required considerably more skill and effort than if a blank, smooth surface had been selected.

Did the whalers chisel their names and that of

their boat over earlier Aboriginal efforts as an act of trespass and usurpation? Or did they perceive that they were continuing a tradition of marking this coastal landscape? Was the grid seen as a lined page for use by these literate whalers?

We interpreted the Rosemary Island historical inscription to be like those made at the Sydney Quarantine Station on the other side of the continent, where maritime travellers to Australian colonies were held from 1830 onwards (Paterson et al. 2019a: 224). Clarke and Frederick (2016: 521) describe the quarantine mark-making as ‘private declarations of presence, remembering and commemoration’. While the *Connecticut* inscription is ‘highly spatially and temporally bounded’ (ibid.), this is not because of the institutional boundaries that constrained its makers, but rather because of the isolation of this place – and its suitability as a lookout for bay whaling – within the broad seascape of whaling in the Indian Ocean. The recursive effect of extensive Indigenous marking along this ridgeline would appear to have inspired this commemorative act: and the use of the grid lines, as a lined page, can be seen as a respectful cross-cultural exchange.

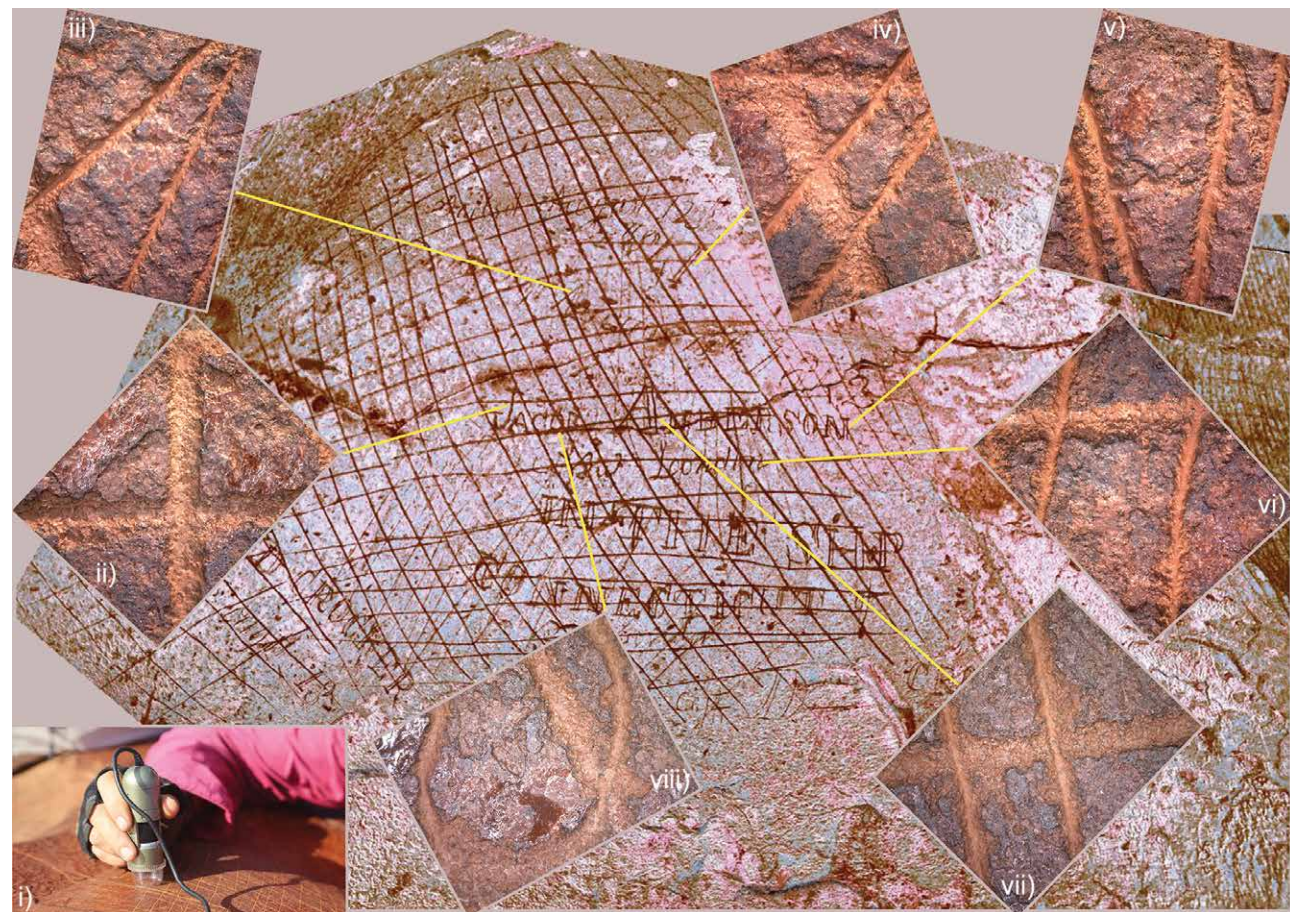


Figure 7.14. Historic whalers' inscription from the ship *Connecticut* in 1842 (from Paterson et al. 2019a: Figure 5).

The most common motif form produced in Area 3 is linear, followed by solid forms, these two forms

accounting for over 72%. There is a lot of variation used in form creation here, with a relatively high proportion of

outlined varieties (16%) and several combination forms (Table 7.29). Pattern infill is limited and found on only 43 motifs in this transect. The forms can be directly

correlated with the techniques being deployed on this smoother, softer geology.

FORM	COUNT	%
Linear	716	58.4
Solid	177	14.4
Outline	70	5.7
Linear; solid	58	4.7
Outline; pattern	37	3.0
Linear; outline	35	2.9
Outline; solid	33	2.7
Scattered marks	30	2.4
Pattern	16	1.3
Linear; outline; pattern	11	0.9
Linear; outline; solid	10	0.8
Linear; scattered marks	9	0.7
Other combination forms	23	1.8
Total	1,225	100

Table 7.29. Rosemary Island Area 3: motif forms.

Scratching is the predominant technique in this area (55%), with an additional 95 motifs involving techniques that combine with scratching (Table 7.30). Given the relative absence of grinding patches, the entire assemblage is considered here. The next most frequently utilised techniques for petroglyph production

are abrasion (16%) and incision (9%). Pecking and pecking-combination forms account for only c. 10% of the motifs. This predominance of techniques which don't involve percussion clearly relates to the nature of the smooth and relatively softer geology along this ridgeline.

TECHNIQUE	COUNT	%
Scratched	671	54.8
Abraded	191	15.6
Incised	107	8.7
Pecked	106	8.7
Abraded; scratched	68	5.6
Gouged	19	1.6
Gouged; pecked	14	1.1
Abraded; pecked	11	0.9
Incised; scratched	11	0.9
Pecked; scratched	10	0.7
Abraded; incised	6	0.5
Combination techniques	11	0.9
Total	1,225	100.0

Table 7.30. Rosemary Island Area 3: motif techniques.

Most of the motifs (88%) along this ridgeline are smaller than 30 cm maximum dimension, and the largest size class is 1–10cm (Table 7.31). There is only one motif larger than 1 m, this being a fish 110 cm long. These size ratios reflect the relatively smaller canvas sizes available in this area and the different techniques used by artists here.

Most of this assemblage (36%) is in contrast state 4 (CS4), followed by CS3 (26%). Fewer of the engraved motifs fall within the earliest two phases, compared to the last (freshest) phase of contrast (Table 7.32). Around 17% of the assemblage has mixed patination

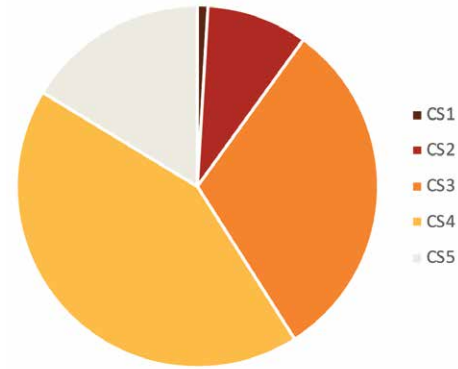
SIZE (CM)	COUNT	%
1–10	454	37.1
11–20	377	30.8
21–30	245	20.0
31–40	77	6.3
41–50	32	2.6
51–60	21	1.7
61–70	8	0.7
71–80	6	0.5
81–90	2	0.2
91–100	2	0.2
101–110	1	0.1
Total	1,225	100.0

Table 7.31. Rosemary Island Area 3: size increments for the motif assemblage.

(NA), making its weathering state not assessable. This is in part due to the predominance of scratching and incising, and the fact that much of the art has not (or has only partially) penetrated the patina during production. Contrast state here is likely not an accurate reflection of the changing focus of art production through time, although the relative dominance of CS4 over CS3 is considered important, as is the higher-than-average proportion of CS5. We interpret the production of art and construction of stone features (and extensive quarrying) as evidence for use of this landscape once it became proximal to the sea (i.e. in the Mid–Late Holocene).

CONTRAST STATE	COUNT	%
CS1	9	0.7
CS2	105	8.6
CS3	321	26.2
CS4	435	35.5
CS5	149	12.2
NA	206	16.8
<i>Total</i>	<i>1,225</i>	<i>100.0</i>

Table 7.32. Rosemary Island Area 3: contrast state of the assemblage.



Stone structures

While only 60% of the ridgeline in this sample transect has been fully documented, 92 standing stones have been recorded in Area 3, these being the predominant structures found here. Each of the recorded stones is within 100 m of another standing stone and it is likely that this pattern continues south towards the southern tip of the ridgeline (Figure 7.10). Only rock art (not stone structures) was recorded at Thring Point. The southern end of the ridgeline has high inter-structure visibility despite the relatively small sizes of the stones used for this purpose, particularly around DPLH 977 (Figure 7.5 and Figure 7.15). Quarrying activity was also noted to be extensive here, suggesting that some of the standing stones could be signalling behaviour related to the

quarrying activities.

A single elongated cluster/pile was identified on the south-western end of the ridgeline within MLP-RI011. This structure has two standing stones at one end and it is surrounded by standing stones (Figure 7.17 g, h). This elongated, mounded structure gives the impression of being a grave; however, the structure dimensions, particularly the length, and the height of the stacked stones do not support this interpretation (Beckett 2021: 249). A single placed structure within MLP-RI029 and a single bedrock pit is constructed from four stones. This structure appears to be an example of modern stone stacking, a common modern practice frequently displayed on social media (see Figure 7.17).

TYPE	COUNT	%
Standing stone	92	96.8
Cluster/pile with standing stone	1	1.1
Discrete placed stone	1	1.1
Bedrock pit	1	1.1
<i>Total</i>	<i>95</i>	<i>100</i>

Table 7.33. Rosemary Island Area 3: standing stone types.

Several of the standing stones were found either with their tops flaked/removed, while a number were also found fallen – and broken. Several of the fallen and broken examples were also found to have scratched designs on them (Figure 17c-d).

It would seem likely that this location became a focus of occupation and structure making and art production after Rosemary Island became isolated

because of sea level rise. This ridgeline, and particularly Thring Point, is the closest point to the other islands, and the fine-grained bedrock here has created a focus for tool stone quarrying as well as art production. The high number of standing stones along this ridge may well form a major medium-distance signalling effort (Beckett 2021).

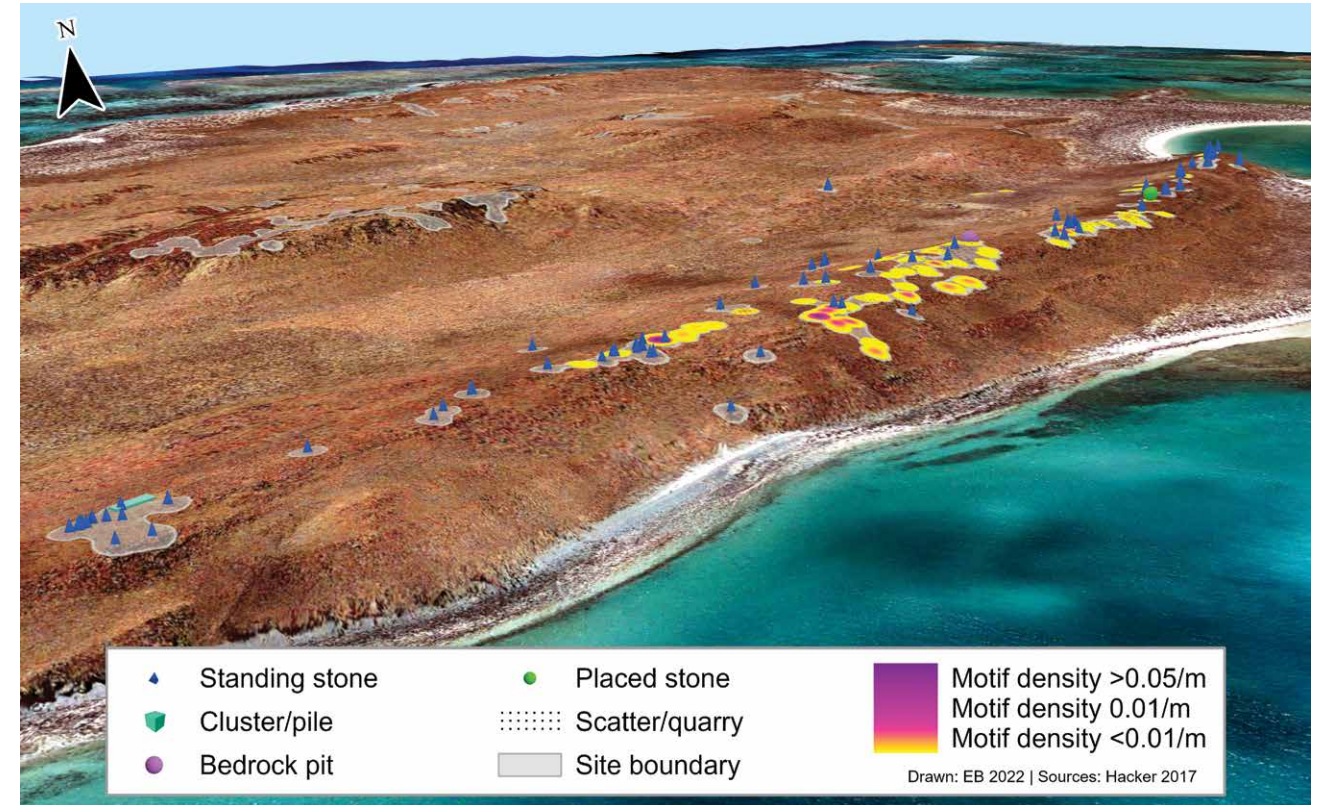


Figure 7.15. Rosemary Island Area 3 ridgeline visualisation showing documented stone structures and rock art density (rock art not recorded south of the area shown).

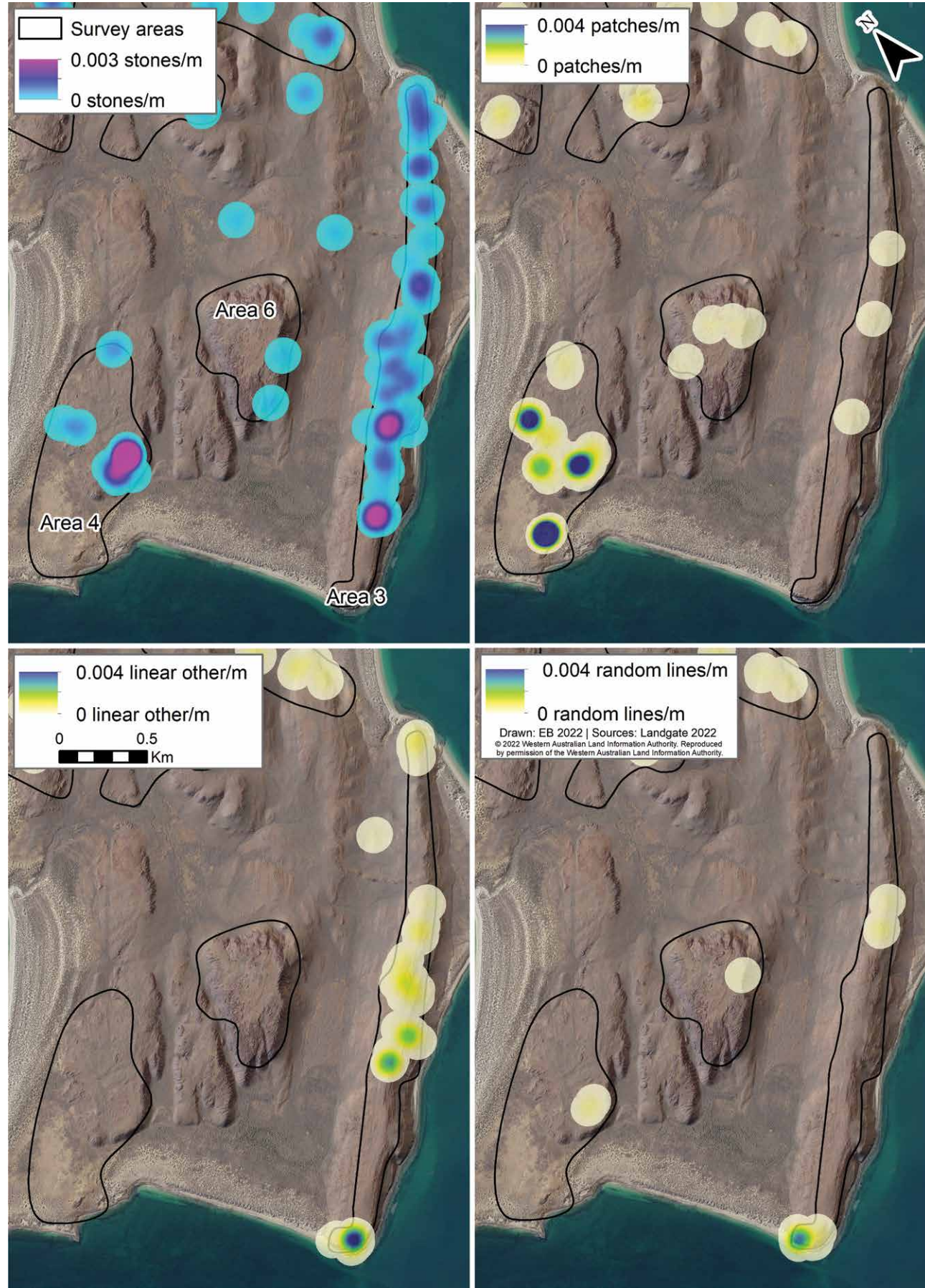


Figure 7.16. Density of standing stones, grinding patches, linear other and random lines across Rosemary Island (kernel density algorithm is calculated with a 100 m radius).



Figure 7.17. Rosemary Island Area 3 stone structure variability: (a) placed stones; (b–e) standing stones; (f) knapped top of a standing stone; and (g, h) the 2 m-long cluster.

Area 4

Area 4 is in the south-eastern quarter of the island on gabbro geology. This geology manifests as a series of flat horizontal platforms and low fractured domes as well as blocky piles of more coarse-grained (gabbro) material. A total of 14 sites were recorded in detail in this sample area (Figure 7.18 and Table 7.34) and three of these sites (DPLH 978, DPLH 11773 and MLP-RI043)

had archaeological excavations. The recording work here focused on rock art sites, and these account for 80% of the sites recorded. A third of these sites had rock art only, while over 50% had rock art combined with other features. Stone artefacts and middens are under-represented in this sample as these were not consistently recorded.

SITE TYPE	COUNT	%
Art; grinding	3	21.4
Art	2	14.3
Art; structure	2	14.3
Art; artefacts; grinding; midden	1	7.1
Art; artefacts; grinding; midden; excavation; archaeological deposit	1	7.1
Art; artefacts; grinding; midden; structure; archaeological deposit; excavation	1	7.1
Art; structure; artefacts; grinding; midden; excavation; archaeological deposit	1	7.1
Art; structure; grinding	1	7.1
Artefacts	1	7.1
Structure	1	7.1
<i>Total</i>	<i>14</i>	<i>100</i>

Table 7.34. Rosemary Island Area 4: site types.

Rock art

There are two very large assemblages and three site complexes: DPLH 6078 (MLP-RI004), DPLH 11773 (MLP-RI008) and DPLH 978 (Wadjuru Rockhole; Table 7.35). There are also five large assemblages, and small and medium-sized sites occur relatively infrequently (Table 7.36). This is an unusual combination of assemblage proportions, reflecting the widespread evidence for a multitude of human activities at the three site complexes (Figure 7.18).

The rock art assemblage at DPLH 978 (MLP-WP001) was recorded by Meg Berry and Ken Mulvaney in 2014, and the 142 grinding patches on

MLP-WP001 were recorded (Berry 2018) but have some missing data for the current analyses. This site complex has an unusually high ratio of grinding patches to rock art (142:50) and it is notable that these two activities are spatially separate. Only two motifs are engraved on the low dome where the 142 grinding patches are located; another engraving is on an isolated horizontal platform with the other 49 on the rocky pile adjacent to the northern edge of the slope above the water. These separated mark-making locations are joined by continuous intervening surface evidence of occupation.

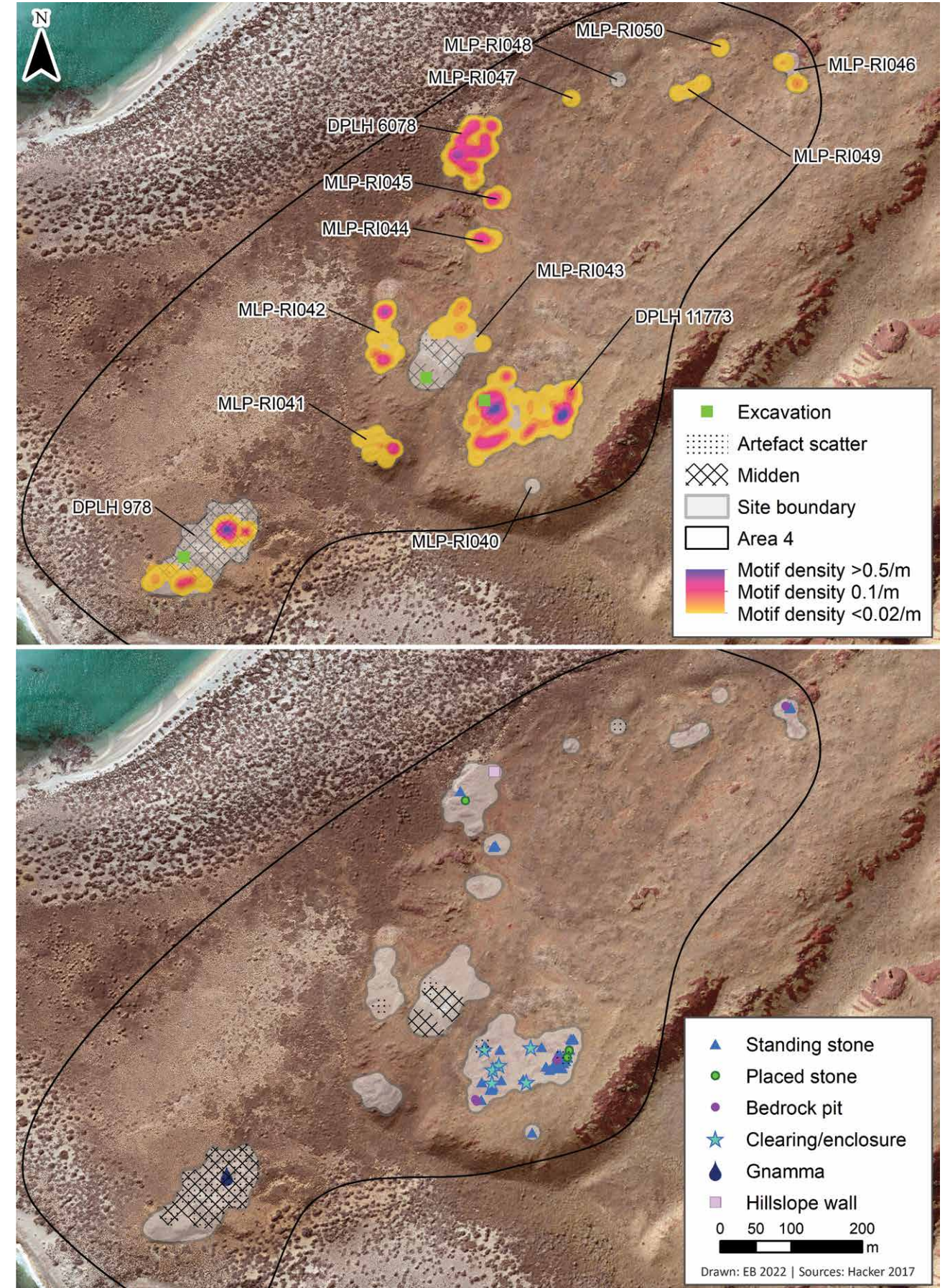


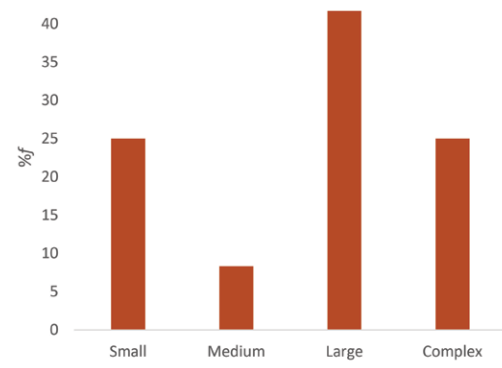
Figure 7.18. Rosemary Island Area 4 showing (top) motif densities relative to the location of excavation squares; and (bottom) the locations of recorded stone structures within the recorded sites.

SITE NAME	MOTIFS
DPLH 11773	637
DPLH 6078	373
DPLH 978 / Wadjuru Rockhole	189
MLP-RI042	105
MLP-RI044	48
MLP-RI045	44
MLP-RI041	44
MLP-RI043	33
MLP-RI046	13
MLP-RI047	3
MLP-RI049	3
MLP-RI050	2
Total	1,494

Table 7.35. Rosemary Island Area 4: rock art sites and assemblage sizes.

ASSEMBLAGE SIZE	COUNT	%
Small	4	25.0
Medium	1	8.3
Large	5	50.0
Complex	2	16.7
Total	12	100.0

Table 7.36. Rosemary Island Area 4: assemblage size proportions.



Almost a third of the assemblage of 1,494 motifs in Area 4 is geometric, and there is a relatively high proportion (25.1%) of tracks (Table 7.37). Anthropomorphic and zoomorphic motifs are present in low, similar proportions (< 10%). 'Other' motifs are less frequent here than in some other sample areas and these are predominantly grinding patches (n = 335, almost half of which are at DPLH 978: see Figure 7.19). There are only small numbers of random pecking (n = 7) or scratching (n = 4). When the 'other' art productions are removed, geometrics account for almost 43% of this assemblage (Table 7.37).

There are high densities of motifs across DPLH 11773, particularly on its eastern and western margins. Grinding patches are mostly on platform 1 (west) near the house structures. Track motifs are concentrated on

platform 6 (east), where there are also many standing stones (Figure 7.18). The highest concentration of grinding patches in this area was found on the low dome around the permanent pool and previously recorded modified gnamma (MLP-WP001: DPLH 978).

DPLH 11773 is in gently sloping terrain, with higher ground in the east and lower ground in the west. The standing stones are generally only visible as you approach the site from the south (the original site record noted '15 erect stones 0.5–1 metre in height (5 or 6 leaning – probably had been upright) and a further 20' were observed along with '12 clear grinding surfaces' (Dix and Virili 1977). This site presents very different placements and types of inter-visibility of standing stones compared with those recorded on elevated ground and along ridges in Area 2 and Area 3.

CLASS	COUNT	%	COUNT	%
Anthropomorphic	143	9.6	143	12.5
Geometric	490	32.8	490	42.7
Other	346	23.2	-	-
Tracks	375	25.1	375	32.7
Zoomorphic	140	9.4	140	12.2
Total	1,494	100	1,148	100

Table 7.37. Rosemary Island Area 4: class proportions.



Figure 7.19. Rosemary Island Area 4: landscapes showing (a, c) flat gabbro platforms and (b) associated midden; examples of (d) human feet in trails; (e) concentric arcs; (f) dugong; (g) geometric design and macropod tracks; (h) turtle on a line; (i) human foot; and (j) large fish with diagnostic features..

As found in the other Rosemary Island sample areas, several old complex geometric forms. Bird tracks are the most common tracks – more than twice as common as human and macropod tracks. There are no turtle tracks here. There are no grids in this area, and linear motifs here are a mixed category which includes

several old complex geometric forms. Bird tracks are the most common tracks – more than twice as common as human and macropod tracks. There are no turtle tracks here.

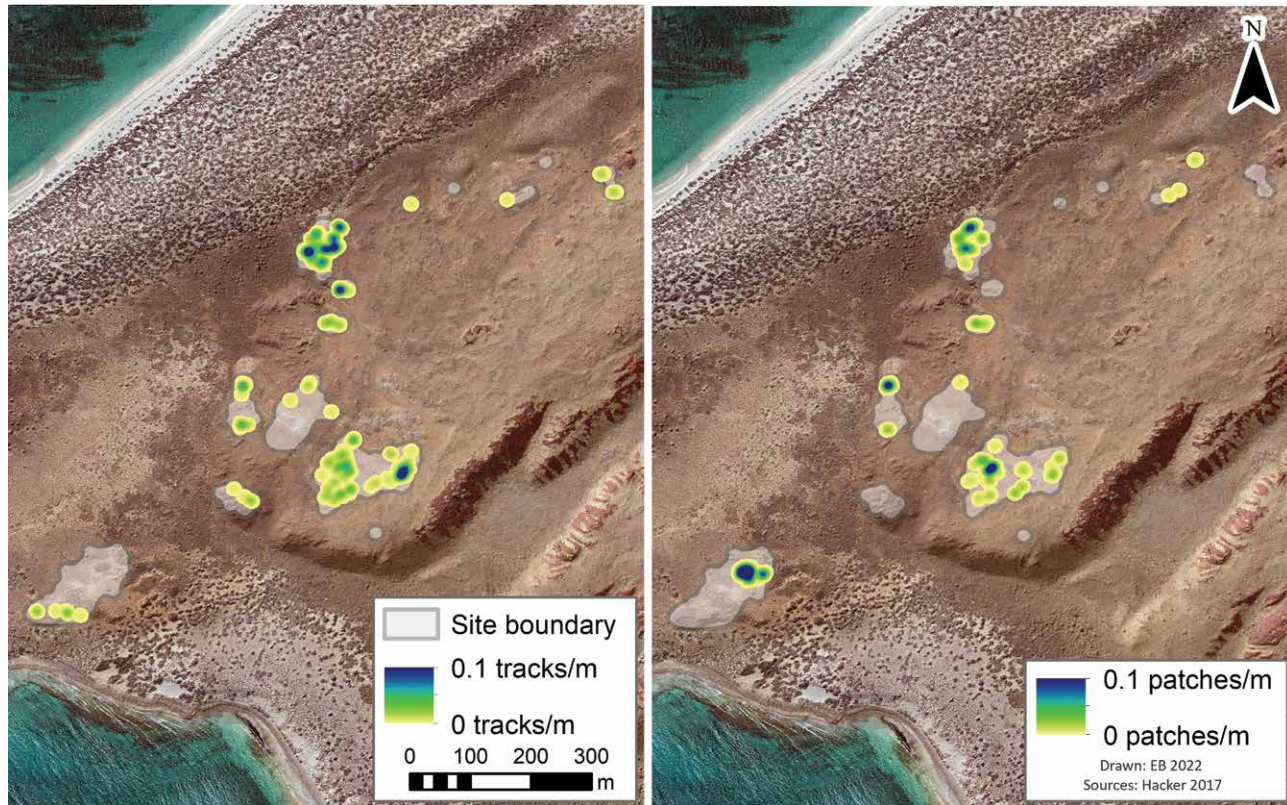


Figure 7.20. Rosemary Island Area 4 tracks and grinding patch densities.

Two archaic faces and two decorative infill human figures indicate motifs/styles associated with the earliest phases of Murujuga rock art production. Most of the human forms here, however, are linear figures, along with some solid forms and profile figures. There are few figures with headdresses. Turtles and other marine themes (fish, dugong, stingrays) dominate the

zoomorphs, with some birds, lizards, macropods and other quadrupeds and just two snakes (Table 7.38).

The most common motif form produced here is solid, followed by linear and then outline forms (Table 7.39). There is a lot of variation in the forms created here, and a relatively high proportion of outlined forms, including combinations (20%). Only 36 motifs have patterned infill.

MOTIF	COUNT	%	MOTIF	COUNT	%
<i>Anthropomorphic</i>			<i>Tracks</i>		
Combination figure	3	0.3	Bird track	168	14.6
Decorative infill figure	2	0.2	Human foot	98	8.5
Face	2	0.2	Human hand	13	1.1
Linear figure	81	7.1	Macropod track	87	7.6
Outline figure	7	0.6	Other track	9	0.8
Profile figure	13	1.1	<i>Zoomorphic</i>		
Solid figure	35	3.0	Animal part	8	0.7
<i>Geometric</i>			Bird	10	0.9
Angular	38	3.3	Dugong	3	0.3
Arc	150	13.1	Fish	24	2.1
Circular	27	2.4	Lizard	11	1.0
Complex	15	1.3	Macropod	9	0.8
Dot	27	2.4	Marine other	4	0.3
Dot and line	4	0.3	Quadruped	8	0.7
Dumb-bell	1	0.1	Snake	2	0.2
Linear	74	6.4	Stingray	3	0.3
Material culture	4	0.3	Terrestrial other	6	0.5
Oval	135	11.8	Turtle	52	4.5
Rayed	15	1.3	Total	1,148	100

Table 7.38. Rosemary Island Area 4: subject proportions in depictive classes.

FORM	COUNT	%
Solid	616	41.2
Linear	396	26.5
Outline	171	11.4
Solid; linear	121	8.1
Outline; linear	93	6.2
Outline; solid	27	1.8
Outline; pattern	14	0.9
Scattered marks	6	0.4
Outline; pattern; solid	4	0.3
Other combinations	46	3.1
Total	1,494	100

Table 7.39. Rosemary Island Area 4: forms of all motifs.

Pecking is the dominant technique here (74%), followed by abrasion (335 grinding patches), with all other techniques contributing less than 1% each (Table

7.40). The use of pecking here clearly relates to the gabbro lithology on this side of the island and possibly also the largely horizontal nature of the panel surfaces.

TECHNIQUE	COUNT	%
Pecked	1,106	74.0
Abraded	346	23.2
Pounded	14	0.9
Pecked; abraded	12	0.8
Scratched	7	0.5
Abraded; pecked	4	0.3
Incised	3	0.2
Pounded; abraded	1	0.1
Pecked; gouged	1	0.1
Total	1,494	100

Table 7.40. Rosemary Island Area 4: technique.

Most of the motifs (65%) in this sample area are smaller than 30 cm maximum dimension, but only a small proportion is less than 10 cm long (Table 7.41). The generally mid-range size categories here result from the chosen techniques (and the absence of small scratched images) as well as the variable range of possible canvas

sizes available in this area. Seven motifs are larger than 1 m in length, including a large macropod, a large fish, a large dugong and another fish which has been speared. The longest motif is a single line which has been pecked across a flat panel (on MLP-RI008) between two natural cracks.

SIZE	COUNT	%	SIZE	COUNT	%
1-10	256	17.1	71-80	17	1.1
11-20	415	27.8	81-90	10	0.7
21-30	296	19.8	91-100	5	0.3
31-40	193	12.9	101-110	4	0.3
41-50	83	5.6	111-120	2	0.1
51-60	42	2.8	161-170	1	0.1
61-70	22	1.5	NA	148	9.9
			Total	1,494	100.0

Table 7.41. Rosemary Island Area 4: size increments of the assemblage.

Less than a third (30%) of the assemblage is contrast state 3; the second-highest colouration phase is CS2 (17%). More of the engraved motifs fall within the earliest phase (10%) compared to the last phase of contrast – but there are more motifs with CS4 than CS1

(Table 7.42). A small proportion (10%) of the assemblage has mixed patination (NA). Several panels and motifs were observed to have desert varnish over them, adding to the impression (and the motif style indications) that some of the art here is likely to be very old.

CONTRAST STATE	COUNT	%
CS1	155	19.2
CS2	259	33.4
CS3	451	30.2
CS4	208	13.9
CS5	30	2.0
NA	249	-
<i>Total</i>	<i>1,352</i>	<i>100</i>

Table 7.42. Rosemary Island Area 4: contrast state of the assemblage. *note the 142 grinding patches on WP did not have this value counted

Stone structures

A total of 71 stone structures were recorded in Area 4 (Table 7.43). Most of the stone structures (89%) are on MLP-RI008 (DPLH 11773). Most of these are standing stones (82.5%), the majority (n = 37 or 65%) found on the easternmost platform. The three placed stones (one on DPLH 6078 and two in DPLH 11773) were found amongst other standing stones and these are interpreted as likely fulfilling a similar role to the standing stones.

All six structures in Area 4 are clearings/enclosures in the centre and west of DPLH 11773.

TYPE	COUNT	%
Standing stone	57	80.3
Clearing/enclosure	6	8.5
Bedrock pit	4	5.6
Placed stone	3	4.2
Landscape wall	1	1.4
<i>Total</i>	<i>71</i>	<i>100.0</i>

Table 7.43. Rosemary Island Area 4: stone structure types.

The standing stones on this site appear to have encoded local ritual behaviour (Beckett 2021: 234). Within this site complex there is separation between utilitarian and domestic activities which can be seen on the lower (western) platforms situated closer to the midden and waterhole further downslope (MLP-RI043). These parts of the site seem spatially separated from the standing stones on the eastern side of this site. Rock art, however, is continuous across the site complex,

Occupation deposit within one of these structures was found to be 8,063–7,355 cal. BP (McDonald and Berry 2016). These structures have been interpreted as having a domestic function given their association with occupation evidence and grinding patches. Three of the four bedrock pits identified within Area 4 were also found on DPLH 11773. These structures may have been a different type of shelter or related to extractive behaviours, for example, removing calcium carbonate to encourage water seepage (Beckett 2021: 309).

although higher densities can be seen in both east and west. The proximity of the domestic structures to the standing stones, accompanied by intervening evidence of rock art production, midden and stone artefacts, suggests that the arrangement of these standing stones was not restricted (i.e. secret/sacred). They would have been visible to all group(s) living in the structures and camping more broadly across this landscape (Berry 2018; McDonald and Berry 2016; Beckett 2021: 234).



Figure 7.21. Rosemary Island Area 4: (a) landscape after firing with the six panels of MLP-RI008 reflected in the sunlight; (b-c) with both short standing stones and cleared structures across these six panels; and (d-f) some examples of the chocked standing stone on platform 6.

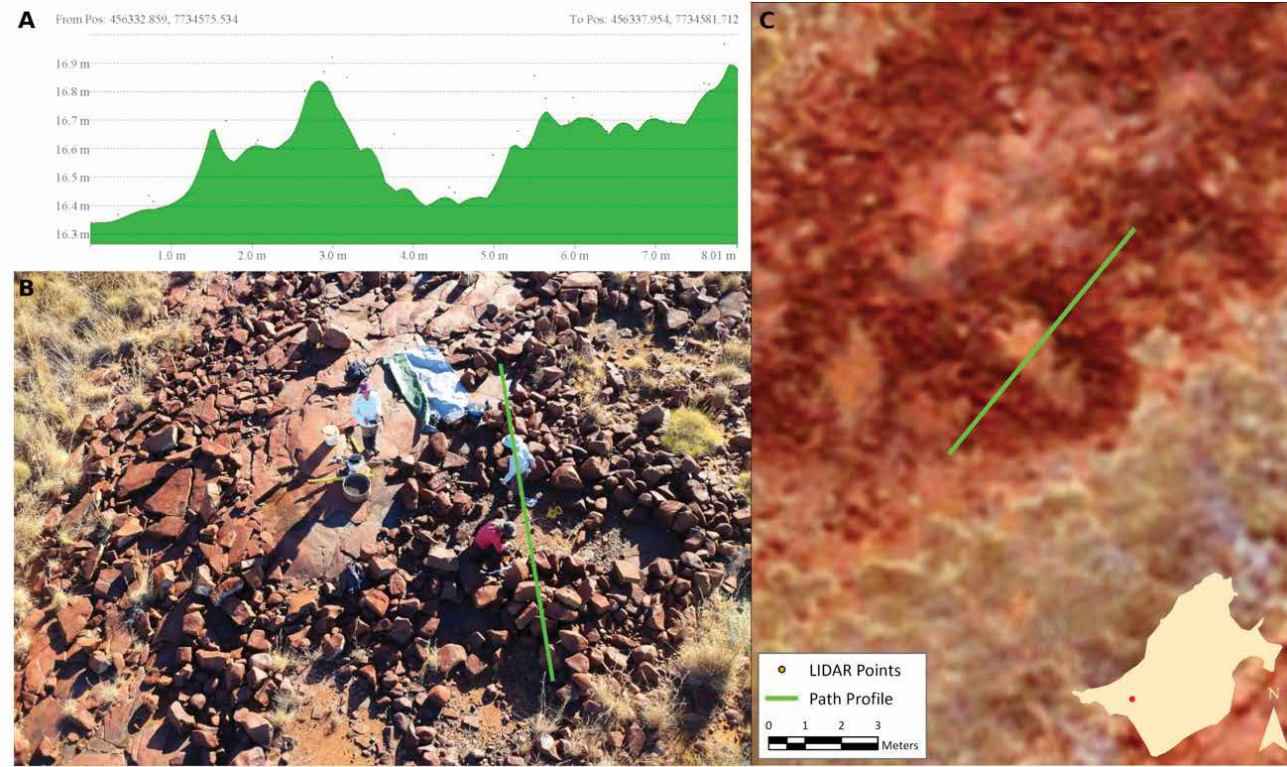


Figure 7.22. Rosemary 8 house structure visualised (a) in cross-section; (b) during excavation as seen from a drone (from McDonald et al. 2020: Figure 17); and (c) using LiDAR imagery.



Figure 7.23. Rosemary Island Area 4: (a) standing stone in 3D; (b) placed megalith on site MLP-RIA044 with grinding patches in mid-frame; and (c) cluster of standing stones on platform 6.

Area 5

Area 5 is in the centre of the island and includes 10 sites. The focus here was initially on an interior gully with a rock pool which retains water after rain. One excavation square was positioned adjacent to this rock pool which is also the focus for the main rock art assemblage (Site RIA-005; see Chapter 8). In the upper headwaters of this gully is an area of extensive rock wall modifications, the subject of detailed recording work (Beckett 2021). Two excavation squares (which revealed no archaeolog-

ical evidence) were located within two different stone features (see Chapter 8). Additional areas with art and stone features were recorded in this sample area when survey in several directions encountered further rock art (Figure 7.20). Nine sites with art contained a total of 226 motifs (Table 7.45). There is one site complex, located around the ephemeral water source, but most art assemblages – other than in the central valley itself – are small or medium-sized (Table 7.46).

SITE TYPE	NO.	%
Art	3	30
Art; structure	3	30
Art; grinding	2	20
Art; structure; artefacts; grinding; archaeological deposit	1	10
Structure	1	10
<i>Total</i>	<i>10</i>	<i>100</i>

Table 7.44. Rosemary Island Area 5: site types.

Rock art

Most of the assemblages in this sample are small. The single site complex here (Site MLP-RI005: Table 7.45) is located around the central valley's ephemeral rock hole. The rock art at this site is mostly clustered around the rock hole, while in the upper reaches of the gully there

is an extensive set of heaped stone walling and circles, with sparse and widely dispersed petroglyphs. There are no large sites here but some small and medium-sized sites (Table 7.46).

SITE NAME	MOTIFS	SITE NAME	MOTIFS
MLP-RI005	181	MLP-RI057	5
MLP-RI056	12	MLP-RI058	2
MLP-RI054	10	MLP-RI055	2
MLP-RI090	7	MLP-RI053	1
MLP-RI059	6	<i>Total</i>	<i>226</i>

Table 7.45. Rosemary Island Area 5: rock art sites assemblage sizes.

ASSEMBLAGE SIZE	COUNT	%
Small	4	44.4
Medium	4	44.4
Complex	1	11.1
<i>Total</i>	<i>9</i>	<i>100</i>

Table 7.46. Rosemary Island Area 5: assemblage size proportions.

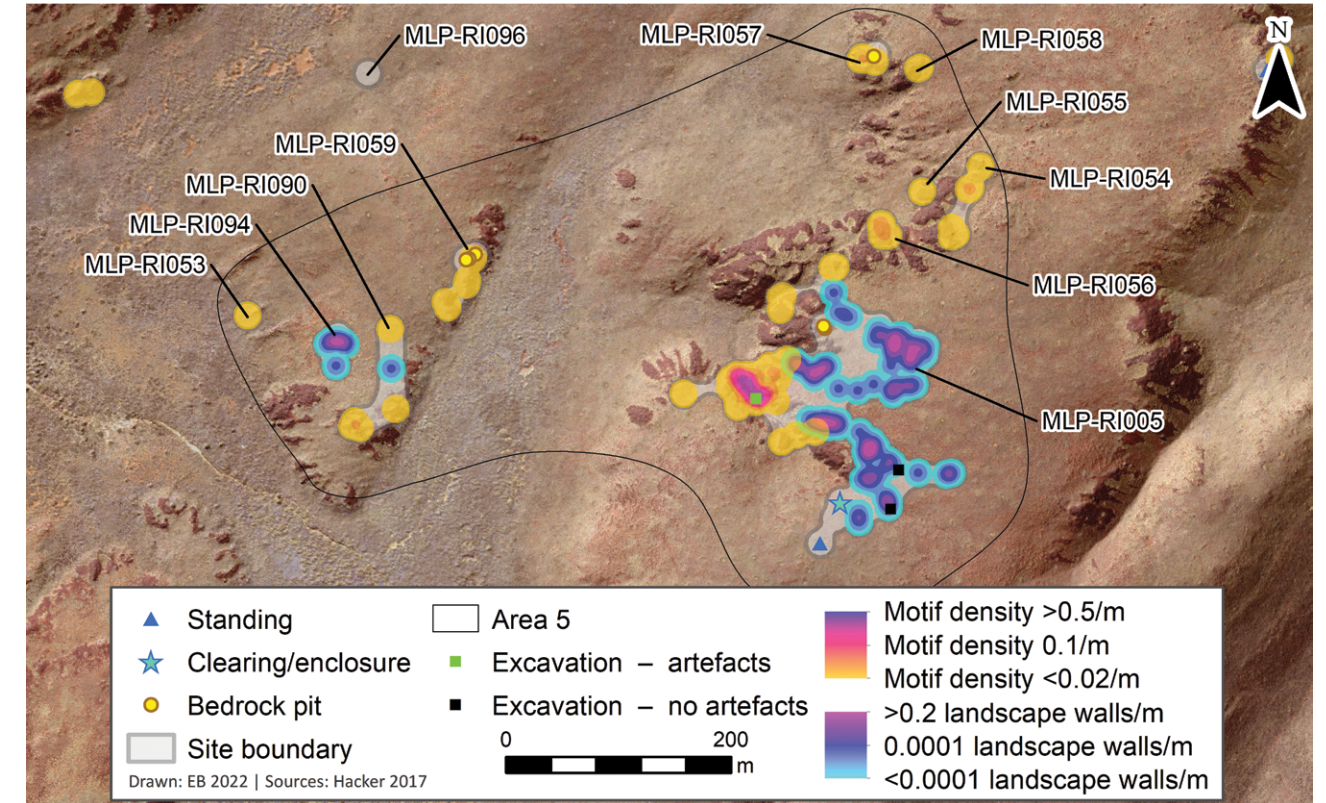
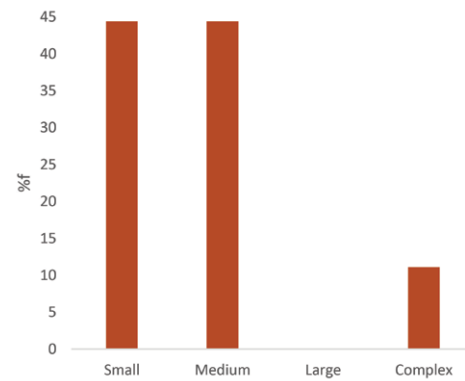


Figure 7.24. Rosemary Island Area 5 showing location of all sites and the excavation squares.

More than a third (36.7%) of the 226 motifs in Area 5 is geometric, with only a small proportion (6.6%) classed as 'other', including 12 grinding patches. Once these non-depictive elements are removed, geometrics

account for almost 40% of this assemblage, followed by anthropomorphs, tracks and then zoomorphs (Figure 7.25 and Table 7.47). No graffiti was encountered in this area.

CLASS	MOTIFS	%	MOTIFS	%
Anthropomorphic	54	23.9	54	25.6
Geometric	83	36.7	83	39.3
Other	15	6.6		
Tracks	43	19.0	43	20.4
Zoomorphic	31	13.7	31	14.7
<i>Total</i>	<i>226</i>	<i>100</i>	<i>211</i>	<i>100</i>

Table 7.47. Rosemary Island Area 5: class proportions.

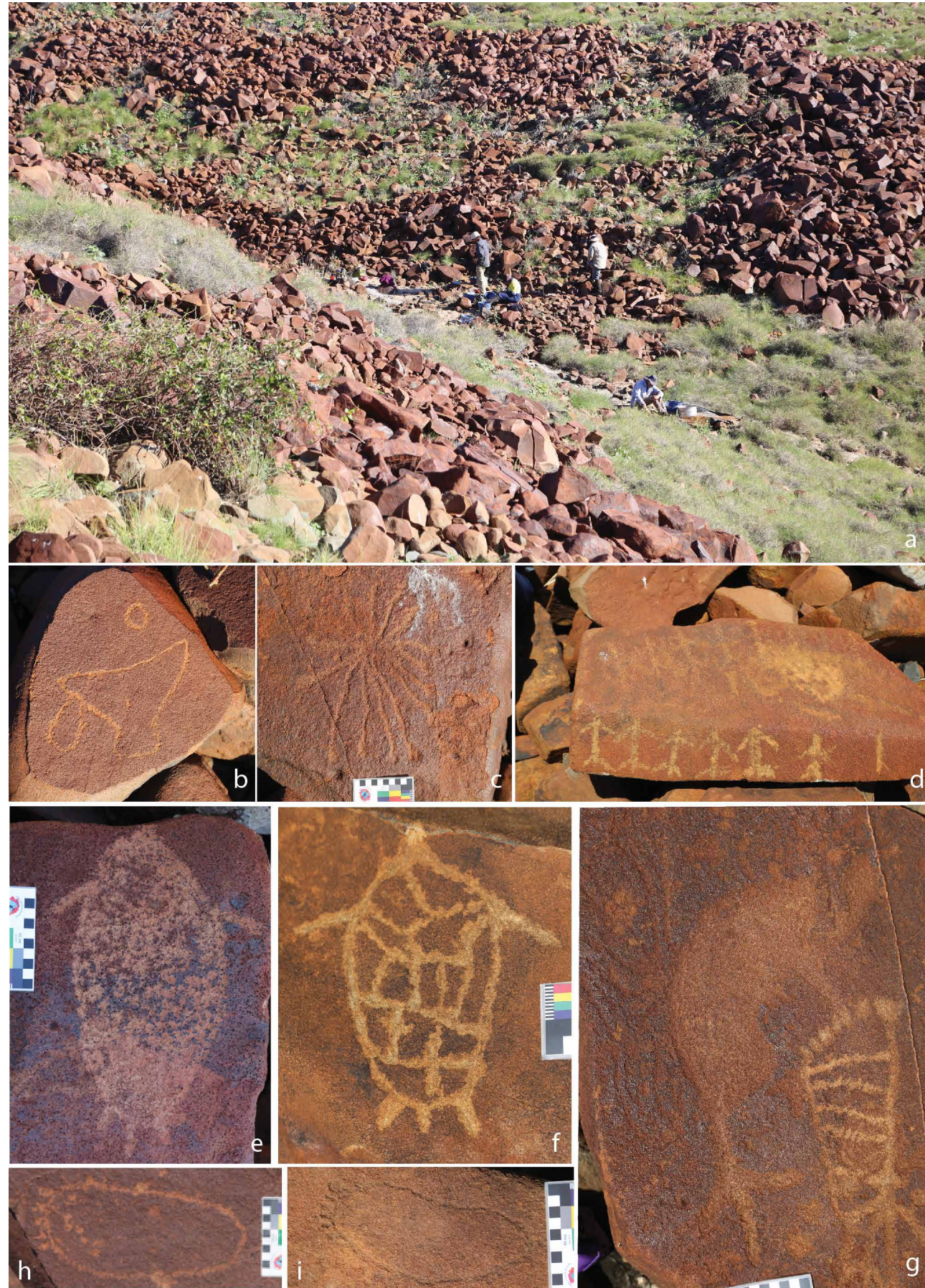


Figure 7.25. Rosemary Island Area 5: (a) landscape during excavation; (b) whale tail, circle and oval; (c) radiating star design; (d) row of recent human figures on two surfaces of panel; (e-f) turtles with different carapace designs; (g) complex panel with superimposition of bird over geometric motif and more recent foot with sandal design; (h-i) and two other human foot motifs, created at different times.

Ovals and linear motifs are the most common geometrics here (Table 7.48). Tracks are dominated by bird tracks (a mixture of three-toed and four-toed varieties), followed by human tracks, some in pairs: around half of these have five toes, while the remainder have six or more (some with sandals). Human figures are dominated by linear forms, and there are six solid figures and two profile figures (including a series of men hanging below a horizontal line). There are no headdress figures, decorative infill figures or disarticulated dot-heads

in this area, that is, artwork diagnostic to particular style phases. A single archaic face was located on the ridgeline above the valley to the north of the site. Turtles dominate the zoomorphs, and there are three birds and three lizards.

There are no macropods or quadrupeds (the 'terrestrial other' motifs are two echidnas and a partial thylacine). There is only one fish (but there are several marine tails).

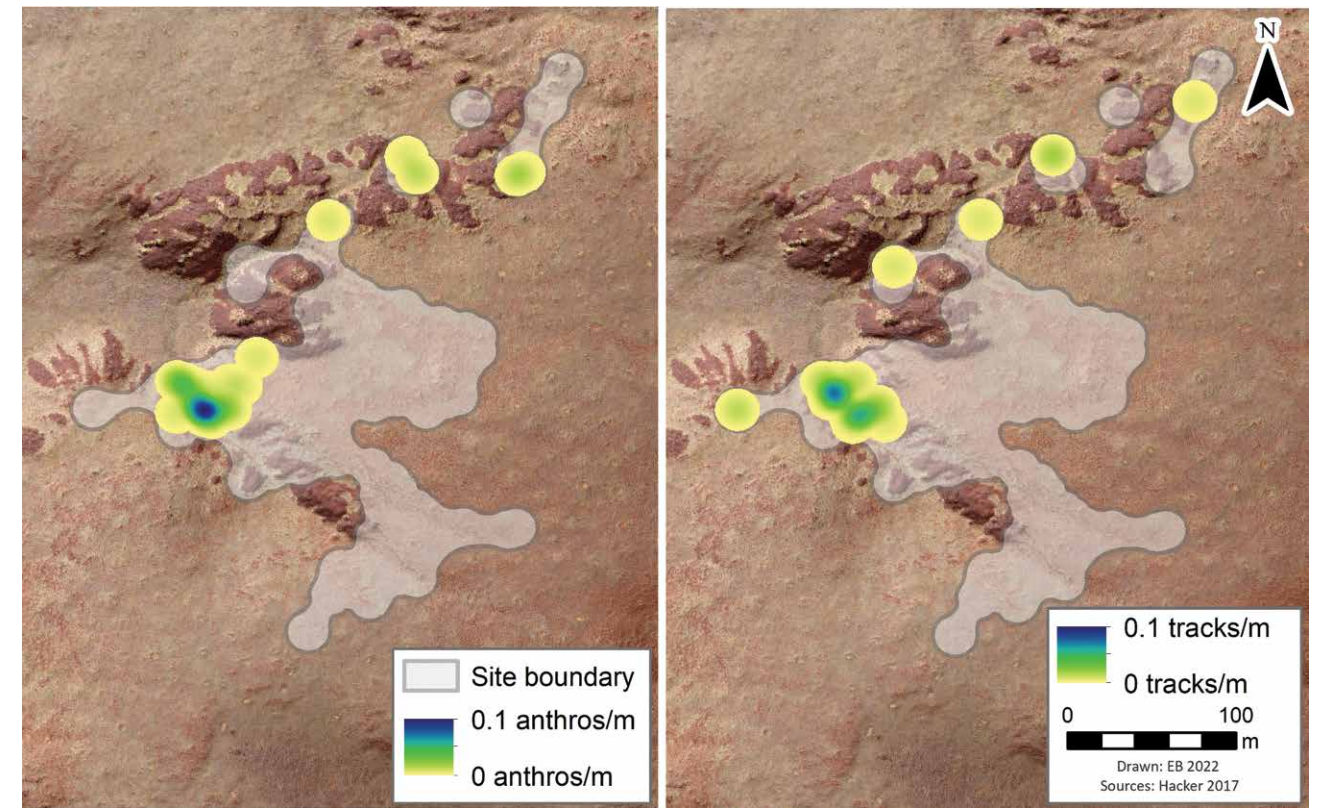


Figure 7.26. Density of anthropomorphs and tracks within MLP-RI005.

SUBJECT	COUNT	%	SUBJECT	COUNT	%
<i>Anthropomorphic</i>			<i>Geometric</i>		
Face	1	0.5	Angular	11	5.2
Linear figure	42	19.9	Arc	16	7.6
Outline figure	2	0.9	Circular	5	2.4
Profile figure	3	1.4	Complex	4	1.9
Solid figure	6	2.8	Dot	3	1.4
<i>Zoomorphic</i>			Linear		
Animal part	4	1.9	Oval	20	9.5
Bird	3	1.4	Rayed	4	1.9
Fish	1	0.5	<i>Tracks</i>		
Lizard	3	1.4	Bird track	25	11.8
Terrestrial other	3	1.4	Human foot	13	6.2
Turtle	17	8.1	Macropod track	4	1.9
			Other track	1	0.5
			<i>Total</i>	<i>211</i>	<i>100</i>

Table 7.48. Rosemary Island Area 5: subject proportions.

The most common (52%) motif form in this area is linear, followed by solid and outlined and solid + linear forms (Table 7.49). There is not a lot of variation in the combination forms created here, and only nine motifs with patterned infill (3%).

FORM	NO.	%
Linear	117	51.8
Solid	33	14.6
Outline	25	11.1
Solid; linear	27	11.9
Linear; outline	8	3.5
Other combinations	16	7.1
Total	226	100.0

Table 7.49. Rosemary Island Area 5: form.

The assemblage is predominantly (86%) smaller than 30 cm in size (Table 7.51). No motifs are larger than 1 m in size. This reflects the available canvas size in this blocky gabbro landscape, with no large horizontal platforms here.

TECHNIQUE	NO.	%
Pecked	171	75.7
Abraded	37	16.4
Pecked; abraded	8	3.5
Scratched	6	2.7
Incised	2	0.9
Pecked; incised	2	0.9
Total	226	100

Table 7.50. Rosemary Island Area 5: technique.

SIZE INCREMENT	NO.	%
1-10	51	22.6
11-20	92	40.7
21-30	51	22.6
31-40	18	8.0
41-50	10	4.4
51-60	1	0.4
81-90	3	1.3
Total	211	100.0

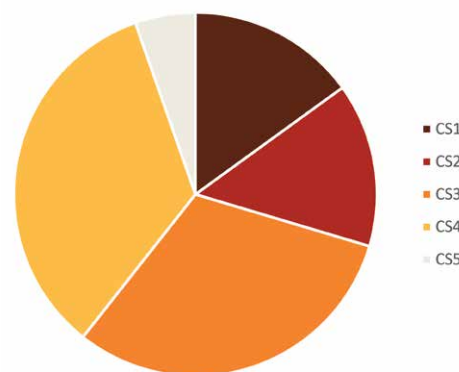
Table 7.51. Rosemary Island Area 5: size increments of motifs.

Most of the assemblage (59%) is in contrast states 3 and 4. A sizeable proportion of the engraved motifs fall within the two earliest phases of contrast (Table 7.52),

CONTRAST STATE	COUNT	%
CS1	31	13.7
CS2	30	13.3
CS3	64	28.3
CS4	70	31.0
CS5	11	4.9
NA	20	8.8
Total	211	100.0

Table 7.52. Rosemary Island Area 5: contrast state of the assemblage.

and very little (5%) falls within the most recent phase of production.



Stone structures

The majority (n = 68) of structures in Area 5 were on the upper slopes around the gully now known as MLP-RI005. These were predominantly (94.1%) low stacked walls and depressions (Figure 7.27 and Table 7.53). It has been argued that these structures may have been constructed to assist in the retention of sediment/moisture and to encourage plant growth in this area (Beckett 2021: 322; following Buck 2018). Further examination of these structures, including analysing soil samples retained during the excavations, may yield more evidence to support this hypothesis.

STRUCTURE TYPE	COUNT	%
Landscape wall	71	89.9
Bedrock pit	6	7.6
Clearing/enclosure	1	1.3
Standing stone	1	1.3
Total	79	100

Table 7.53. Rosemary Island Area 5: stone structure types.



Figure 7.27. Rosemary Island Area 5 structure types recorded in the central valley including (a-b) clearing enclosures; (c-d) landscape walls; and (e-f) bedrock pits.

Area 6

Area 6 is in the central southern part of the island. These high gabbro uplands have several interior valleys, and panels were also recorded on the sheer north and eastern faces. Rock art was first observed in this vicinity by Dix and Randolph in 1970s, and their site (Rosemary 07: DPLH 11777) appears to cover the 'main valley and

boulder ridges' to the south-west of the area covered by Area 6. We initially targeted an interior valley with a rock pool that we had observed during the NHL project, when we landed by helicopter in this vicinity (McDonald and Veth 2006).

Rock art

All 20 sites in this area have rock art (85%); five of the sites have rock art associated with other features (Table 7.54). An overall assemblage of 282 motifs (Table 7.55) was recorded from these sites. While the focus here

was on rock art, all stone structures encountered were recorded. Artefacts and middens may be under-represented here, although these were not as prolific as noted in other samples.

SITE TYPE	COUNT	%
Art	15	75
Art; grinding	3	15
Art; structure	1	5
Art; structure; grinding	1	5
Total	20	100

Table 7.54. Rosemary Island Area 6: site types.

SITE NAME	MOTIFS	SITE NAME	MOTIFS
MLP-RI006	81	MLP-RI072	3
MLP-RI077	66	MLP-RI073	3
MLP-RI067	45	MLP-RI074	3
MLP-RI068	25	MLP-RI075	3
MLP-RI062	24	MLP-RI066	2
MLP-RI064	5	MLP-RI078	2
MLP-RI065	5	MLP-RI060	1
MLP-RI063	4	MLP-RI069	1
MLP-RI071	4	MLP-RI070	1
MLP-RI061	3	MLP-RI076	1
Total		282	

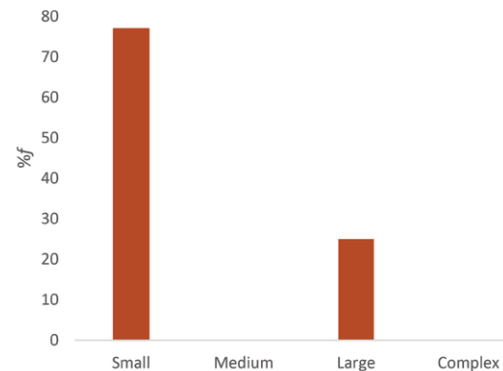
Table 7.55. Rosemary Island Area 6: rock art sites and assemblage sizes.

There are no complex-sized assemblages here or medium-sized sites; they are all either small or large assemblages (Table 7.56). This is an unusual combination of assemblage sizes for both this island and generally

across the archipelago. While there is an internal drainage line within this massif, only an ephemeral water hole was observed.

ASSEMBLAGE SIZE	COUNT	%
Small	15	75
Large	5	25
Total	20	100

Table 7.56. Rosemary Island Area 6: assemblage size proportions.



A relatively small and dispersed assemblage was recorded in this area. A relatively low number of 'other' markings were noted, with only six grinding patches contributing to these (Table 7.57). Geometrics account for the largest proportion of the recorded classes, followed by equal contributions of tracks and anthropomorphs. Animal motifs have the lowest contribution to this assemblage.

CLASS	COUNT	%	COUNT	%
Anthropomorphic	67	23.8	67	24.6
Geometric	108	38.3	108	39.7
Other	10	3.5		
Tracks	71	25.2	71	26.1
Zoomorphic	26	9.2	26	9.6
Total	282	100.0	272	100.0

Table 7.57. Rosemary Island Area 6: class proportions.

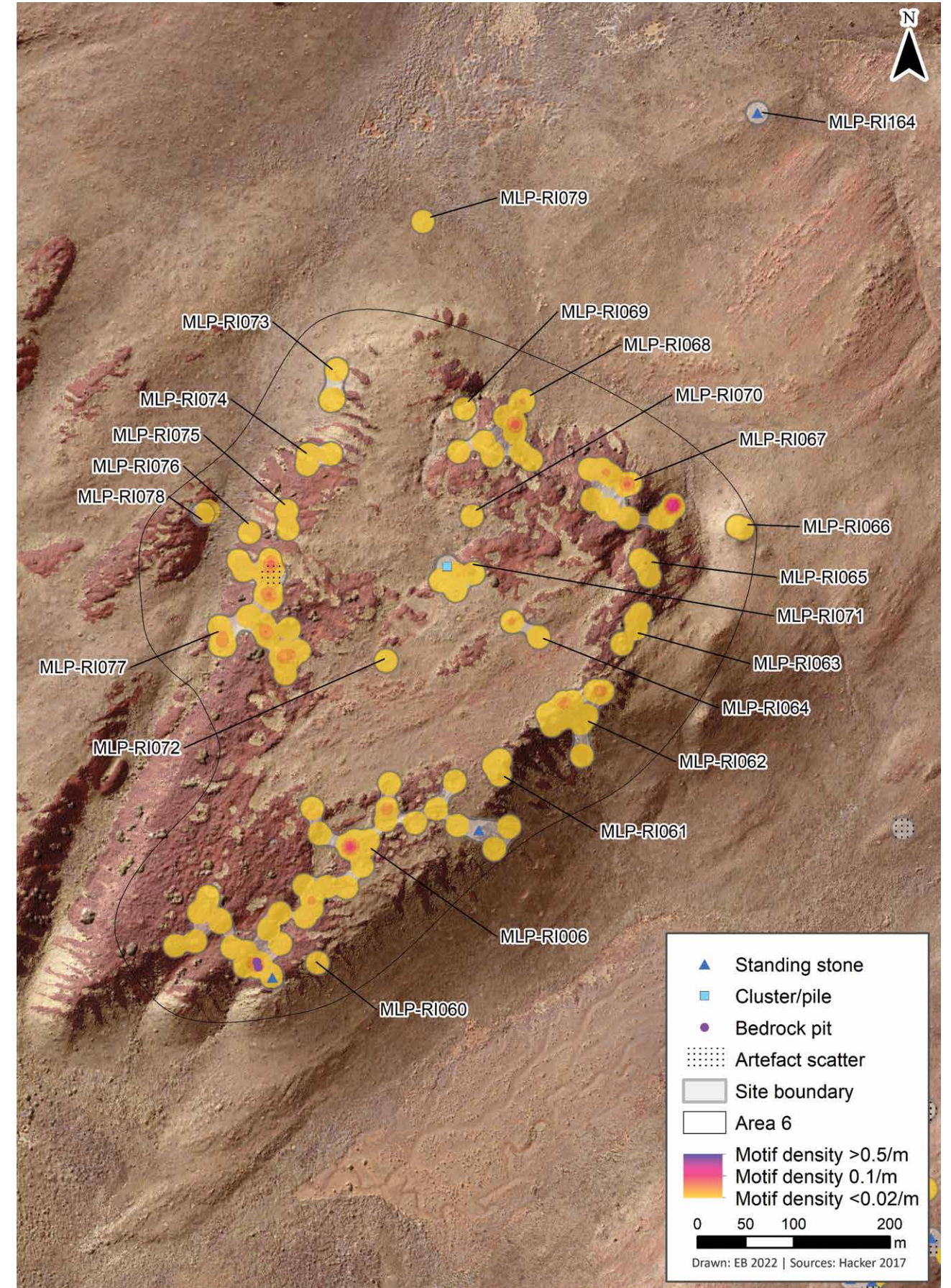


Figure 7.28. Rosemary Island Area 6 showing location of sites recorded.

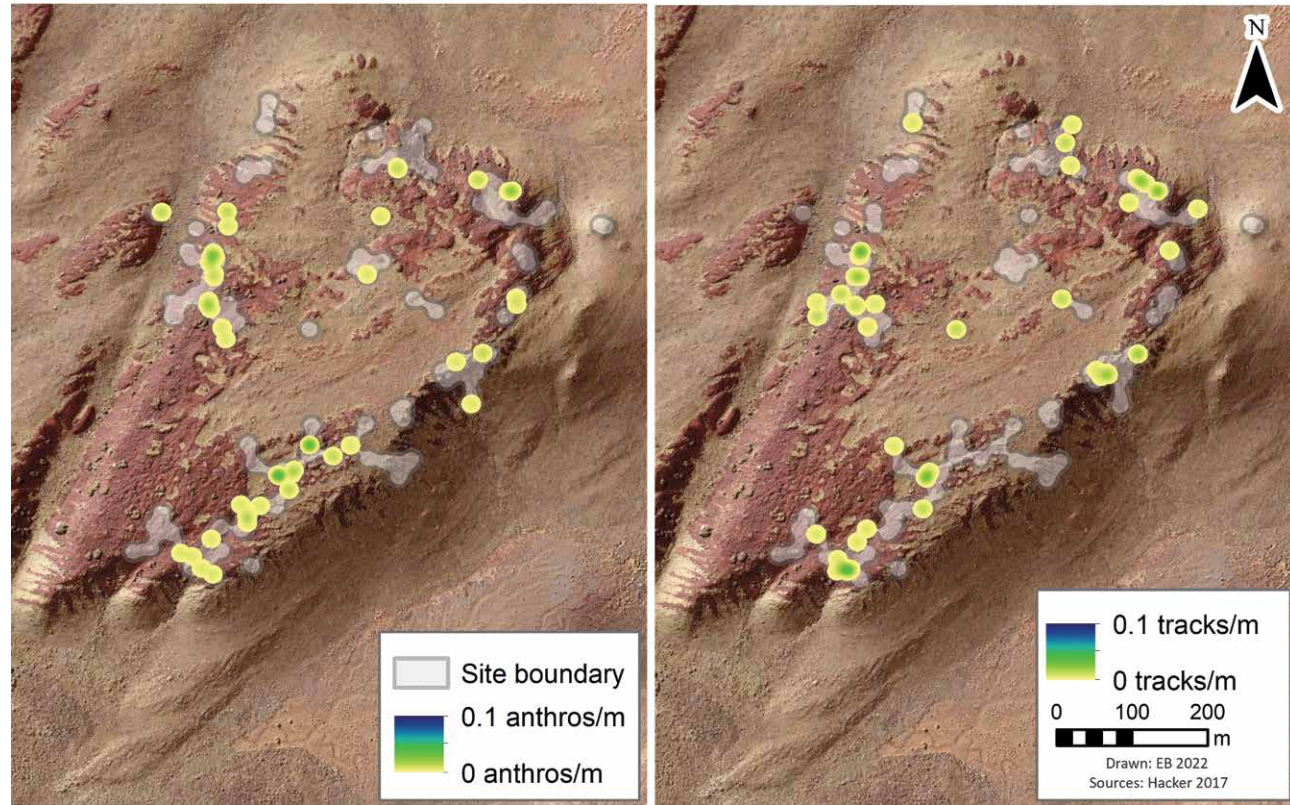


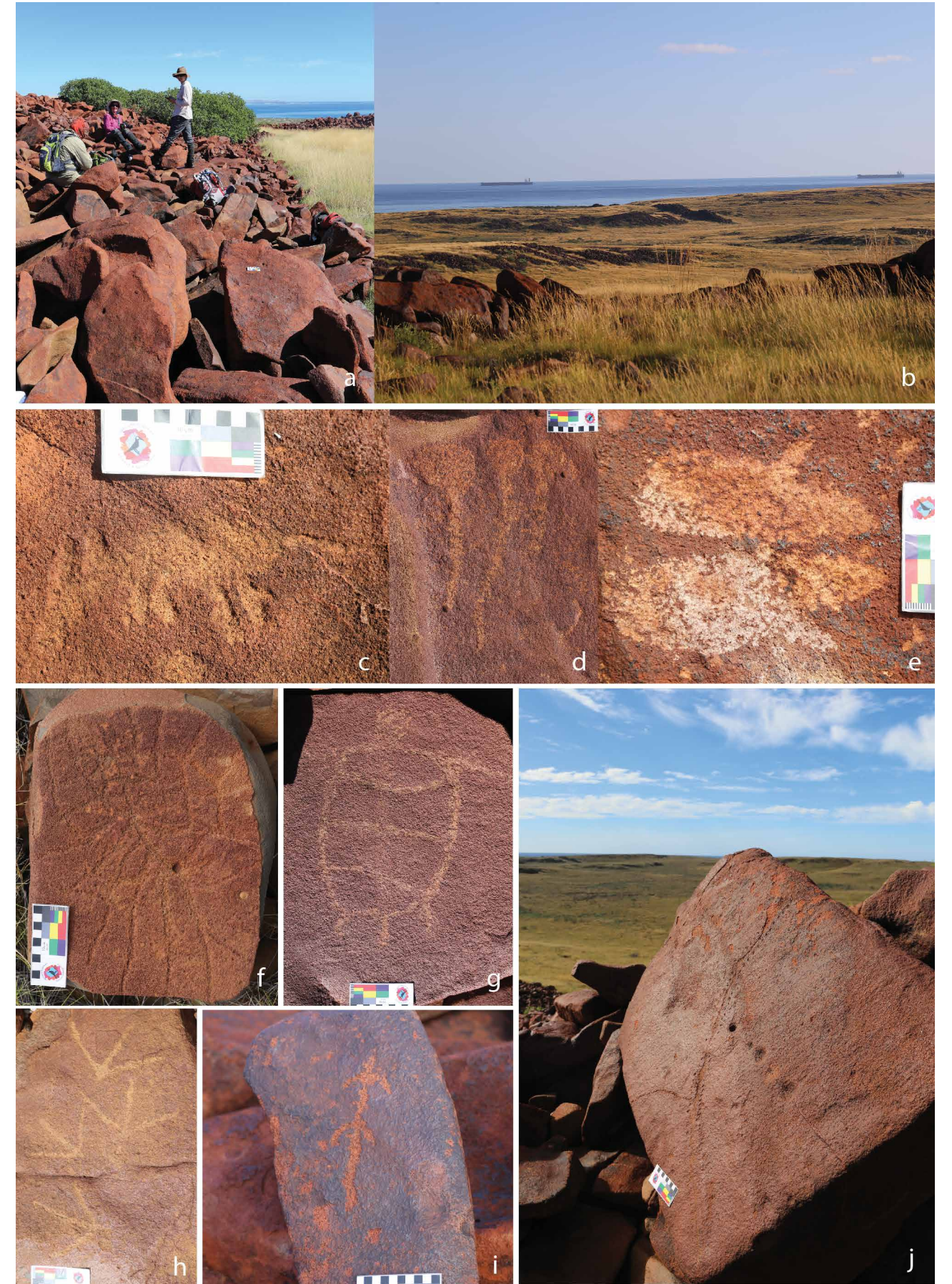
Figure 7.29. Rosemary Island Area 6 distribution of anthropomorphs and tracks.

Linear variations are the most numerous geometrics, and these include meandering lines, parallel lines and sinuous designs (Table 7.58). There are a fair number of early geometric designs (with CS1), including those with concentric elements, dots and lines and enclosing designs. Ovals, arcs and angular motifs are also common. There are two archaic faces in this assemblage – both located in the largest site (MLP-RI006) towards the south end of this concentration of activity. Linear figures dominate the anthropomorphic assemblage, followed by solid figures. Several of the more recent human figures have exaggerated feet and genitalia, and there is a dominance of male gendered motifs.

Bird tracks (three- and four-toed varieties) are the dominant tracks followed by similar proportions of human and macropod tracks (Table 7.58). There is one human hand, and most of the human feet have five toes, although two have six toes, and one of these is also shown with a sandal. Turtles dominate the zoomorphs, and most of these have carapace designs. There are more marine themes than terrestrial animal, with only one macropod (a very small example with a big head and well-defined feet), and neither of the two birds are water birds: one is heavy-set with a solid-beak and the other a short-legged creature with defined claws.

SUBJECT	COUNT	%	SUBJECT	COUNT	%
<i>Anthropomorphic</i>			<i>Geometric</i>		
Face	2	0.7	Angular	10	3.7
Linear figure	47	17.3	Arc	12	4.4
Outline figure	4	1.5	Circular	5	1.8
Profile figure	1	0.4	Complex	5	1.8
Solid figure	13	4.8	Dot	4	1.5
<i>Zoomorphic</i>			<i>Dot and line</i>		
Bird	2	0.7	Dumb-bell	1	0.4
Fish	5	1.8	Linear	37	13.6
Lizard	3	1.1	Material culture	2	0.7
Macropod	1	0.4	Oval	21	7.7
Marine other	2	0.7	Phytomorph	4	1.5
Snake	1	0.4	Rayed	4	1.5
Turtle	12	4.4	<i>Tracks</i>		
			Bird track	44	16.2
			Human foot	12	4.4
			Human hand	1	0.4
			Macropod track	14	5.1
			Total	272	100

Table 7.58. Rosemary Island Area 6: subject proportions.



Rosemary Island Area 6: (a-b) landscapes looking west towards the Indian Ocean in two separate parts of the uplands; (c) with small quadruped; (d) circles with tangs (axes?, plants?); (e) large macropod tracks; (f) on separate knoll (MLP-RI066) older geometric on broken panel; (g) turtle with simple carapace design; (h) recent water bird tracks; (i) lizard engraved on top of standing stone; and (j) panel with dot rows positioned on either side of a natural crack – lizard track? (Scale is 10 cm.).

Linear is the dominant form in this area, followed by solid and solid + linear forms (Table 7.59). Outline forms are relatively rare, as are patterned infill and this

FORM	COUNT	%
Linear	128	45.4
Solid	58	20.6
Outline	20	7.1
Linear; solid	30	10.6
Outline; linear	12	4.3
Outline; solid	8	2.8
Outline; pattern	4	1.4
Other combinations	22	7.8
Total	282	100.0

Table 7.59. Rosemary Island Area 6: form.

As with other areas dominated by gabbro basal geology, pecking is the dominant technique used in the production of this assemblage (Table 7.60). Pecked + abraded is relatively rare, but is the next most common

TECHNIQUE	COUNT	%
Pecked	241	85.5
Pecked; abraded	18	6.4
Abraded	10	3.5
Scratched	7	2.5
Incised	3	1.1
Gouged; pecked	2	0.7
Gouged	1	0.4
Total	282	100

Table 7.60. Rosemary Island Area 6: technique.

The size of motifs in this assemblage reflects the techniques used and the generally rougher-textured surfaces – and there are more moderately sized motifs than very small ones (Table 7.61). While almost 75% of the assemblage is smaller than 30 cm, only 10% is smaller than 10 cm (and these are mostly bird tracks).

SIZE INCREMENTS	COUNT	%
1–10	30	10.6
11–20	123	43.6
21–30	55	19.5
31–40	22	7.8
41–50	13	4.6
51–60	7	2.5
61–70	13	4.6
71–80	4	1.4
81–90	2	0.7
91–100	3	1.1
101–110	2	0.7
111–120	2	0.7
121–130	3	1.1
191–200	1	0.4
NA	2	0.7
Total	282	100.0

Table 7.61. Rosemary Island Area 6: size increments.

is largely confined to turtle carapace designs. There are two archaic faces and an early geometric design.

technique, and abrading and scratching are rare, especially compared with the smoother volcaniclastic surfaces in Area 3 nearby.

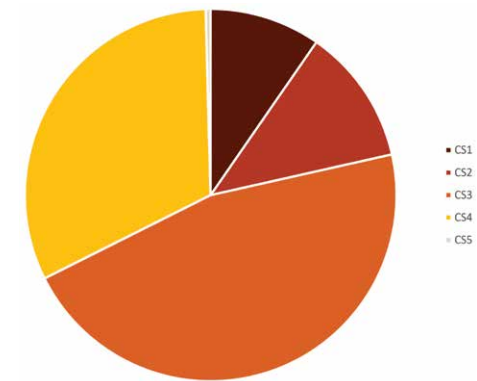
Eight motifs are larger than 1 m in maximum length and, interestingly, seven of these are anthropomorphs (a variety of outlined, profile and solid figures). The other three large motifs are a complex geometric, a tapered oval and a fish.

Contrast state here reflects that most of the assemblage is in the middle phase of production with 44% in CS3. The most profound patterning observable here is that there is only a single motif recorded with the latest weathering state (CS5), with much larger proportions in the earliest two phases (CS1 and CS2).

CONTRAST STATE	COUNT	%
CS1	26	9.2
CS2	32	11.3
CS3	124	44.0
CS4	86	30.5
CS5	1	0.4
NA	13	4.6
Total	282	100.0

Table 7.62. Rosemary Island Area 6: contrast state.

This, along with the presence of archaic faces and complex geometric motifs, is seen as evidence for an earlier art production focus in this interior massif, accompanied by a sharp reduction of art production during the most recent (island-based) use of this part of the archipelago.



Stone structures

Five structures were identified within Area 6 (Table 7.63) – the lowest number and density of any of the areas on Rosemary Island. Four of these structures are standing stones and bedrock pits, located within the largest site, MLP-RI006. Two standing stones are both located on the south-eastern edge of the massif and can be seen from

the valley between this and Area 3. The two bedrock pits were found near each other on the outer edge of the massif and are likely to have been related to extractive activities. The cluster/pile structure was found in the centre of the area and is associated with sparse art production in MLP-RI071. Its function is unclear.

STRUCTURE TYPE	COUNT	%
Standing stone	2	40
Bedrock pit	2	40
Cluster/pile	1	20
Total	5	100

Table 7.63. Rosemary Island Area 6: stone structure types.



Figure 7.31. Rosemary Island Area 6: (a) landscape looking east towards Malus Island; (b) with one of the stacked walls; and (c-d) the two standing stones on top of the eastern escarpment.

Rosemary Island Rock Art Summary

Around 4,800 motifs were recorded across these six sample areas. The following concluding statements can be made about Rosemary Island rock art:

- Rock art was found in moderate to high densities across all Rosemary Island sample areas, regardless of geology.
- Rock art densities are highest around identified potable water features.

Most of the engraved art across the Rosemary landscapes is geometric (Figure 7.32), with variable proportions of tracks, human figures and different animal forms. Grinding patches are present in significant proportions at many sites along with other forms of occupation evidence.

Stone structures here include standing stones, circular cleared structures (interpreted as domestic living structures), landscape walls, bedrock pits and heaped cairns (in various forms). These are found across the entire island, and the distribution of different structure types is patterned.

Variable signalling and somatic interpretations are possible for the stone structures which have been placed and constructed in a range of different landscape contexts.

Techniques used to produce rock art vary with geology: pecking dominates in the gabbro, while scratching/incising dominates on the fine-grained volcaniclastic sediments.

Archaic faces, decorative infill humans and disartic-

ulated dot-head human figures are found here, indicating that stylistic forms characteristic of the earliest Murujuga art phases were produced in this north-western part of the Dampier Ranges.

Seven archaic faces (one with a body) have been recorded across the island (except in Area 3). These occur on gabbro and dolerite lithologies and demonstrate the typically wide range of Murujuga stylistic characteristics.

Changing contrast state figures, excluding Area 3 on different geology, demonstrates that rock art was produced in the earliest phases (CS1 and 2) in all landscapes (Figure 7.33); most art was produced in the middle phases (CS3 and/or CS4). Rock art was also produced, albeit in smaller quantities, in the last phase (CS5), but this later production appears to be focused on the coastal margins.

The area with the largest proportion of art in the earliest phases of production is Area 4.

While contrast state cannot be compared in Area 3 because of the differential techniques/geology, this rock art assemblage located along the south-western margin has a marine-animal focus and is interpreted as a Mid-Late Holocene production (Figure 7.34).

Turtles dominate in all areas except Area 3, where fish are dominant. Marine themes override all others on the coastal margins (especially in Areas 2 and 3), while macropods and terrestrial themes are more prevalent in Areas 4 and 5.

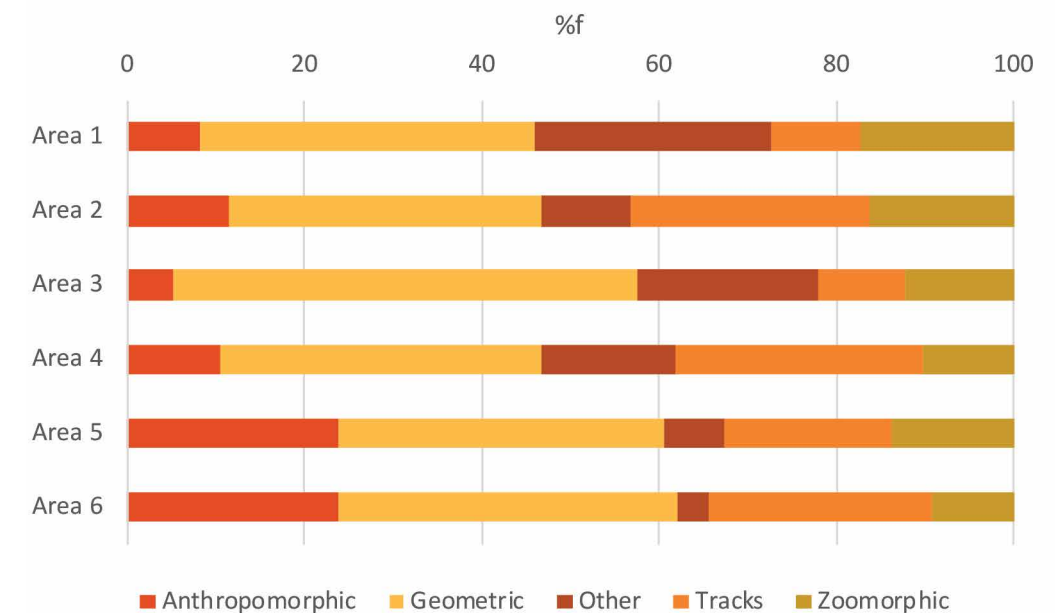


Figure 7.32. Rosemary Island Areas comparing subject foci in all assemblages.

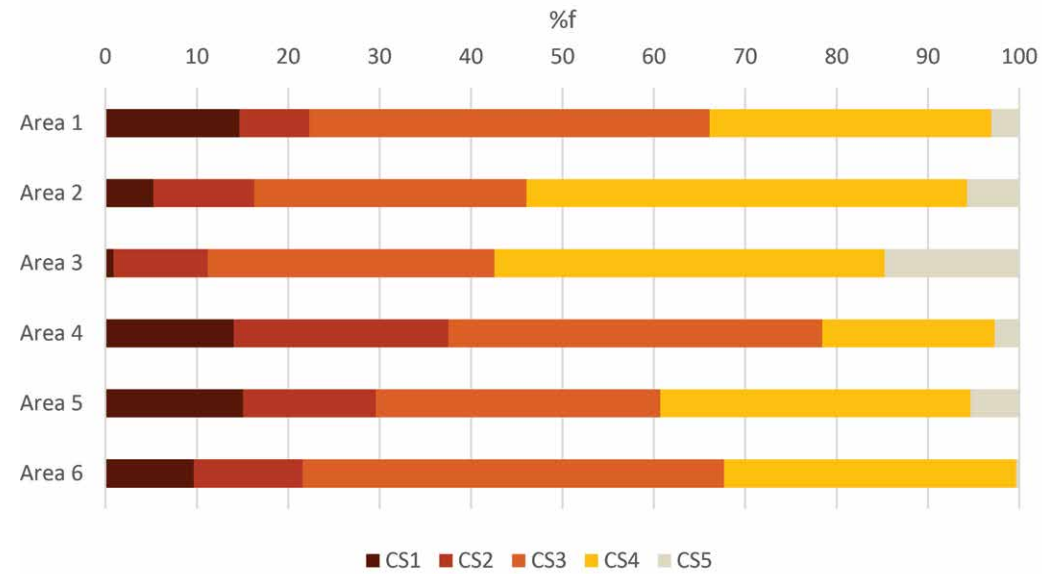


Figure 7.33. Rosemary Island Areas comparing contrast state in all assemblages. Note Area 3 is on different geology.

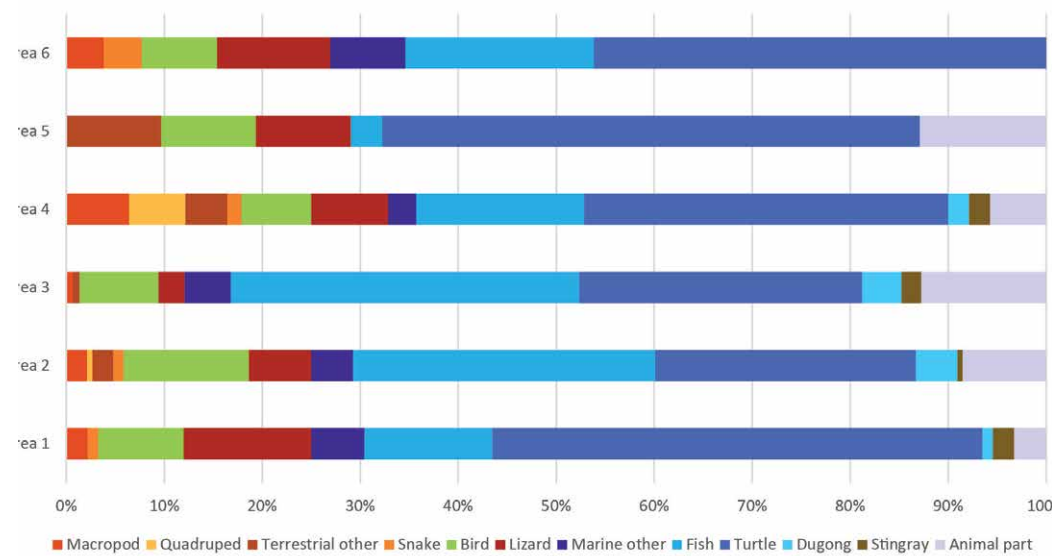


Figure 7.34. Rosemary Island Areas comparing animal foci in all assemblages.

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First published in 2023 by UWA Publishing
 Crawley, Western Australia 6009
www.uwap.uwa.edu.au
 UWAP is an imprint of UWA Publishing,
 a division of The University of Western Australia.



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ISBN: 978-1-76080-241-7
 Design by Upside Creative.