



West Lewis Island Rock Art and Stone Structures

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A single 10-day field season was spent on West Lewis Island in June 2017. The primary focus here was the West Lewis Pastoral Station, on the eastern coast of the island, where Paterson and Souter (2004) had identified Aboriginal rock art on outcrops adjacent to the pastoral station buildings (Figure 9.1).

Their survey recorded the remains of stone buildings and yards, and an extensive array of rock engravings in the centre of the settlement, not recorded by previous WAM recording work (McIlroy 1979). Over 60 motifs including historical names and dates were documented behind three of the buildings:

The engravings may predate Aboriginal settlement, especially as some seem very weathered. Other engravings are fresher and include the names and years of nineteenth and twentieth century visitors to the site such as Tunney (Paterson and Souter 2004: 17, Table 1).

A local Pilbara resident had also reported to the Western Australian Museum the presence of an 1849 inscription on West Lewis Island. The team visited and documented inscriptions recording a visit by the whale ship *Delta* (Paterson et al. 2019a) as well as surrounding Aboriginal rock art on the south-west end of the island (Figure 9.1; Area 5). The project aimed to document and to

excavate features at the historic homestead, out-buildings and yards (see Chapter 11) as well as undertake systematic recording of the rock art around the two historical locations.

Prior to our investigation, three registered sites were known on southern West Lewis Island (DPLH sites 9736, 11759 and 11759: DPLH's Aboriginal Heritage Inquiry System: see Figure 9.2). The Pastoral Settlement (DPLH 9736; MLP-WL001) has been remapped, as the DPLH boundaries do not cover its full extent. The DPLH record for site 11759 shows that this too is an earlier recording of the Pastoral Settlement with an incorrect boundary (a 600 m circle c. 800 m north of the settlement). This was confirmed by the relocation of several distinctive motifs. DPLH 6228 is in a well-watered valley behind a high dune on the west coast. While not visited, its boundaries are refined here based on its original site record. A total of 38 sites were identified and documented on West Lewis Island as part of this project (Figure 9.2).

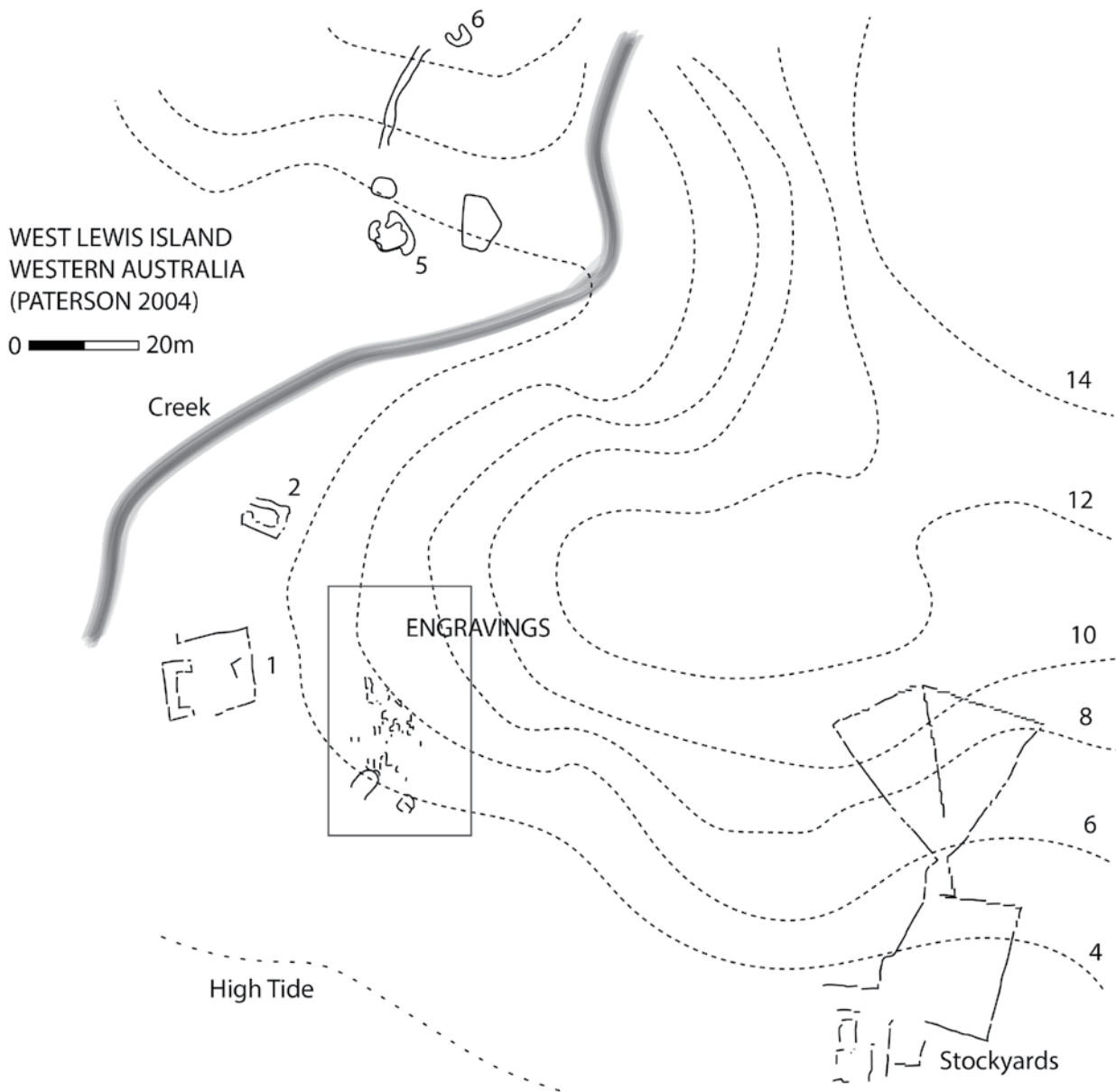


Figure 9.1. West Lewis Pastoral Settlement Plan (Paterson and Souter 2004).

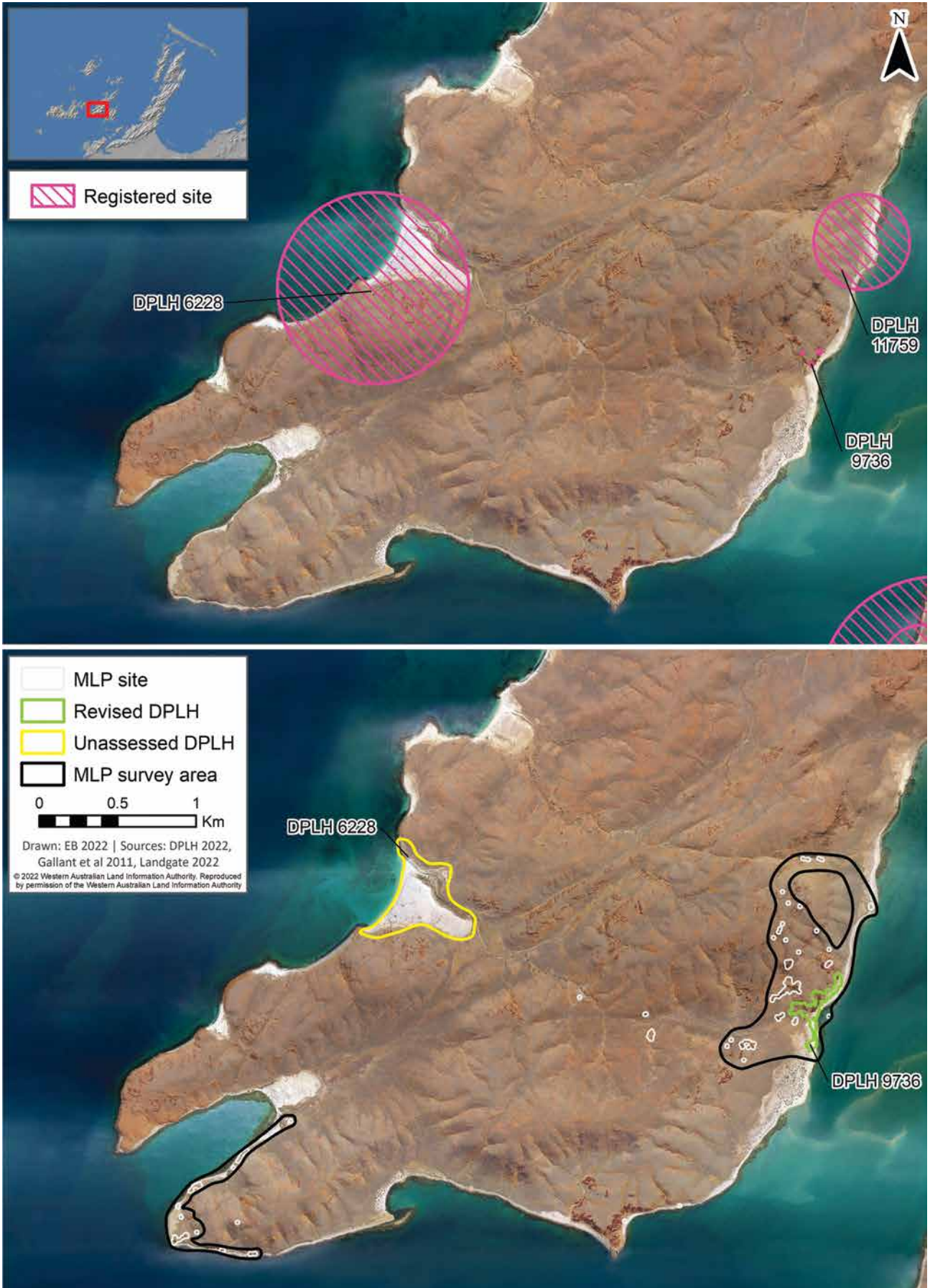


Figure 9.2. Sites recorded on West Lewis Island (top) in the DPLH AHIS register; and (bottom) as a result of this fieldwork and site audit.

Approximately 56.7 hectares was surveyed while on West Lewis Island (Figure 9.3). The 38 sites (Table 9.1, Table 9.2) were recorded in two sample areas, with several discrete locations recorded during our pedestrian access between the two areas (Figure 9.3). The 25 sites with engravings include 1,102 panels and 1,260 motifs (994 in Area 1; 345 in Area 5; 56 from isolated sites). These totals include 111 grinding patches and 56 historic inscriptions and/or more recent graffiti/contemporary marks. Historic mark-making is present at just two places: the homestead site MLP-WL001 (n = 45) and the

low bluff where there is evidence of bay whaling in 1849: site MLP-WL005 (n = 11). Grinding patches are present at 10 sites, and the greatest density of these (n = 55) is found at a spring-fed site (MLP-WL016) upslope from the station homestead. A substantial number of grinding patches are also found at MLP-WL026 (n = 33), inland with a semi-permanent waterhole, and amongst the homestead site MLP-WL001 assemblage (n = 14). At seven other locations, grinding patches occur as single or double patches, all associated with rock art production.

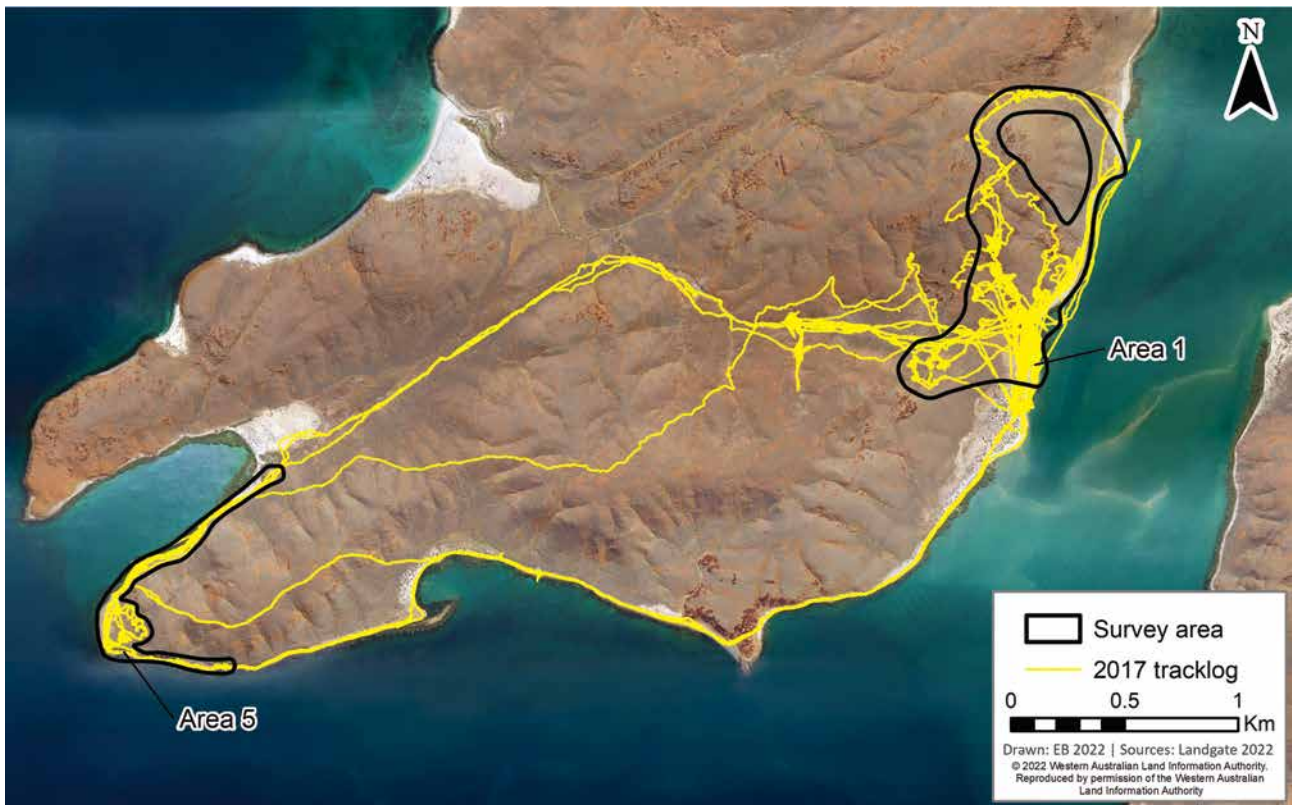


Figure 9.3. Tracklog and survey areas investigated on West Lewis Island.

The basal geology on West Lewis Island is predominantly andesitic basalt, with several major valleys having deep Holocene sand dune formations, particularly on the west coast. One of the deeply dissected interior valleys surveyed to the north of the homestead cuts through an intrusion of gabbro geology (Figure 9.4).

There are several dolerite dykes which strike parallel to the longitudinal axis of the island. Unmapped surface manifestations of this were encountered in Area 5, where site MLP-WL010 includes six panels recorded on this geology (see next section, West Lewis Sample Area 5).

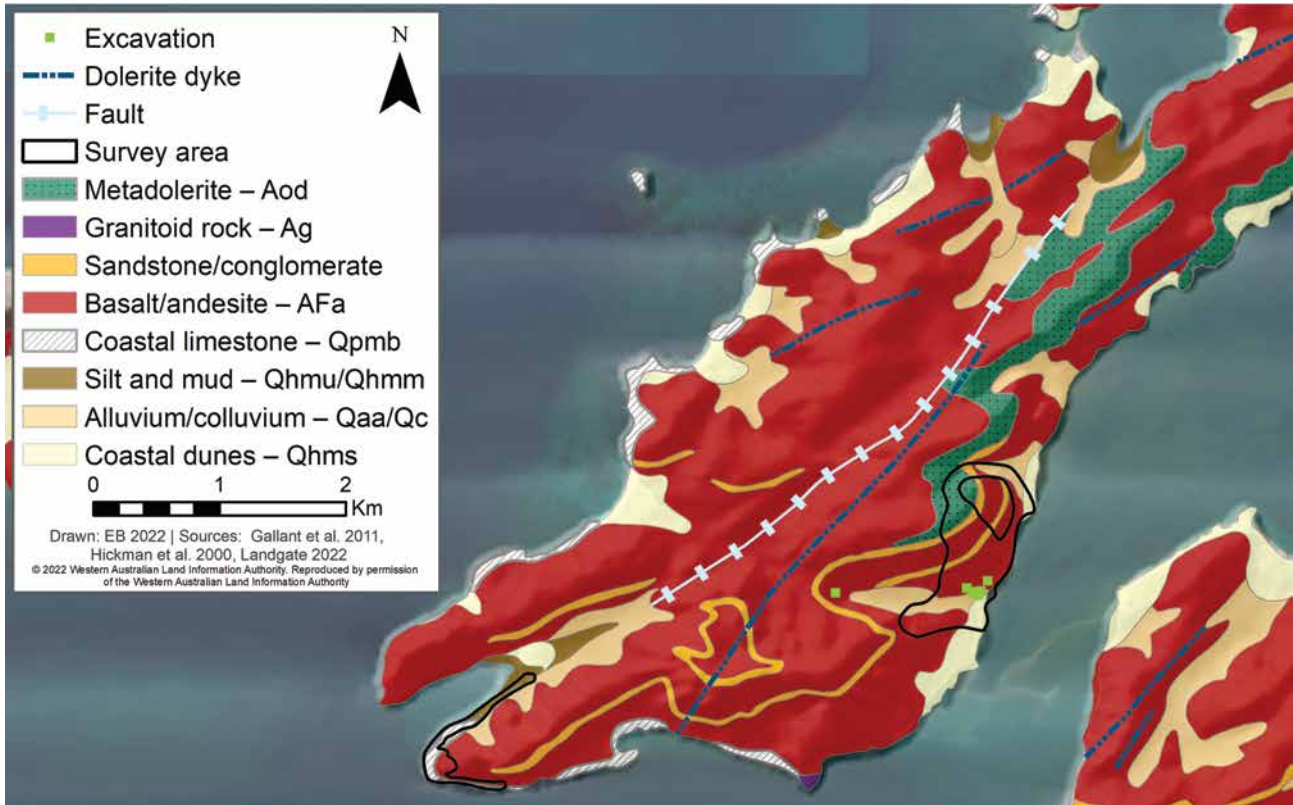


Figure 9.4. Mapped West Lewis geological bedrock showing survey areas and excavation locations.

The excavation and analysis of the sheep station is reported in Chapter 11, including details of the graffiti and moved Aboriginal art associated with individual buildings. Here we focus on the rock art located and recorded in the two sample areas and isolated locations (Figure 9.2), discussing the historical mark-making in relation to other rock art subjects and placement. Several surface finds were encountered on our traverse

of the island. Two of these were *Melo* (baler) shells which had been transported to the island's interior, presumably as containers. These isolated items were collected for dating (but have not been included in the site tally). A rockshelter in the interior valley, with no surface evidence of artefacts, was test pitted at the request of MAC CEO Peter Jeffries (see Chapter 10).

SITE TYPE	NO.	%
Art	12	31.6
Art; grinding	7	18.4
Art; rockshelter; archaeological deposit	1	2.6
Art; structure; artefacts; quarry	1	2.6
Artefacts	2	5.3
Artefacts; quarry	2	5.3
Grinding	1	2.6
Historical	5	13.2
Historical; structure	1	2.6
Historical; art	2	5.3
Historical; art; structure; artefacts; grinding; quarry	1	2.6
Historical; art; structure; grinding; midden; archaeological deposit	1	2.6
Structure	2	5.3
<i>Total</i>	<i>38</i>	<i>100</i>

Table 9.1. West Lewis Island site types.

West Lewis Sample Area 1

Located on the eastern shore of West Lewis Island, this sample area includes sites on the east-facing slopes above and immediately adjacent to the sheep station (built and occupied between the late 1860s and mid-1880s). Included here is the short gully that rises behind the main buildings as well as a steeper cut valley

to the north and its associated foreshore (Figure 9.5). Twenty sites were recorded in this sample area, 15 of which include petroglyphs. Four of these assemblages close to the sheep station feature historical elements (Table 9.2).

SITE TYPES	SITE TOTALS	%F	MOTIFS
Art	7	35	19
Art; grinding	4	20	27
Art; structure; artefacts; quarry	1	5	29
Artefacts; quarry	2	10	
Historical	2	5	
Historical; art	1	5	64
Historical; art; structure; artefacts; grinding; quarry	1	5	422
Historical; art; structure; grinding; midden; archaeological deposit	1	5	431
Structure	1	35	
<i>Total</i>	<i>20</i>	<i>100.0</i>	<i>994</i>

Table 9.2. West Lewis Island Area 1 site types (motif counts for sites with petroglyphs).

Stone structures

The stone structures here are, not surprisingly, dominated by those associated with the pastoral station within DPLH 9736 (see Table 9.3, Figure 9.5 and Chapter 11). Five bedrock pits were recorded within Area 1. These were associated with artefacts or quarrying activities (particularly those within MLP-WL014 and MLP-WL016) and may have been a by-product of quarrying and stone acquisition activities (Figure 9.5). Two small circular structures (defined as clearings/enclosures) were also

situated on either side of a rock hole within MLP-WL016. Both clusters/piles were identified in the field as being potentially associated with the historical period, as their appearance seemed more recent. MLP-WL039 is a cluster of stones in the intertidal zone, presumed to be ballast stones, and MLP-WL031 is interpreted as a historical cairn. A single standing stone was recorded on the western side of DPLH 9736.

TYPE	COUNT	%
Pastoral station: built structure	13	56.5
Bedrock pit	5	21.7
Clearing/enclosure	2	8.7
Cluster/pile	2	8.7
Standing	1	4.3
<i>Total</i>	<i>23</i>	<i>100.0</i>

Table 9.3. West Lewis Area 1 stone structures.

Rock art

Based on the spatial arrangement of panels with motifs, there are two site complexes here. Less than a third (30%) of the sites have a small assemblage and less than 20% are medium-sized (Table 9.3 and Table 9.4).

The two site complexes occur immediately adjacent and upslope from the historic site (MLP-WL001) and extend further up the drainage line, and around a semi-permanent, spring-fed rock hole (MLP-WL016: Figure

9.6 and Figure 9.7). The current number of recorded petroglyphs is likely an underrepresentation of the pre-contact assemblage as many of the blocky outcrops here were quarried for use in construction of the sheep station buildings and stockyards. These two site

complexes contain 86% of the motifs recorded in Area 1 and 92% of the recorded grinding patches. These assemblages potentially reveal insights about the cross-cultural interactions likely to have taken place here in the historic period (see Burcham 2019; Mulvaney 2019)

ASSEMBLAGE SIZE	COUNT	%
Small (<5 motifs)	7	30.4
Medium (6–20)	4	17.4
Large (21–150)	1	4.3
Complex (>150)	2	8.7
<i>Total</i>	<i>15</i>	<i>100</i>

Table 9.4. West Lewis Area 1: rock art site assemblage size proportions.

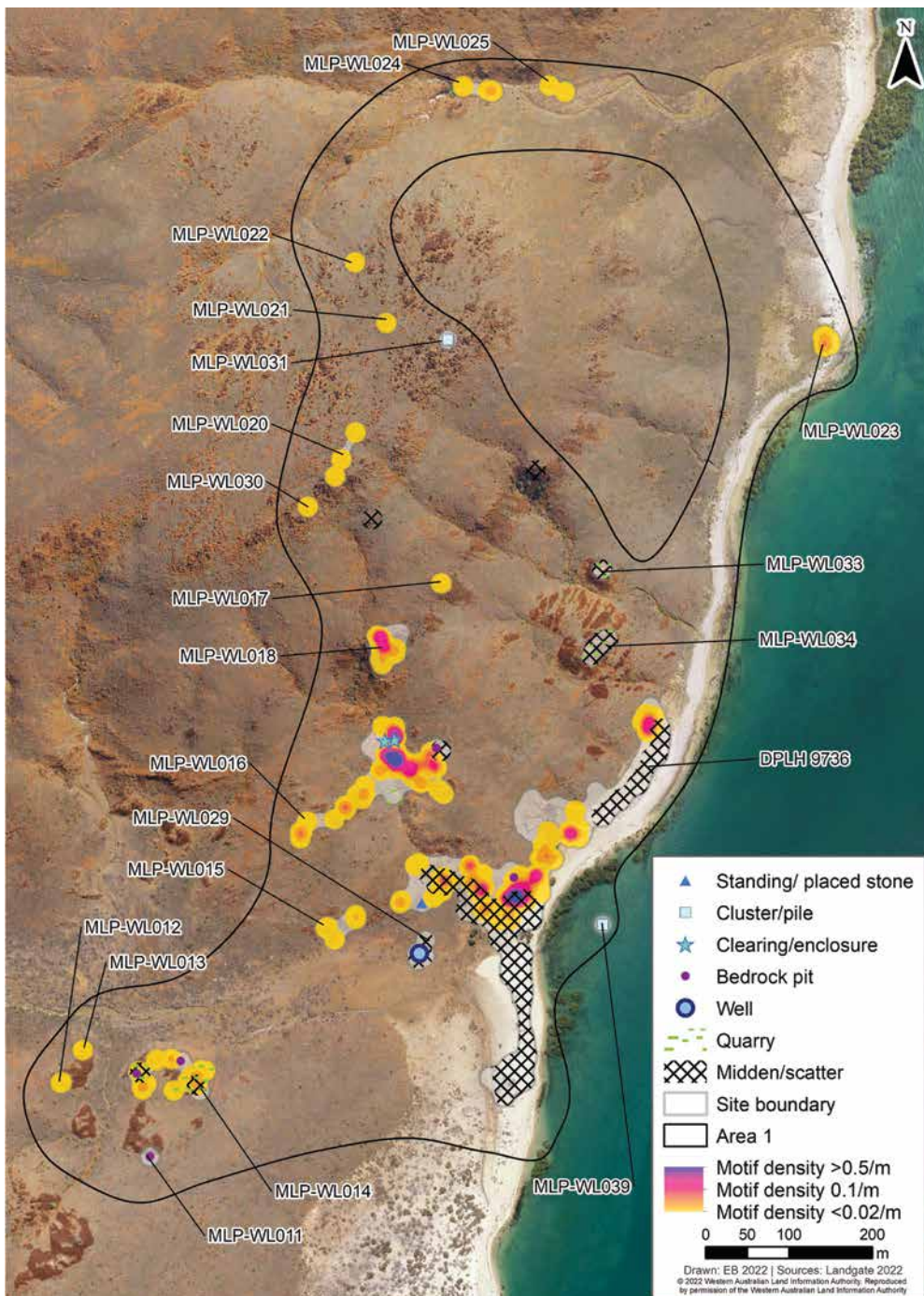
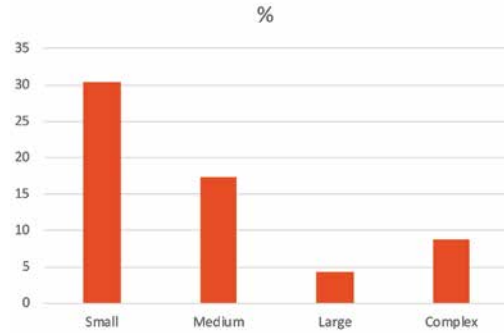


Figure 9.5. West Lewis Area 1 showing recorded sites.



Figure 9.6. Contrasting landscapes of West Lewis Area 1: (a) looking south-southeast over part of Site MLP-WL016 and the spinnifex-covered slopes above the pastoral station to the passage between the two Lewis Islands; and (b) rocks around the spring-fed gully of Site MLP-WL016 with calcium carbonate flowstone.

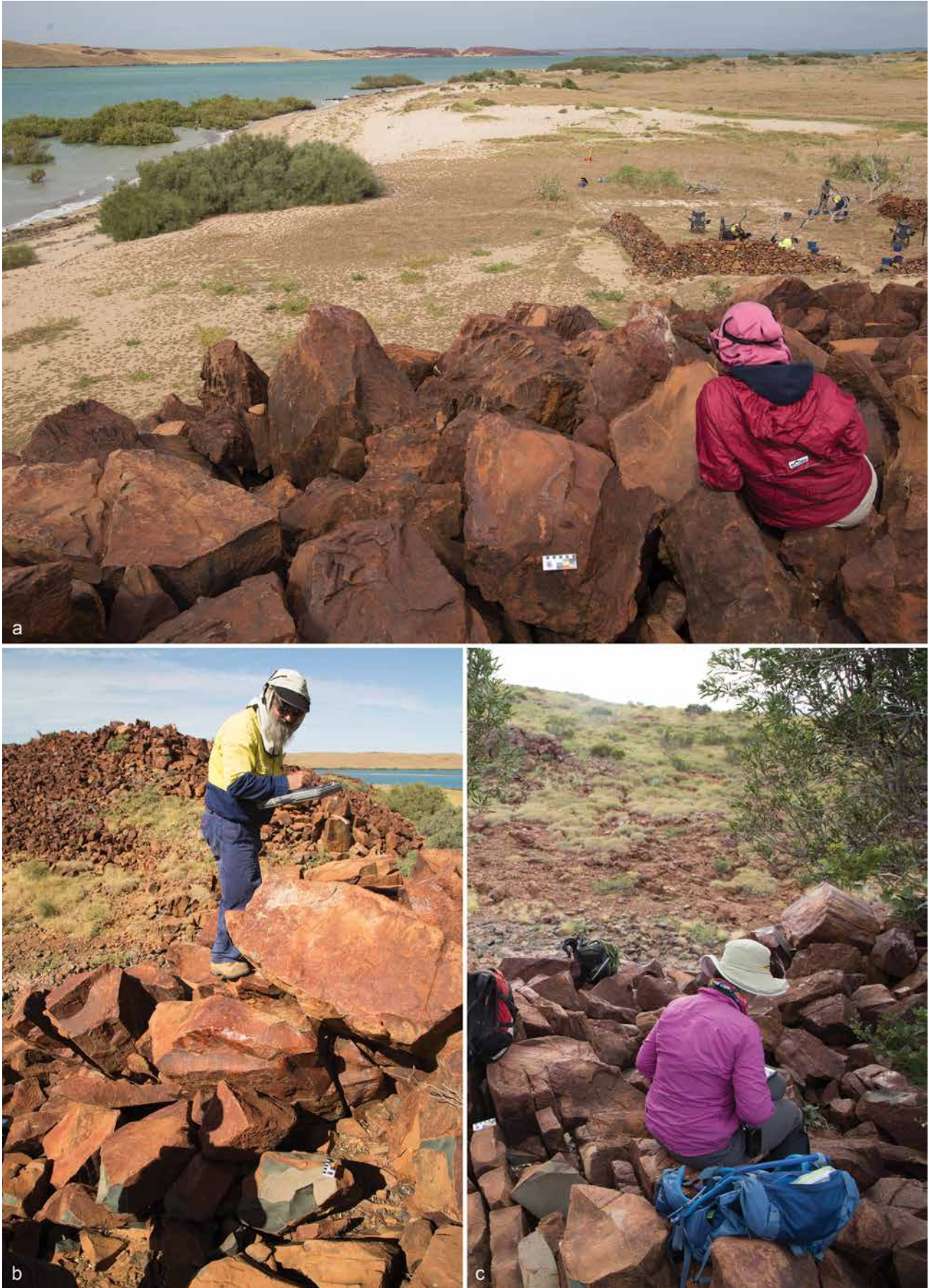


Figure 9.7. Site MLP-WL001 showing various landscape contexts for the petroglyph assemblage: (a) overlooking the homestead; (b) the lower hillslope above the sheep station; and (c) in the vegetated creek line.

SITE	PANELS	MOTIFS	GRINDING	STRUCTURES	GRAFFITI
MLP-WL001 (DPLH 9736)	252	433	14	15	46
MLP-WL016	164	422	55	3	
MLP-WL018	24	64			
MLP-WL014	19	29		2	
MLP-WL023	6	14	2		
MLP-WL015	6	7			
MLP-WL024	6	7	1		
MLP-WL020	3	6			
MLP-WL025	2	4	2		
MLP-WL012	2	2			
MLP-WL022	1	2			
MLP-WL030	2	2			
MLP-WL013	1	1			
MLP-WL021	1	1			
MLP-WL011				1	
<i>Total</i>	<i>489</i>	<i>994</i>	<i>75</i>	<i>21</i>	<i>46</i>

Table 9.5. West Lewis Area 1: rock art sites and assemblage sizes.

The West Lewis Island Area 1 site assemblage proportions are potentially skewed as our efforts were focused on the historically used, well-watered resource areas rather than a more systematically recorded

sample transect. This assemblage has an unusually high number of 'other' elements (Figure 9.8 and Figure 9.9). The geometrics account for 40% and 'other' for c. 37% of the overall assemblage (Table 9.5).

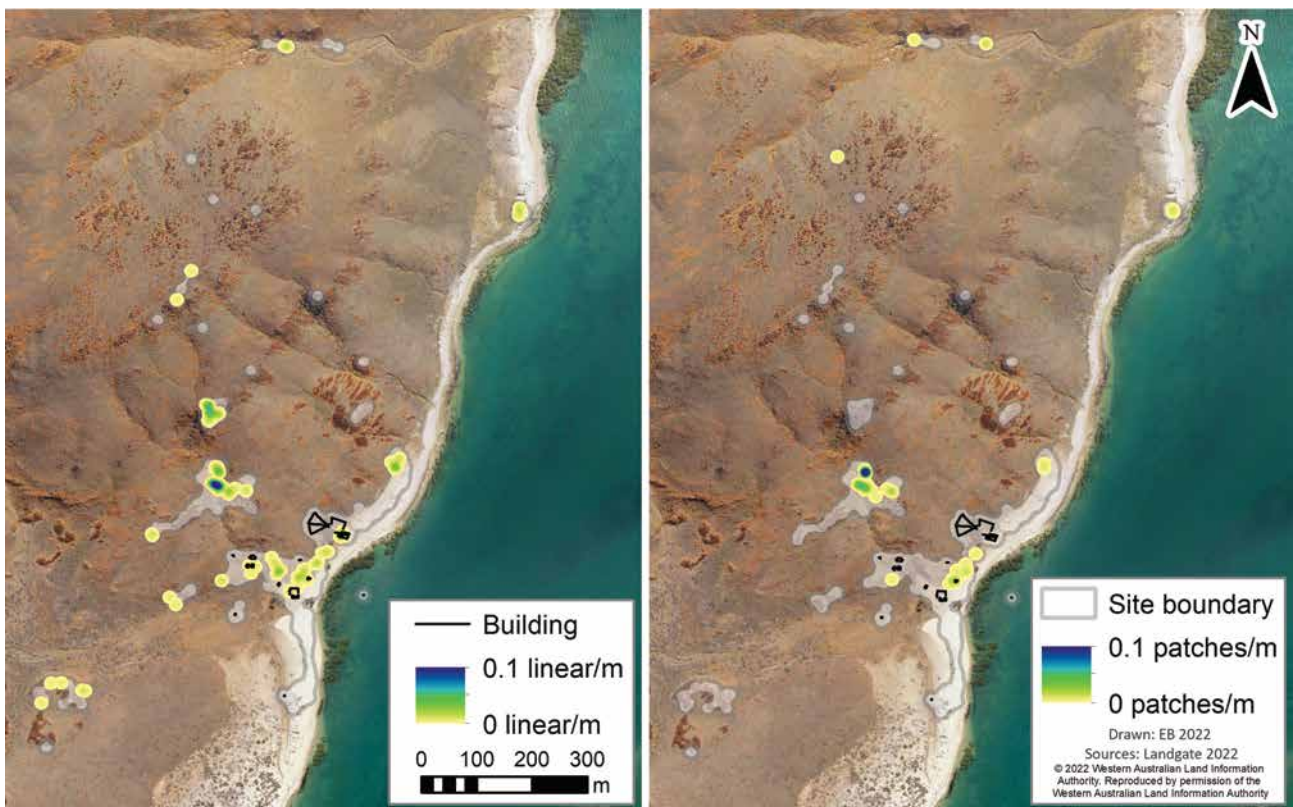


Figure 9.8. West Lewis Area 1: distribution of (left) linear scratching and (right) grinding patches.

Grinding patches (n = 75) account for a large proportion of this 'other' set of markings; however, the largest contribution (n = 152) comes from scratched 'linear other' (unidirectional and multidirectional). An explanation for this unusual assemblage patterning is the andesitic basalt geology of West Lewis Island. This is a relatively soft bedrock compared to the gabbro and

granophyre present in the eastern archipelago (including Burrup Peninsula). This assemblage's most comparable counterpart is on Enderby Island (EIA-010), on a similar bedrock. When the 'other' elements are removed from the assemblage, geometric motifs (Figure 9.9) are even more dominant (62%) with anthropomorphic, tracks and zoomorphic motifs contributing 11–14% each (Table 9.7).

Most of the geometrics are linear types (n = 143; 23%) but ovals and arcs are also present in large numbers (Table 9.7).

CLASS	COUNT	%	DEPICTIVE	%F
Anthropomorphic	87	8.8	87	13.8
Geometric	394	39.6	394	62.6
Other	365	36.7		
Tracks	79	7.9	79	12.6
Zoomorphic	69	6.9	69	11.0
Total	994	100.0	629	100.0

Table 9.6. West Lewis Area 1: class totals and depictive element proportions.

SUBJECT	COUNT	%	SUBJECT	COUNT	%
<i>Anthropomorphs</i>			<i>Tracks</i>		
Combination figure	2	0.3	Bird track	50	7.9
Linear figure	54	8.6	Human foot	14	2.2
Outline figure	3	0.5	Human hand	2	0.3
Profile figure	3	0.5	Macropod track	10	1.6
Solid figure	25	4.0	Other track	3	0.5
<i>Geometric</i>			<i>Zoomorphs</i>		
Angular	39	6.2	Animal part	15	2.4
Arc	58	9.2	Bird	5	0.8
Circular	9	1.4	Crustacean	1	0.2
Complex	4	0.6	Fish	13	2.1
Dot	7	1.1	Lizard	3	0.5
Dumb-bell	1	0.2	Macropod	4	0.6
Linear	143	22.7	Marine other	1	0.2
Material culture	22	3.5	Quadruped	3	0.5
Oval	94	14.9	Snake	1	0.2
Phytomorph	1	0.2	Stingray	2	0.3
Rayed	16	2.5	Terrestrial other	1	0.2
			Turtle	20	3.2
			Total	629	100.0

Table 9.7. West Lewis Area 1: subject proportions for depictive motifs.

Human forms are the most common figurative motifs, and the dominant style of these are linear figures (8.6%). No early anthropomorphic forms, such as archaic faces or decorative infill, were found here. A distinctive early Murujuga style of anthropomorph has a solid body and 'dot head' separated from the torso. Until the Murujuga Linkage Project, this style was only known to occur on the Burrup Peninsula. The West Lewis examples of this distinctive human form are on the western side of the creek adjacent to the main homestead and include two human figures in profile, one associated with a bird image. These male figures shown in plan-view are unusual as gender is not normally indicated in this anthropomorphic style (Figure 9.10). There is one old geometric design associated with the earliest rock art phase (Mulvaney 2015) which is very close in design to an archaic face (Figure 9.11).

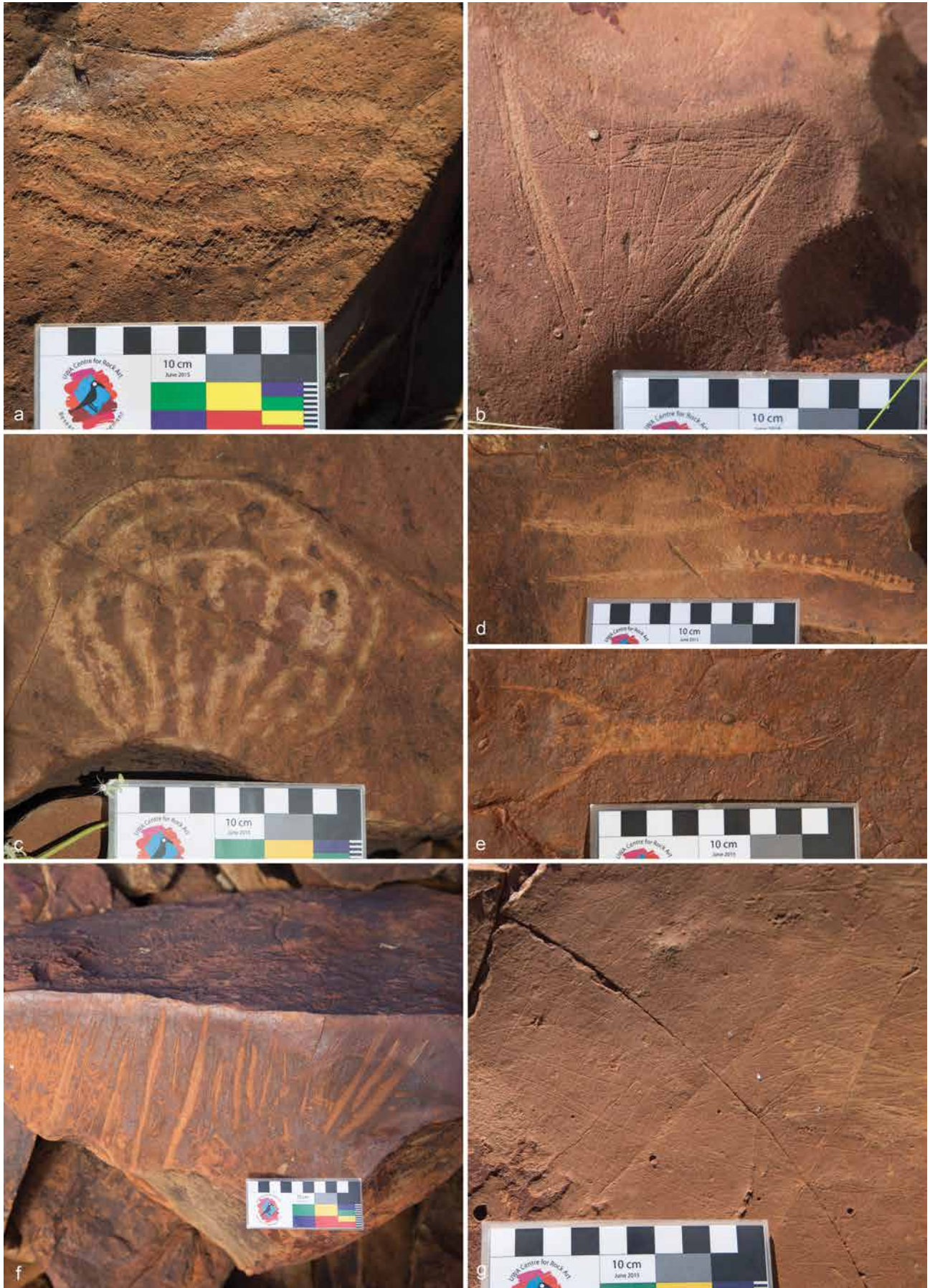


Figure 9.9. West Lewis Area 1: (a) pecked geometric concentric arc motif; (b) scratched and incised marine tail motif with multiple repeated marking; (c) geometric motif like a shell; (d) barbed spear motif; (e) Y-shaped motif; (f) 'other' marks abraded and incised line set; and (g) scratched and incised multidirectional and grid design.



Figure 9.10. West Lewis Area 1 a) section of the upper gully behind the homestead where much of the older rock art occurs; b) detail of engraved panel showing the pecked pair of animal track motif superimposed over a much older incised line set; and (c) panel being recorded.

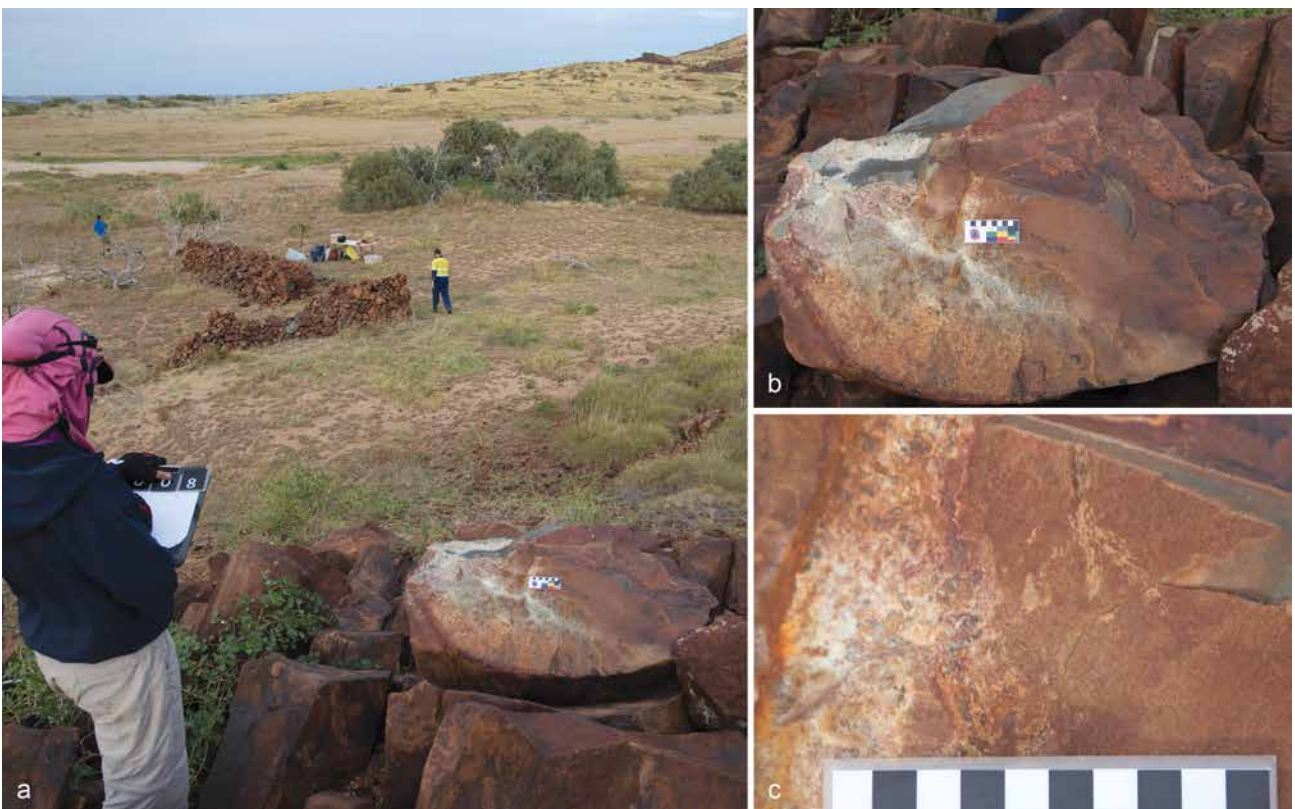


Figure 9.11. West Lewis Area 1 a) Victoria Wade recording panel above the homestead in an area with much more recently produced rock art; b) panel with location of motif indicated by scale card; and c) detail of the relatively fresh (recent) four toe bird track motif.

Bird tracks are the most common tracks found here, with human feet being more common than macropod

tracks (Figure 9.12). Marine-themed zoomorphs are the most numerous animal motifs, with turtles, fish and

marine tails the most common depictions. Terrestrial animals are relatively rare with only four macropod and three quadruped images recorded (Table 9.7).

The two largest assemblages (Site DPLH 9736, $n = 433$; and MLP-WL016, $n = 422$) show remarkably similar range and proportions of subjects depicted. The

European occupation of the island and the addition of historic artistic elements has had minimal impact on the overall art assemblage, although as mentioned it is possible that many more motifs than are currently visible have been incorporated into the built structures as blocks were moved from their natural locations.

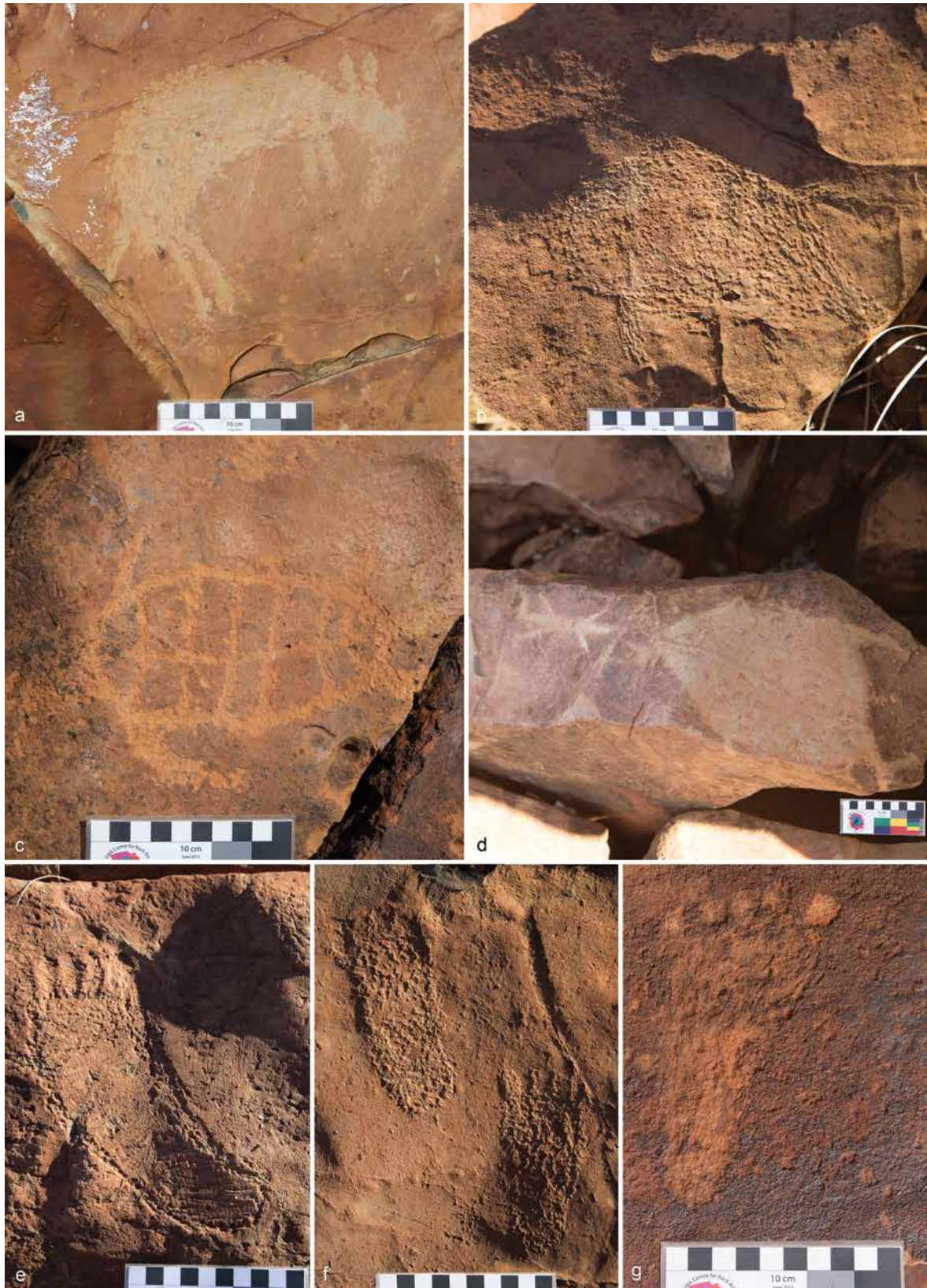


Figure 9.12. West Lewis Area 1 pecked petroglyphs in various contrast states: (a) quadruped; (b) echidna; (c) turtle with carapace design; (d) fishing composition; and (e-g) human tracks (singles and pair).

The much smoother surface texture and appearance of the basalt geology is reflected in the primary form and techniques used in the production of the petroglyphs here. Most (68%) of the recorded motifs are linear in form (Table 9.7 and Table 9.8), particularly the dominant geometric and ‘other’ classes. The ‘other’ items represent a very different set of productions (Table 9.9). The very

high occurrence of random scratching influences these proportions. Form and process dictate method, and the line sets are all incised while grinding patches are all abraded. The graffiti is predominantly scratched but has also been produced using several other techniques (Figure 9.15).

FORM	ANTHROPOMORPHIC	GEOMETRIC	TRACK	ZOOMORPHIC	OTHER	TOTAL	%	DEPICTIVE ONLY % (N = 679)
Linear	39	187	34	2	167	429	68.2	41.7
Solid	21	97	34	26	108	286	45.6	28.3
Outline	1	29		6		36	5.7	5.7
Pattern	1	1		1		3	0.5	0.5
Outline; solid		14	3	2		19	3.0	3.0
Solid; linear	19	15	5	7	25	71	7.3	7.3
Outline; linear	2	22	1	8	13	45	5.2	5.2
Outline; pattern		16		5		24	3.3	3.3
All other combinations	4	12	2	12	51	81	4.8	4.8
<i>Total</i>	<i>87</i>	<i>394</i>	<i>79</i>	<i>69</i>	<i>364</i>	<i>4</i>	<i>100</i>	

Table 9.8. West Lewis Survey Area 1 dominant form of depictive classes and other motifs.

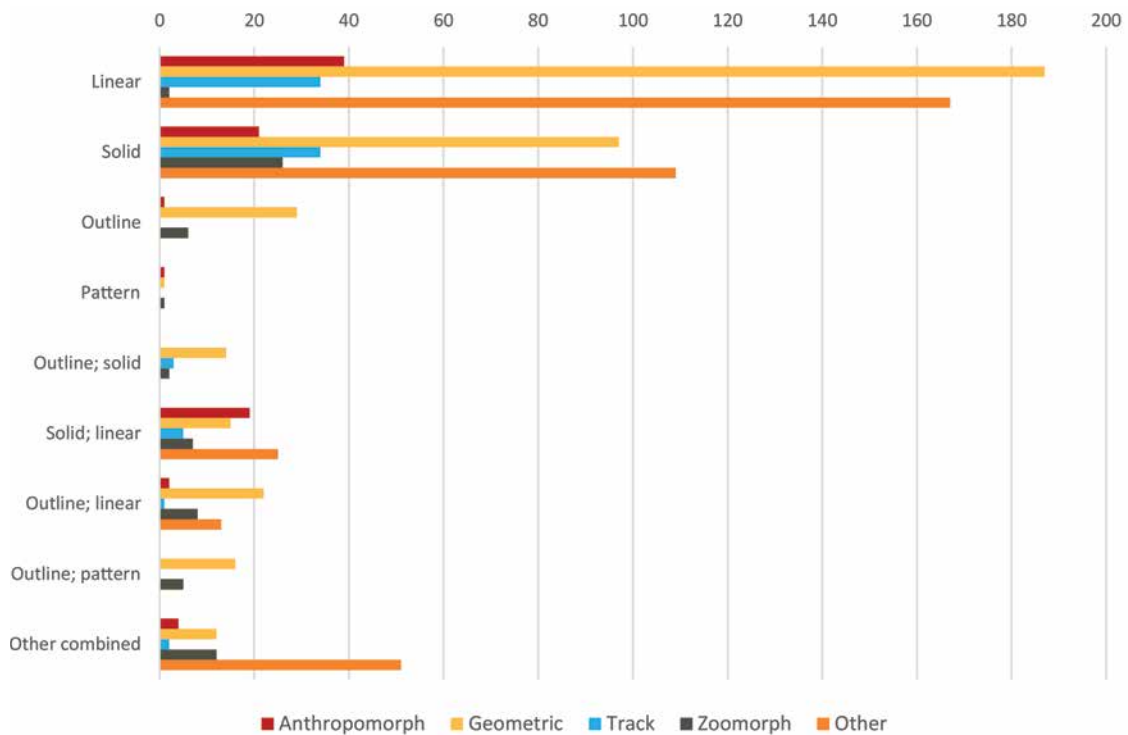


Figure 9.13. West Lewis Area 1 motif classes and form (n = 994).

Exceptionally high proportions of scratching as a technique is a feature of the fine-grained, less resistant geologies of the intermediate and outer islands. The majority (43%) of Area 1 motifs are created by scratching the image into the rock surface, with pecking the next most common technique (31%). Abrasion (10%), incision (5%) and gouging (2%) are also common

techniques (Table 9.9 and Figure 9.14). The anthropomorphic, track and zoomorphic motifs deploy almost identical technique proportions. The geometric motifs reveal an above-average proportion of scratching and decline in pecking compared to the figurative motifs (Figure 9.14). Scratching is the dominant technique of ‘other’ art productions – particularly the fine line sets

(multidirectional/linear scratching) which account for c. 60% of these marking types (Table 9.9). The scratching technique generally accounts for only 5–20% on the

gabbro and granophyre dominated areas (see Gunn and Mulvaney 2008; McDonald 2009a; Mulvaney 2015; and Chapter 14).

TECHNIQUE	ANTHROPOMORPHIC	GEOMETRIC	TRACKS	ZOOMORPHIC	OTHER	TOTAL	%F	DEPICTIVE %F
Scratched	10	165	15	17	220	425	42.7	32.9
Pecked	50	146	43	36	34	309	31.1	43.7
Abraded	3	14	2	2	76	97	9.8	3.3
Incised	9	23	7	2	13	54	5.4	6.5
Abraded; scratched	3	16	5	6	4	34	3.4	4.8
Gouged	5	7	1	2	6	21	2.1	2.4
Pecked; gouged	1	7			4	12	1.2	1.3
Combination techniques	6	16	6	4	10	42	4.1	5.1
<i>Total</i>	<i>87</i>	<i>394</i>	<i>79</i>	<i>69</i>	<i>365</i>	<i>994</i>	<i>100.0</i>	

Table 9.9. West Lewis Area 1 technique in each motif class (depictive n = 679).

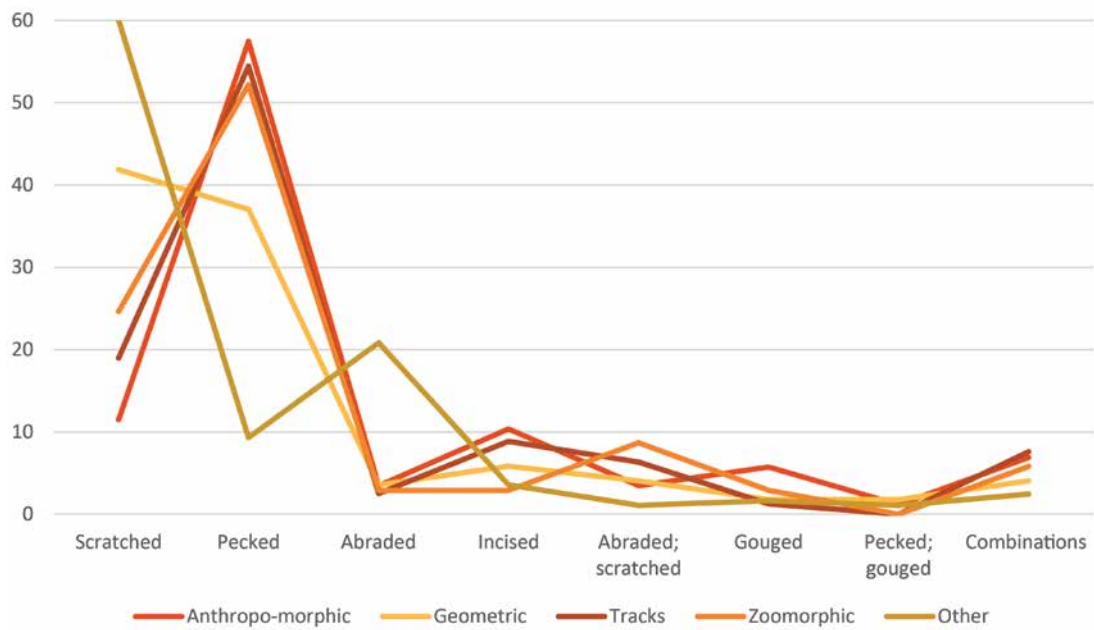


Figure 9.14. West Lewis Area 1 motif classes and techniques (n = 994).

TECHNIQUE	AMORPHOUS AREA	FRAGMENTS	GRAFFITI	GRINDING PATCH	INCISED LINE SET	LINEAR OTHER	RANDOM PECKING	TOTAL	%F
Scratched			41			178	1	220	59.8
Abraded	2			74				76	20.9
Pecked	2	1	1			2	28	34	9.4
Incised					13			13	3.6
Gouged			1			2	3	6	1.7
Combination techniques	3		2	1		5	6	17	4.7
<i>Total</i>	<i>7</i>	<i>1</i>	<i>45</i>	<i>75</i>	<i>13</i>	<i>187</i>	<i>38</i>	<i>364</i>	<i>100</i>

Table 9.10. West Lewis Area 1 'other' depictions and techniques used to produce them.

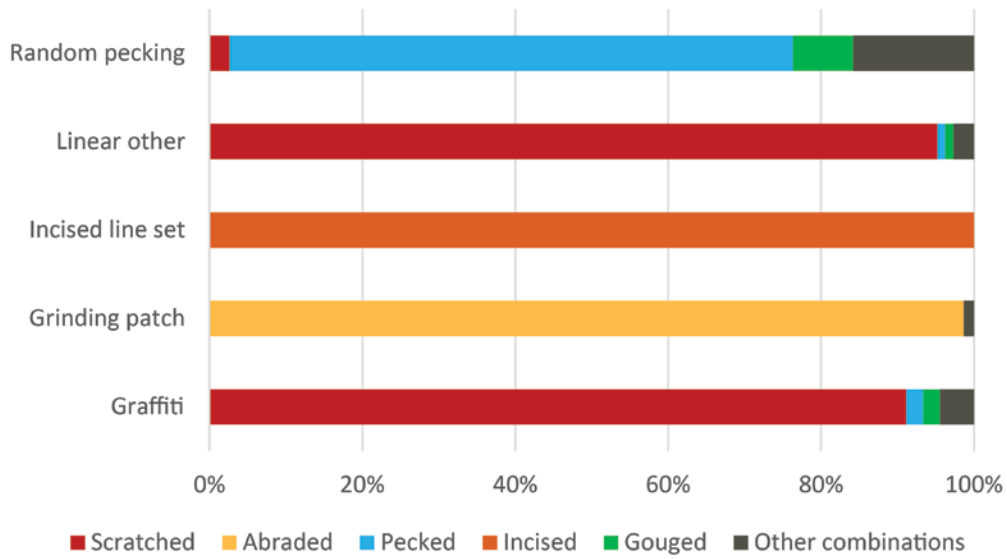


Figure 9.15. West Lewis Area 1 'other' depictions and the techniques used to produce them.

Most (86.3%) of the assemblage is smaller than 30 cm in size (Table 9.11). Only a single motif (a pecked and gouged spear-thrower) is larger than 1 m, and it is 109 cm long. A large portion of the tracks are in the <10 cm size category. Both the geometrics (60%) and other motifs tended to be in the 1–20 cm size

category, particularly the random lines and pecking, along with almost all (93%) of the graffiti (Table 9.12). Human figures, zoomorphs and a small proportion of the geometrics are the classes which occur in the mid-range size categories.

SIZE CATEGORIES (CM)	ANTHROPOMORPHIC	GEOMETRIC	OTHER	TRACKS	ZOOMORPHIC	TOTAL	%F
1-10	14	140	109	40	8	309	31.1
11-20	36	152	146	28	26	388	39.0
21-30	18	57	54	6	24	159	16.0
31-40	10	22	14	1	3	50	5.0
41-50	1	6	4	1	5	17	1.7
51-60	4	6	1		2	13	1.3
61-70	1	1	1			3	0.3
71-80		2	1		1	4	0.4
81-90	1					1	0.1
91-100			2			2	0.2
101-110		1				1	0.1
N/A	2	7	33	3		45	4.5
<i>Total</i>	<i>87</i>	<i>394</i>	<i>365</i>	<i>79</i>	<i>69</i>	<i>994</i>	<i>100</i>

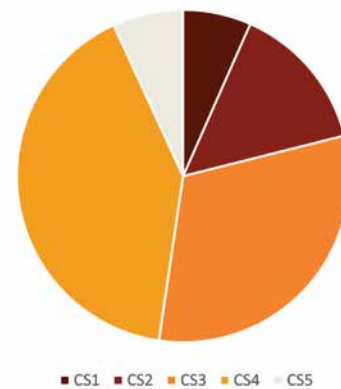
Table 9.11. West Lewis Area 1 size relative to motif class.

SIZE CATEGORIES (CM)	GRAFFITI	GRINDING PATCH	ALL OTHER	TOTAL
1-10	27	14	106	147
11-20	15	2	90	107
21-30	3	21	30	54
31-40		5	9	14
41-50		1	3	4
51-60			1	1
61-70			1	1
71-80		1	0	1
91-100		2	0	2
N/A		29	4	33
<i>Total</i>	<i>45</i>	<i>75</i>	<i>244</i>	<i>364</i>

Table 9.12. West Lewis Area 1 size categories of other markings.

CONTRAST STATE	HUMAN	GEOMETRIC	OTHER	TRACKS	ZOOMORPHIC	TOTAL	%F
1	5	19	24	3	3	54	5.4
2	7	40	56	10	4	117	11.8
3	14	114	71	25	29	253	25.5
4	42	157	83	31	18	331	33.3
5	13	16	20	3	5	57	5.6
N/A	6	48	111	7	10	182	18.3
<i>Total</i>	<i>87</i>	<i>394</i>	<i>365</i>	<i>79</i>	<i>69</i>	<i>994</i>	<i>100.0</i>

Table 9.13. West Lewis Area 1 contrast state for each motif class.



Graffiti and other recent inscription behaviours

Our fieldwork recorded all human-made marks on the natural outcrops and buildings around the settlement to further explore Aboriginal agency in the building and operation of the pastoral station. As described above, our classification system categorises motifs which are not part of Murujuga’s Indigenous taxonomy as Other (class): Graffiti (subject). All graffiti was measured and documented in the same manner as all other anthropogenic marks/motifs, measuring size, technique, form, contrast state and other characteristics, including a description of the individual attributes (see Chapter 3 for a detailed description of the Murujuga taxonomy). On West Lewis Island, however, we encountered an assemblage that contained a lot of ‘other markings’ and as part of the documentation we assessed whether the mark-making was Aboriginal art made during and after European contact.

An interesting tension arises from the language around inscription practices that are made ‘out of place’ (Frederick 2017). We recognise that the study of graffiti and rock art

has evolved and the perceptions of this out of time and place inscribing behaviour is more than just a dilemma for heritage managers who may view graffiti as wilful vandalism and destruction of pristine, authentic rock art places. The Murujuga Conservation Management Plan directs the Rangers to actively remove graffiti from public rock art spaces in the Murujuga National Park. But as Frederick (2016) and other authors point out, it is the motivation underlying the production of graffiti which differentiates this from a continuing art practice, and impetus can include: vandalism against rock art; contestation and resistance or commemoration of space; denouncing or marking time while incarcerated; or mere casual place-making actions (Bashford et al. 2016; Blundell and Woologoodga 2012; Bowdler 1988; Carey 2014; Clarke et al. 2017; Frederick 1999, 2009, 2016, 2019; O’Connor et al. 2013; Voss 2010). There is also a recognised relationship created by rock art in cultural landscapes that has a recursive effect on its audience through time (Morphy 2012), leading to the ongoing creation of rock art through different temporal phases. This can

include Aboriginal people reactivating long-held traditions (Blundell and Woolgoodga 2012; Mowaljarlai et al. 1988) or place-marking in new contexts (Tacon 2022), or graffiti by site visitors who perceive rock art not as a pristine relic of the past, but as landscape where they too have a right to record their presence (Gale 1984).

Frederick’s initial interest in graffiti was sparked by her engagement with charcoal drawings and light scratching amongst a pigment art assemblage that had been dismissed as ‘recent graffiti ... not worthy of further scrutiny’ (Frederick 1999). Frederick’s more nuanced analysis of this art component found this demonstrated a change in the recent mark-making practises of Aboriginal people in central Australia. Since Frederick’s early disentangling of the enigmatic rock art of the recent past, the ‘contact period’ has become a more valued period of archaeological interest, and here we mobilise a plethora of cognate research to understand how recent inscription practises at West Lewis can inform a fleeting ‘shallow history’, with limited historical records, in what was a traumatic transitional landscape as manifested by the Flying Foam Massacre of 1868 (see Chapters 11 and 20).

A total of 46 motifs were classified as graffiti in West Lewis Area 1; these are all within site MLP-WL001 (DPLH 9736). The graffiti is focused on the walls of the buildings (85%) with seven (15%) on the adjacent natural outcrops that serviced the rock for construction of the walls (Table 9.14 and Figure 9.16). Only 28 of these motifs (60%) are definitively European in origin: these being initials, names and dates, or combinations thereof (Figure 9.17). All but

three of the alphanumeric markings are located on built structures. One name, *Sustenance*, our historic research has found was a procurer of Aboriginal workers, mentioned in the hearing related to the death of an Aboriginal man on the island (CSR vol 877, p. 100 [5/11751 No 2310]). While this inscription has no associated date, the murder occurred in 1877, at which time the victim was said to have been left on the island by Sustenance. Four of these inscriptions are associated with John Tunny, a museum employee who in 1901 stayed on the island to collect animal specimens. The other alphanumeric inscriptions fall into two date ranges: several around 1944 and then the recent period (1971–2017). The World War II wartime visit may relate to when flying boats reportedly laid off here during Broome transits, or when a Catalina crashed, the remains of which are now located on Enderby Island 8.8 km west-southwest (see Chapter 11).

PLACE	NO.	%F
B1	2	4.3
B2	10	21.7
B3	6	13.0
B5	11	23.9
B7	9	19.6
Yard	1	2.2
Outcrop	7	15.2
<i>Total</i>	<i>46</i>	<i>100.0</i>

Table 9.14. Placement of recorded graffiti across the pastoral station.

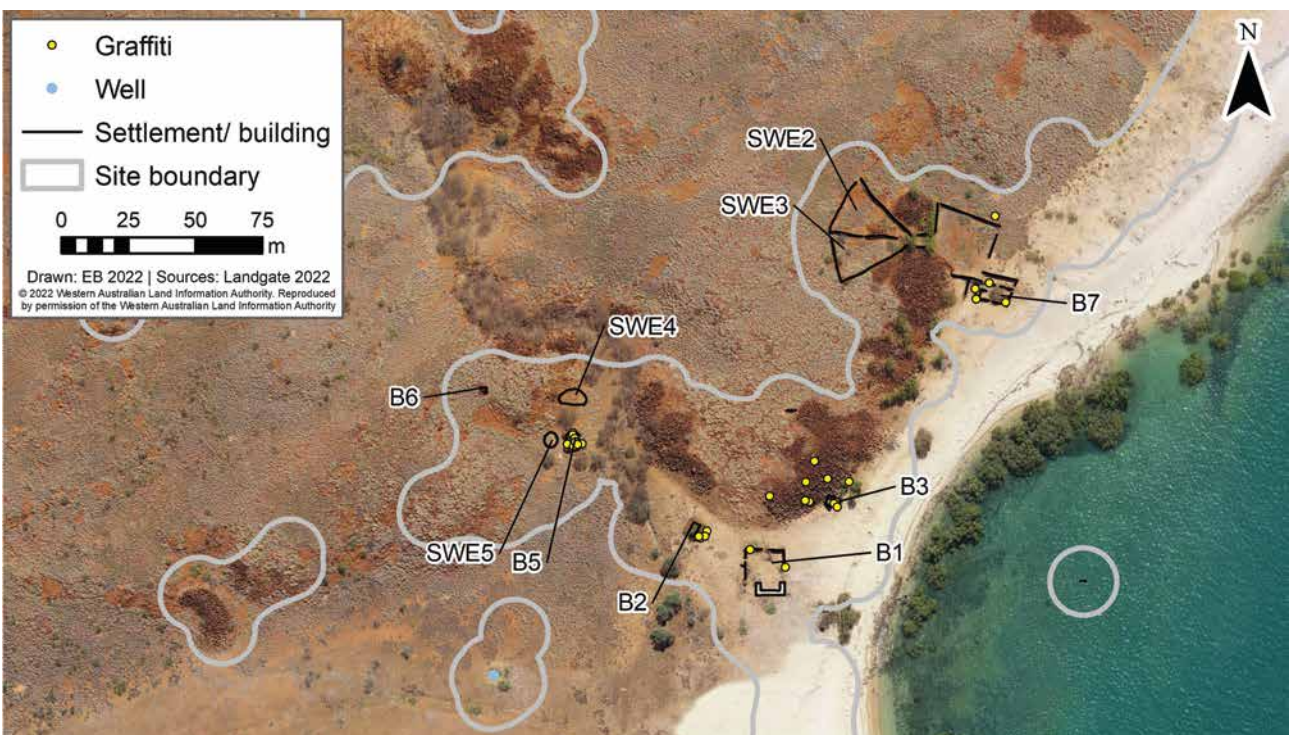


Figure 9.16. Pastoral station settlement showing the distribution of graffiti on the built structures and relative location of the natural outcrops.



Figure 9.17. Pastoral station inscriptions: (a) assumed to be made by John Tunney while camping within the station ruins in 1901; (b) inscription E B E with leaf-like embellishments; (c) an alphanumeric inscription presumed done in 2017; and (d) inscription '1944' with '1971' scratched later below. (Scale bars in cm.)

In addition to the alphanumeric inscriptions, the graffiti includes 12 figurative renderings, including quadrupeds, a possible barbed spear design (phytomorph) and an arrow or bird track (Figure 9.18). There are five geometric shapes, including a five-pointed star within a circle, and other marks that may relate to superstition (Figure 9.19). Four of the figurative images are boats: three of which are single-masted with the other a two-masted skiff (Figure 9.20). There are only four other sailing vessel images known in the rest of the archipelago (see Mulvaney 2018; Paterson et al. 2019a). Burcham (2019) has argued that the West Lewis sailing boat with rigging (Figure 9.20c) was likely the pearling skiff, the *Mary*, owned and used as a transport by the sheep station and used for pearling in the off-season.

The West Lewis rock art assemblage was documented and then subject to a more detailed analysis of motifs within 500 m of the settlement buildings to assess placement and to make a further evaluation as to possible authorship. This post-fieldwork audit identified numerous potentially transitional motifs – in terms of authorship. These more enigmatic motifs across the pastoral station landscape could be the result of:

1. Indigenous people using a range of introduced materials (e.g. fencing wire, metal foil, glass) to produce traditional motifs;
2. Aboriginal people brought to this settlement from elsewhere producing rock art different to the local Murujuga art schema;
3. production by early historical settlers (or more recent observers) attempting to mimic the art which is widespread across this cultural landscape.

A total of 875 motifs (excluding grinding patches and more distant isolated assemblages) were further investigated to explore this question (Table 9.15).



Figure 9.18. Pastoral station figurative graffiti: (a-b) both quadruped, likely to be either dog or sheep; (c) possible bird (human) and fish motifs; (d) simple geometric designs, most likely representing barbed spearheads. (Scale bars in cm.)

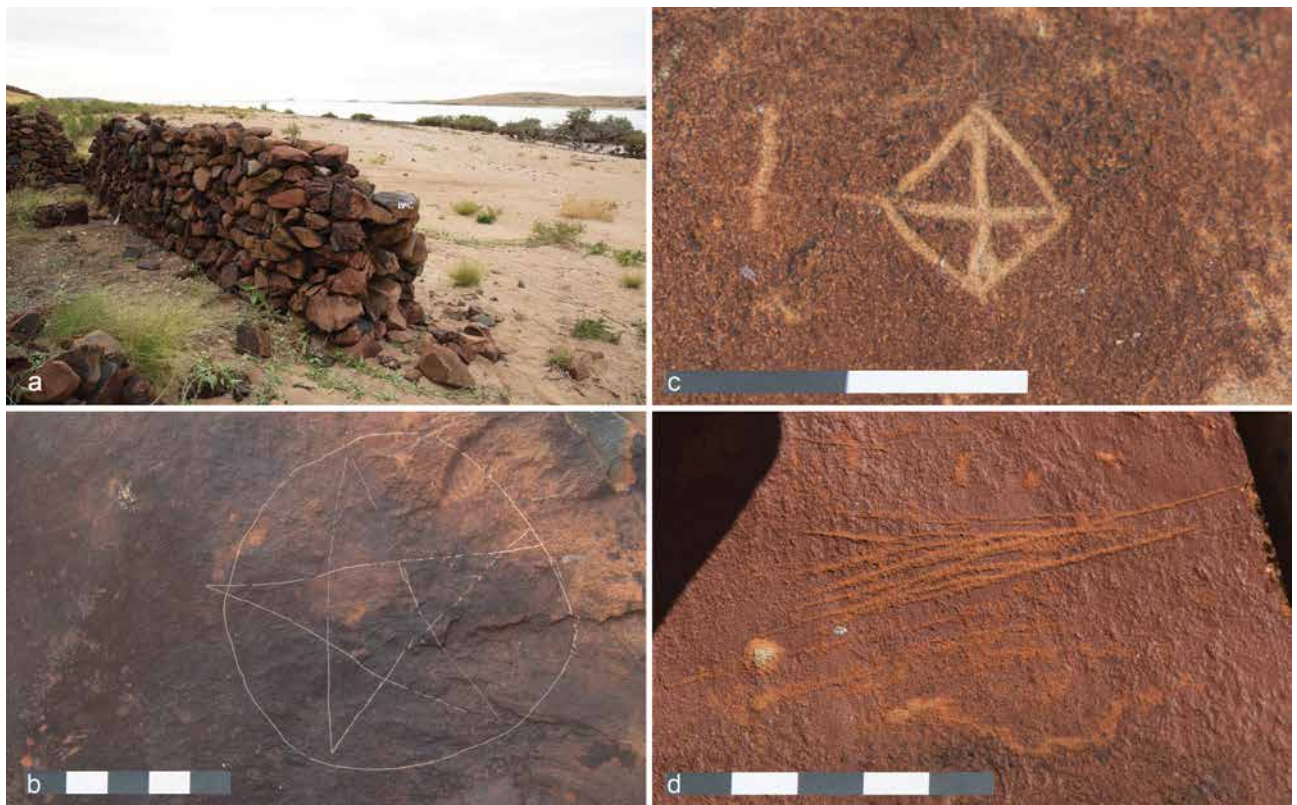


Figure 9.19. West Lewis Area 1: (a) wall landscape context with (b) pentacle placed near the entrance to building, possibly as symbol of protection; (c) a very small cross (c. 10 mm), within square incised on the same rock surface as a faint single-mast boat (see Figure 9.20d); and (d) one of the many examples of unidirectional lines (images enhanced). (Scale bars in cm.)



Figure 9.20. West Lewis Area 1 scratched boat images, three on rock surfaces built into the walls of buildings; (d) this two-masted vessel is so lightly scratched, the implement only removed the high points of the rock surface.

LOCATION	ABORIGINAL	EUROPEAN	INDETERMINATE AUTHORSHIP	TOTAL
B1	4	2	3	9
B2	3	3	6	12
B3	1	3	2	6
B4	1		1	2
B5		10	6	16
B6			2	2
B7	4	6	19	29
Yard		1	1	2
Station outcrop	114	3	126	243
Homestead Creek East	5		44	49
Upper Creek East	183		27	210
Upper Creek West	125		5	130
Northern outcrop	40			40
Southern slopes	26			26
Upper slopes	91			91
Western slope	8			8
<i>Total</i>	<i>605</i>	<i>28</i>	<i>242</i>	<i>875</i>

Table 9.15. Spatial distribution of Aboriginal, European and indeterminate authorship markings across the pastoral station buildings and adjacent natural features.

The West Lewis contact assemblage is complicated by several factors. The buildings constructed for the pastoral station have been made from the local rock, and many motifs on the buildings were likely produced before being moved to these locations. This translocation of

Aboriginal art was also found in the historical ‘quarry’ area, where the stones were ‘dressed’ for use in construction. Around the settlement we also encountered a number of motifs which were made in traditional schema but which appeared to have been created using a

sharp-pointed non-traditional tool (e.g. fencing wire, or perhaps metal bottle foils, as negligible fencing wire was located in the yards). These could have been made by Aboriginal people living in this landscape with access to introduced pastoral-era materials. There were several motifs with ambiguous schemas which made the designation of authorship difficult. We have been conservative in our designation of authorship in the uncertain (possibly Indigenous) category. In most part, it was the nature of the extant assemblage with its many enigmatic unilinear and multidirectional scratchings (see Figure 9.8) which made this analysis difficult. This assemblage pattern was similarly found in Area 5 on the other side of the island, which again has evidence for European inscribing behaviour from the 1840s.

While the marks made by Europeans are located on and close to the historic buildings, the Aboriginal art is located everywhere, and the art of indeterminate authorship is located only in the two site complexes immediately adjacent to the pastoral station (Figure 9.21). This proximity to the pastoral station, combined with the large assemblage sizes, makes interpretation difficult. These ambiguous images could be an effect of sampling (i.e. the normal variability in this type of assemblage) as well as being in the likely locations where Aboriginal people associated with the pastoral/pearling activities would have been. It is evident that the smaller assemblages further away from the pastoral station do not contain these images, suggesting that these types of marks are focused on resource zones considered to be important through time, such as potable water, or the foreshore with its Holocene intertidal resources. The strong focus of European and contemporary inscriptions on the historical structures and adjacent surfaces indicates that this mark-making was clearly place-focused, with surfaces identified as European in origin being preferred for this activity.

The analysis of authorship and subject choice distribution demonstrates definite patterning across the physical landscape (Figure 9.21). This reflects both cultural preference as well as temporal shifts in the surfaces available and speaks to the potential ethnicity of the artist. Petroglyphs linked to earlier artistic phases of Murujuga rock art are, unsurprisingly, distributed widely across the entire landscape and located on the rock outcrops along the gully and up the slope (see Figure 9.22). The further away from the homestead, the less European and potentially transitional art is found. The recent productions, especially the alphanumeric inscriptions and European graffiti, are almost entirely on the built structures of the sheep station and adjacent rock extraction area.

The historic extraction area used during the building construction had seven petroglyphs, including a macropod, human foot and possible woomera (Figure 9.23a–c), three of which likely predate the use of this area for rock extraction. Also located here, and likely associated with the colonial occupation period, is the letter 'E' and three line sets, one with converging pattern in a bird-track form, likely produced using metal (Figure 9.23d and e).

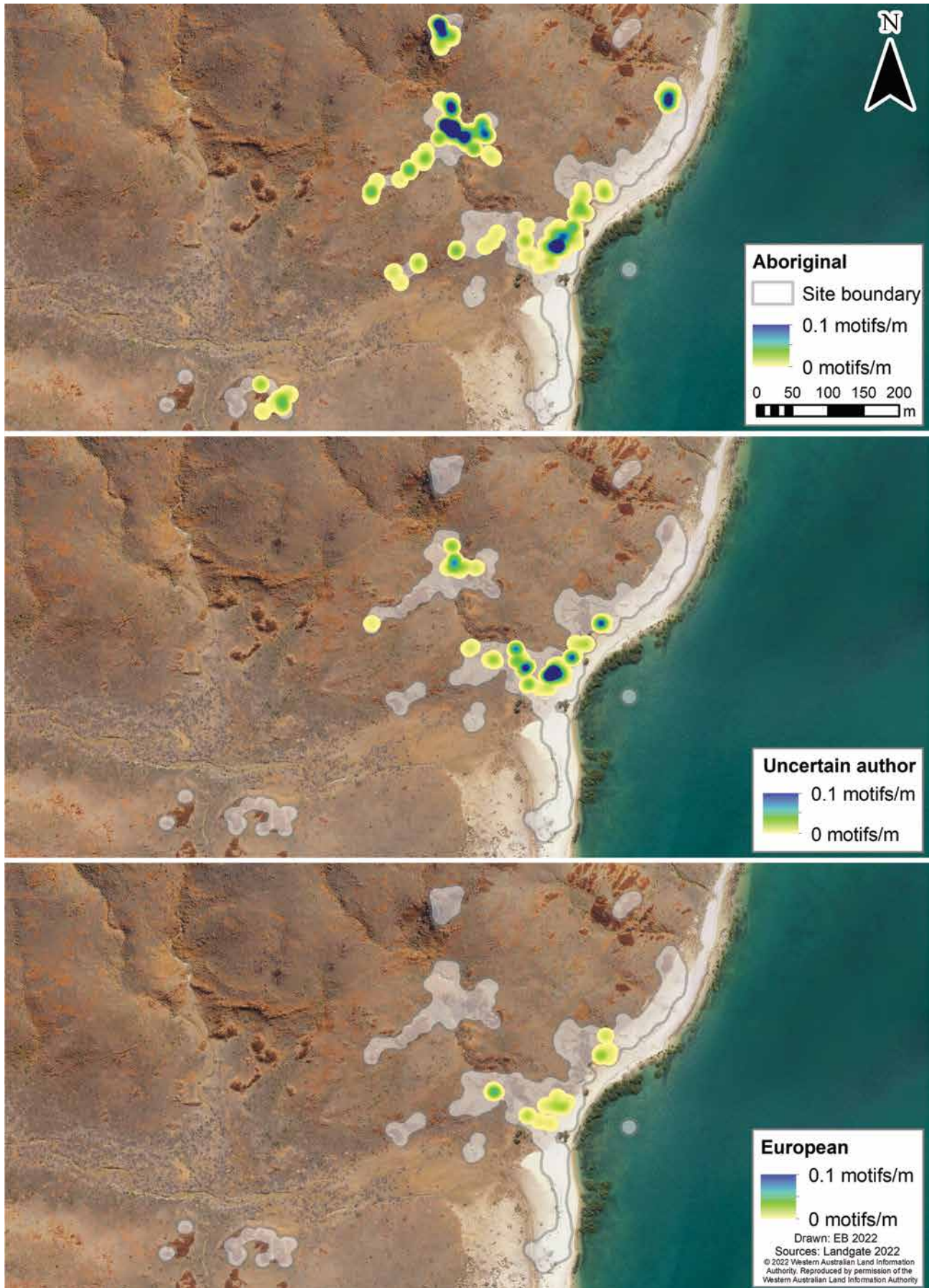


Figure 9.21. Pastoral station settlement site showing distribution of Aboriginal, European and uncertain authorship markings.

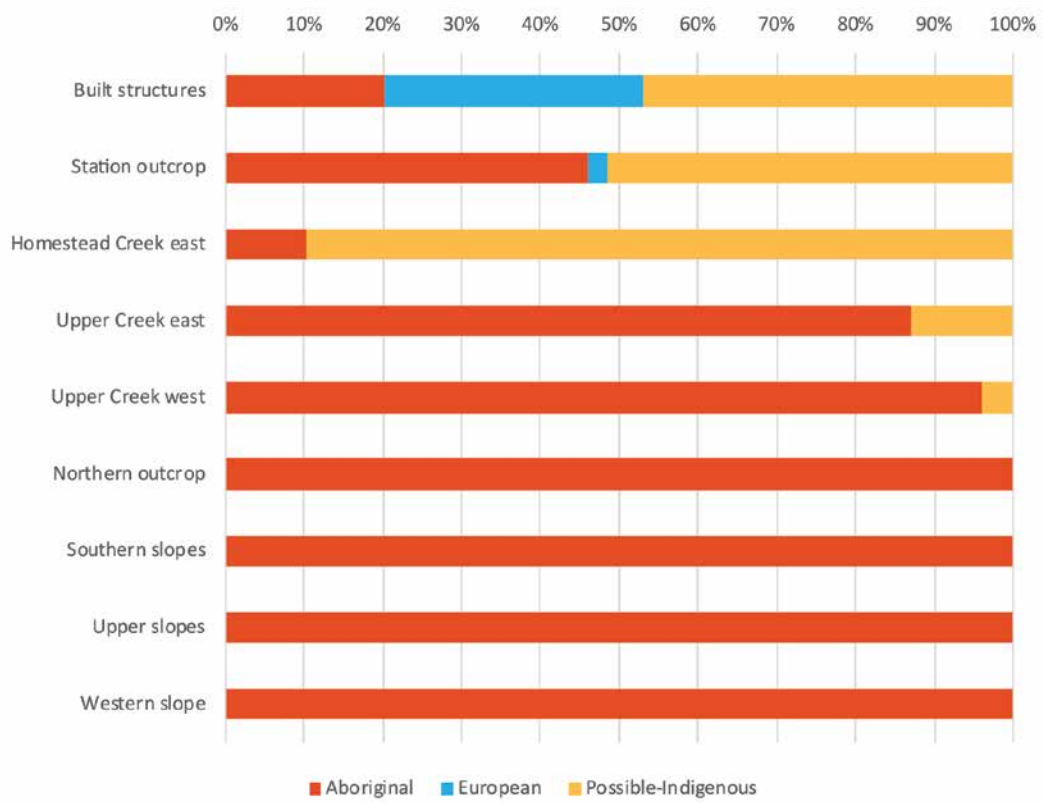


Figure 9.22. Distribution of graffiti and mixed-authorship motifs by different landscape contexts, from the sites adjacent to the pastoral station (n = 711). Grinding patches, which are all assumed to be Aboriginal in origin, were excluded.

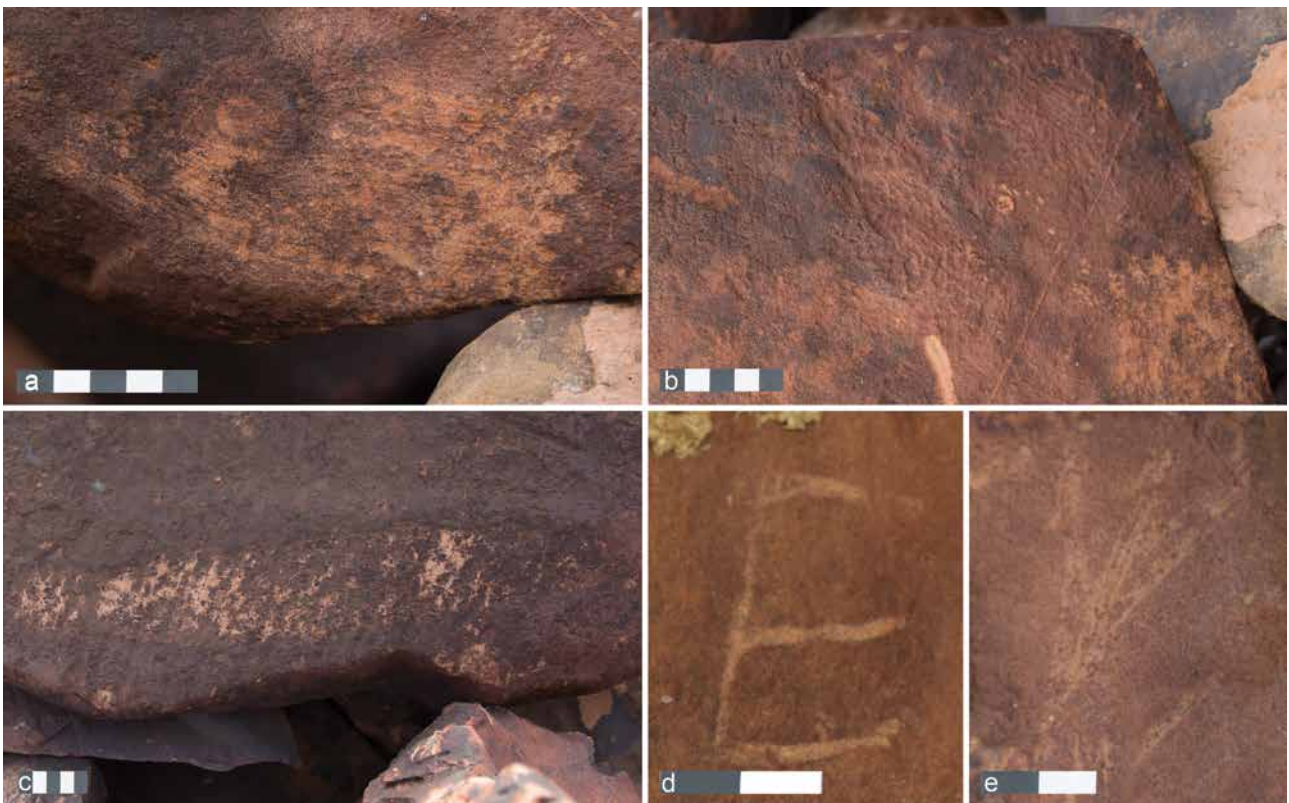


Figure 9.23. West Lewis Area 1 petroglyphs located in the rock extraction area: (a-b) human foot and macropod track motifs on one panel, likely done prior to quarrying; (c) one of the numerous 'woomera' images modified later to an earlier petroglyph; (d) letter E incised with wire; (e) scratched bird-track motif probably done during extraction phase of the outcrop. (Scale bars in cm intervals.)

A number of figurative images are likely to have been produced with introduced materials from the post-contact period (Figure 9.24). Still other petroglyphs are produced with more traditional techniques and/or styles but include non-local schema. These motifs may reflect Aboriginal occupants at the settlement brought from elsewhere for pastoral or pearling; e.g. Kimberley man, Cooramarra, was killed on West Lewis Island by Pearler Ned Chapman during the pastoral station's operation in 1877, and Durlacher (2013) reports that there were many Aboriginal people from elsewhere living in the archipelago after the Flying Foam Massacre (see

Chapters 11 and 18), though not necessarily during the sheep station period. These motifs include shields and spear throwers which are more characteristic of other rock art regions from the Pilbara and beyond.

Thirteen motifs were recorded on the built structures that were clearly produced earlier and transported from the adjacent engraved slopes (Table 9.15). There is nothing about these to suggest production by other than Aboriginal hand. Other motifs on the buildings were placed such that they may have been produced *in situ*, since the building was constructed (see Chapter 10). These are the ones with more ambiguous authorship.



Figure 9.24. WLA-001 motifs produced with metal, most likely fencing wire, on blocks overlooking the main homestead complex: (left) incised bearded human with pecked area between legs; (middle and right) angled-limb figures and sausage dog - fish (?), most likely produced during the historic occupation of the sheep station.

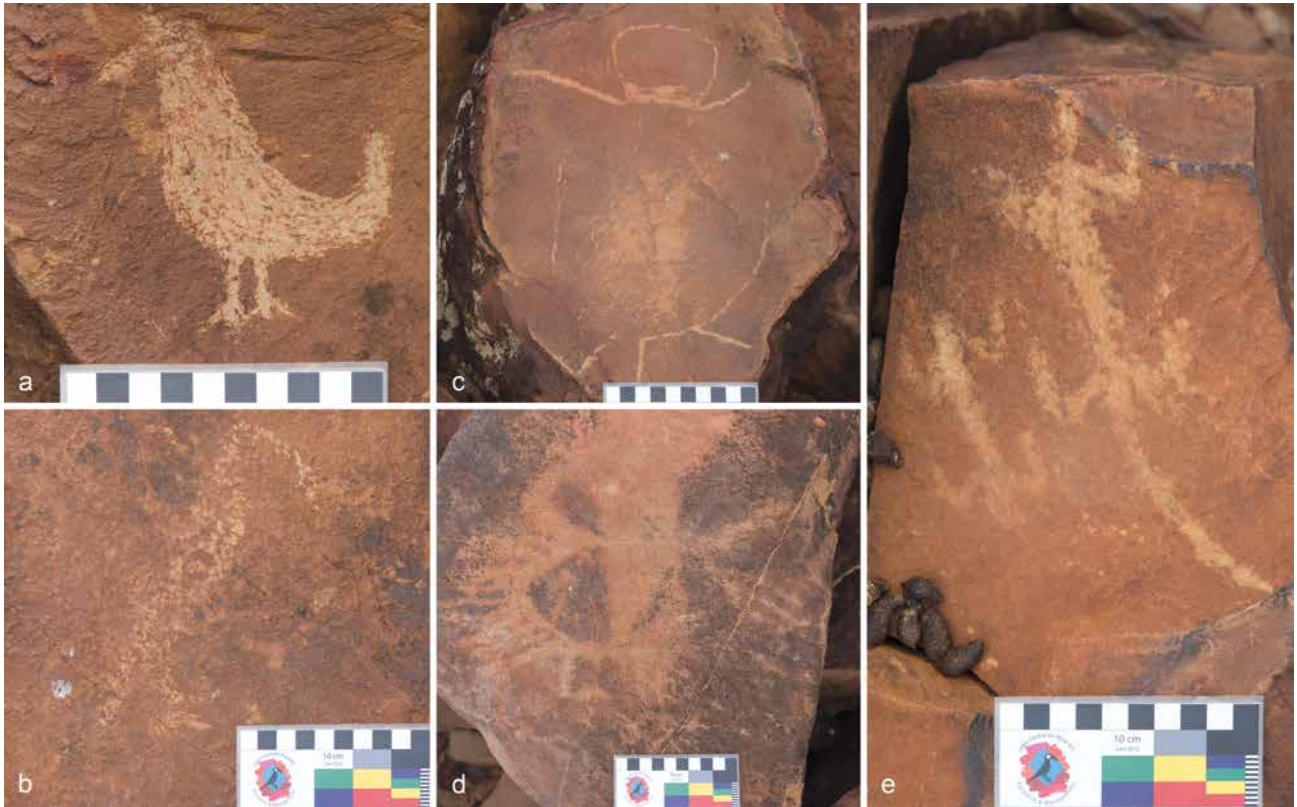


Figure 9.25. West Lewis Area 1 overlooking the homestead: variations in graphic forms not normally found in the more recent rock art phases, indicating they were possibly produced during the operation of the sheep station: a-b) bird motifs; c) turtle; d) crab; and e) lizards.

West Lewis Sample Area 5

This area was targeted by the project to record the known historic whalers' inscriptions located on a low bluff at the south-west tip of West Lewis Island (Figure 9.26). Whalers from the *Delta*, in 1849, made multiple inscriptions amongst an already heavily fractured bedrock and block exposure overlooking the strait between Enderby and West Lewis islands (Paterson et al. 2019a). Recorded as site WLA-005, petroglyphs are found both on top of the low rise and on blocks and other surfaces closer to the waterline at the base of the low bluff. The team recorded panels around this promontory adjacent to the water, and adjacent to the small inlet. The bedrock in this area is mostly andesitic basalt (Figure 9.27) with a small dyke of dolerite observed in the field.

The recording teams documented 94 panels on the day that this location was surveyed. Based on the physiographic occurrence and distribution, 10 sites are defined, eight of which contain petroglyphs. One site has a single grinding patch and one recorded flaked stone artefact scatter (Table 9.16). While a single grinding patch is also present at two other sites, these locations are dominated by rock art. No structures were recorded within Area 5. One isolated standing stone (MLP-WL036) was located on the ridgeline upslope from the promontory (Figure

9.26). This structure was identified during the overland crossing to record the *Delta* inscriptions.

This assemblage also has an unusually high number of geometric motifs and 'other' elements. The geometric motifs account for 44% and 'other' for c. 35% of the overall assemblage (Table 9.19). There are relatively few grinding patches ($n = 3$; 2.4%) in this area, and most of the 'other' markings are linear scratching (unilinear and multidirectional: $n = 82$; 67%) or random pecking ($n = 22$; 18%). When the non-depictive elements are removed from the assemblage, geometric motifs are even more dominant (68%) with anthropomorphic, tracks and zoomorphic motifs contributing between 8% and 16% each (Table 9.19). Most of the geometrics are linear designs ($n = 56$; 16%) but ovals and rayed motifs are also present in large numbers here. Arcs are less frequent than found in West Lewis Area 1 (Table 9.20). Many of the 22 rayed geometrics here are interpreted as phytomorph (fern) designs, barbed spearheads or possibly fish-bone motifs (Figure 9.30). Tracks are the next most common motif class and, of these, most are bird tracks (Table 9.20). Of the human figures depicted here, most ($n = 14$) are linear figures. There are no distinctive older styles, but several linear figures with characteristic

arrangements of material culture and headdresses (from the middle of the art phase sequence) do occur. Zoomorphs are predominantly marine themes, with only one snake and one bird depicted and no images of macropods or other quadrupeds (Figure 9.29).

SITE TYPE	COUNT	%
Art	7	70
Historic; art	1	10
Artefact scatter	1	10
Grinding patch	1	10
<i>Total</i>	<i>10</i>	<i>100</i>

Table 9.16. West Lewis Area 5: site types.

SITE	PANELS	MOTIFS	GRINDING	GRAFFITI
MLP-WL005	43	216		10
MLP-WL002	13	61	1	
MLP-WL008	16	24	1	
MLP-WL003	7	21		
MLP-WL010	10	15		
MLP-WL007	2	3		
MLP-WL004	1	1		
MLP-WL006	1	1		
MLP-WL009	1	0	1	
<i>Total</i>	<i>94</i>	<i>342</i>	<i>3</i>	<i>10</i>

Table 9.17. West Lewis Area 5: rock art sites and their assemblage sizes.

SITE ASSEMBLAGE	COUNT	%
Small (<5 motifs)	4	37.5
Medium (5–10)	0	–
Large (11–100)	4	50.0
Complex (>200)	1	12.5

Table 9.18. West Lewis Area 5: assemblage size proportions.

CLASS	COUNT	%	DEPICTIVE	%
Anthropomorphic	18	5.2	18	8.0
Geometric	153	44.3	153	68.3
Other	121	35.1		
Tracks	36	10.4	36	16.1
Zoomorphic	17	4.9	17	7.6
<i>Total</i>	<i>345</i>	<i>100.0</i>	<i>224</i>	<i>100.0</i>

Table 9.19. West Lewis Area 5: class totals and depictive element proportions.

SUBJECT	COUNT	%	SUBJECT	COUNT	%
<i>Geometric</i>			<i>Anthropomorphic</i>		
Angular	13	3.8	Linear figure	14	4.1
Arc	17	4.9	Solid figure	4	1.2
<i>Circular</i>			<i>Zoomorphs</i>		
Dot	2	0.6	Animal part	2	0.6
Linear	56	16.2	Bird	1	0.3
Oval	32	9.3	Fish	3	1.1
Rayed	26	7.5	Dugong	1	0.3
<i>Tracks</i>			Snake		
Bird track	22	6.4	Stingray	2	0.6
Human foot	9	2.6	Turtle	7	2.0
Macropod track	5	1.4	<i>Total</i>	<i>224</i>	<i>100.0</i>

Table 9.20. West Lewis Area 5: subject proportions.

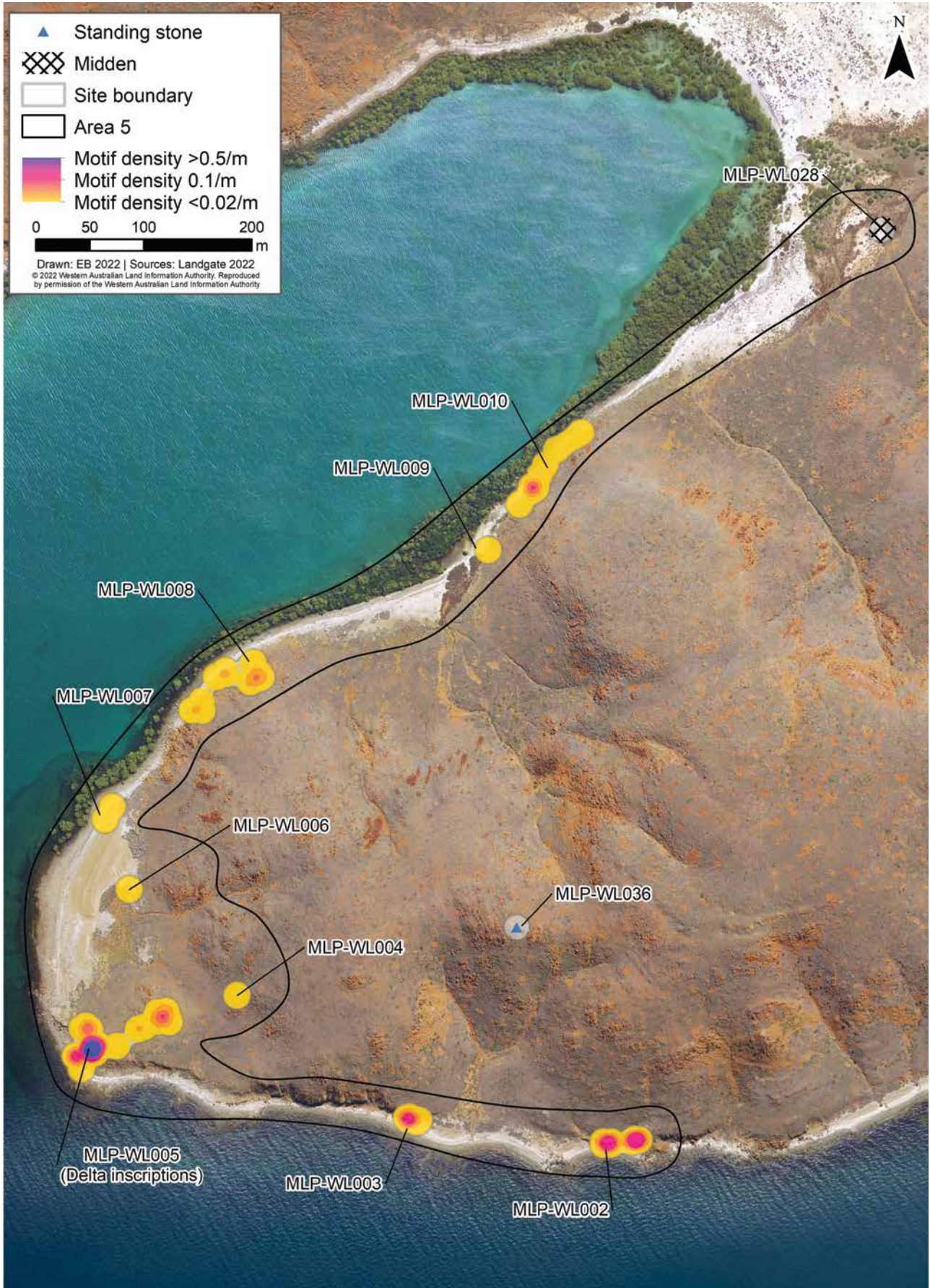


Figure 9.26. West Lewis Area 5: recorded Aboriginal rock art sites with isolated structure MLP-WL036 also shown.



Figure 9.27. West Lewis Area 5 showing the various landscape features, including: (a) the grassy interior traversed to reach the basalt promontory; (b) the sloping bedrock surface in MLP-WL002; (c) looking down the spur towards the coastline from above MLP-WL004; (d) low beach cliff with petroglyphs MLP-WL003; (e) part of the dolerite dyke; and (f) basalt expression in MLP-WL008.

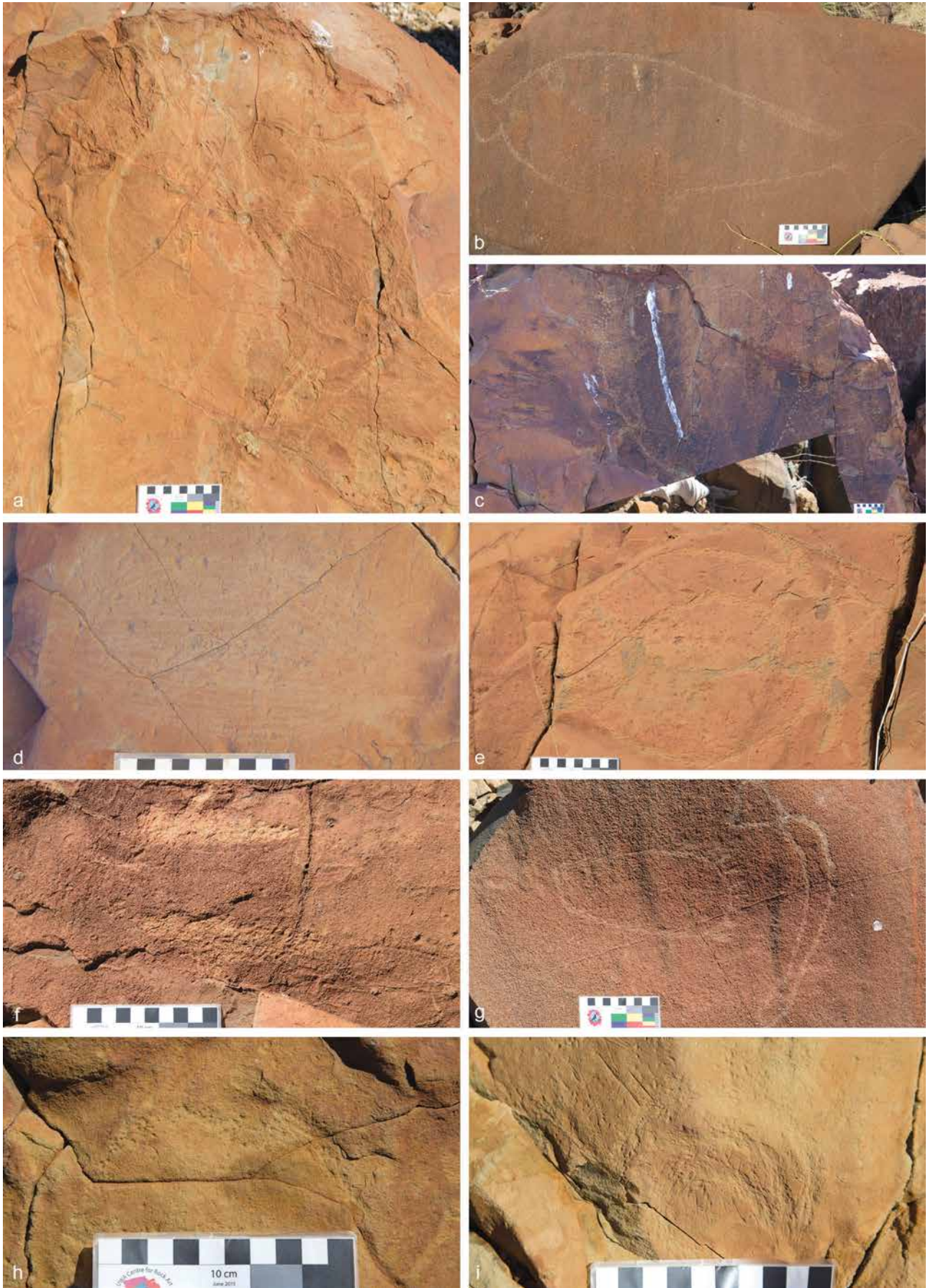


Figure 9.28. West Lewis Area 5: (a) two outlined fish; (b) a dugong depicted in unusual perspective, showing the belly with pectoral fins bent inward and anus; (c-e) turtle images, outline, infill and patterned forms; (f) pecked macropod tracks; (g) human footprint and possible fish motif on dolerite; (h) undulating line, possible snake motif; (i) a concentric-arc set.

The smooth surface texture of the basalt geology is reflected in the techniques used in the production of the petroglyphs and their resultant forms across WL005. Most (64%) of the recorded motifs are of linear form (Table 9.21), particularly the dominant geometric and 'other' classes (Figure 9.31). Tracks and anthropomorphs are similarly mostly linear; however, zoomorphs are created using a much wider range of forms, predominantly solid and outline and combination forms (Figure 9.32). The 'other' items represent a very different set of productions.

The techniques used to create the art also reflect the smoother bedrock surfaces. The majority (44%) of West Lewis Area 5 petroglyphs are created by scratching the image into the rock surface, while pecking is the next most common technique (32%). Incision (11%), abrasion, and combined scratching and abrasion (3.2% each) are the other common techniques (Table 9.22 and Figure 9.33). The anthropomorphic, track and zoomorphic motifs demonstrate a similar proportion of techniques, with pecking being the dominant technique for these three classes (Figure 9.33).

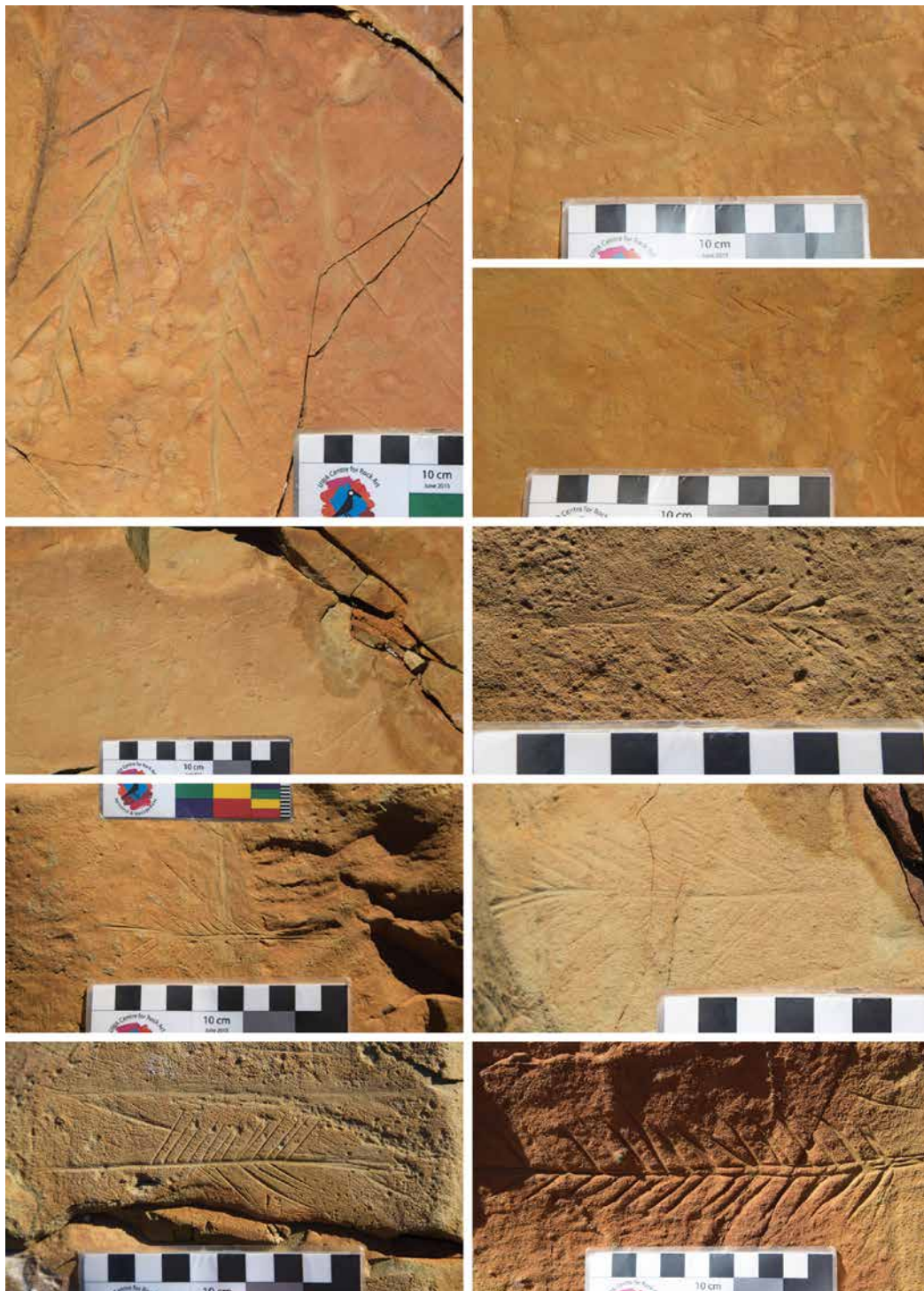


Figure 9.29. West Lewis Area 5 scratched and incised geometric motifs – phytomorphs or barbed spears: top left has an anthropomorphic stick figure 'holding' two of these, suggesting the motif may be a spear representation.

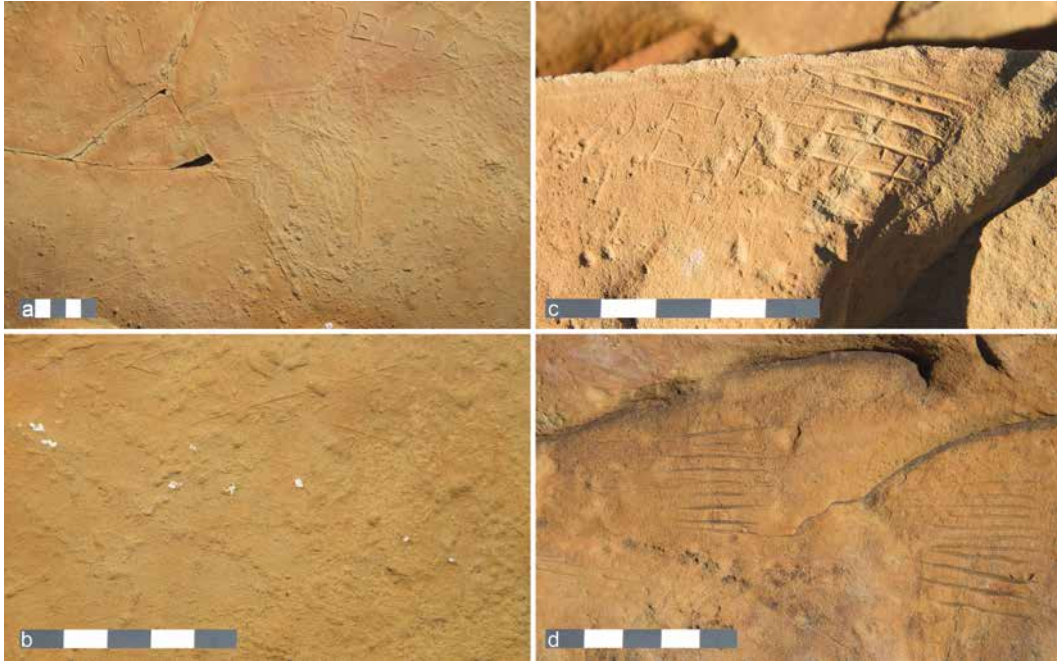


Figure 9.30. West Lewis Area 5: variety of ‘other’ forms, with (a-b) random pecking areas; (c-d) incised line sets.

FORM	ANTHROPOMORPHIC	GEOMETRIC	OTHER	TRACKS	ZOOMORPHIC	TOTAL	%F
Linear	78	63	75	56		222	64.3
Solid	6	10	2	14	29	30	8.7
Outline		12			24	22	6.4
Scattered marks		1	14	3		20	5.8
Pattern		1	2			4	1.2
Linear; outline		3	1	3	12	8	2.3
Solid; linear		4	2	3	12	12	3.5
Combination forms	17	5	3	22	24	27	7.8

Table 9.21. West Lewis Area 5: form shown for each motif class.

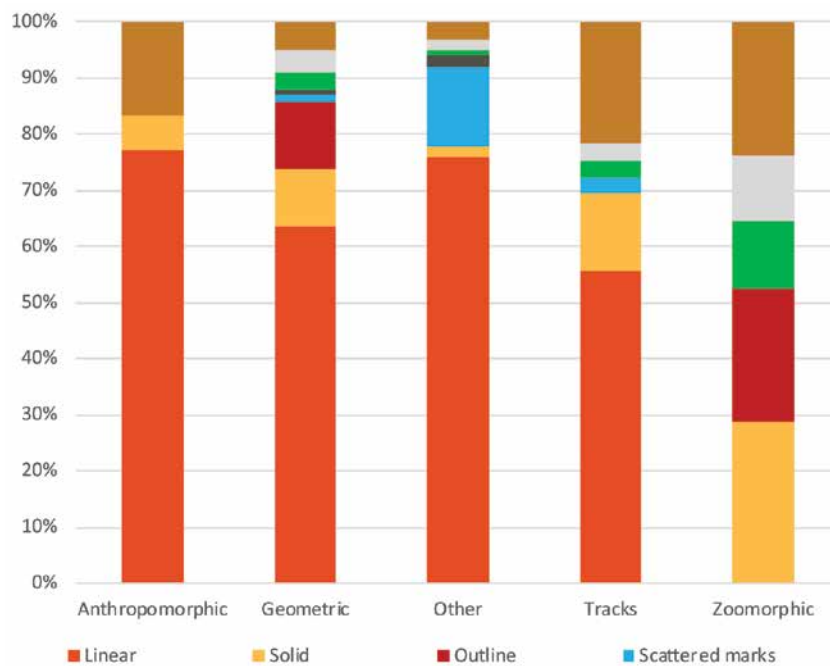


Figure 9.31. West Lewis Area 5: form used in producing each motif class.

TECHNIQUE	ANTHROPOMORPHIC	GEOMETRIC	OTHER	TRACKS	ZOOMORPHIC	TOTAL	%F
Scratched	2	63	83	5		153	44.3
Pecked	10	44	18	25	13	110	31.9
Incised	4	22	8	4		38	11.0
Abraded		8	3			11	3.2
Scratched; abraded	1	7	2		1	11	3.2
Gouged		1	1	1		3	0.9
Bruised/pounded		1			2	3	0.9
Combination	1	7	6	1	1	16	4.6
<i>Total</i>	<i>18</i>	<i>153</i>	<i>121</i>	<i>36</i>	<i>17</i>	<i>345</i>	<i>100.0</i>

Table 9.22. West Lewis Area 5: technique used in each motif class.

TECHNIQUE	AMORPHOUS AREA	HISTORIC GRAFFITI	GRINDING PATCH	INCISED LINE SET	LINEAR OTHER	RANDOM PECKING	TOTAL
Scratched	1	3			78	1	83
Pecked						18	18
Incised		4		4			8
Abraded			3				3
Incised; scratched		2			1		3
Combination techniques	1	1	0	0	3	3	8
<i>Total</i>	<i>2</i>	<i>10</i>	<i>3</i>	<i>4</i>	<i>82</i>	<i>22</i>	<i>123</i>

Table 9.23. West Lewis Area 5: techniques used in other motif categories.

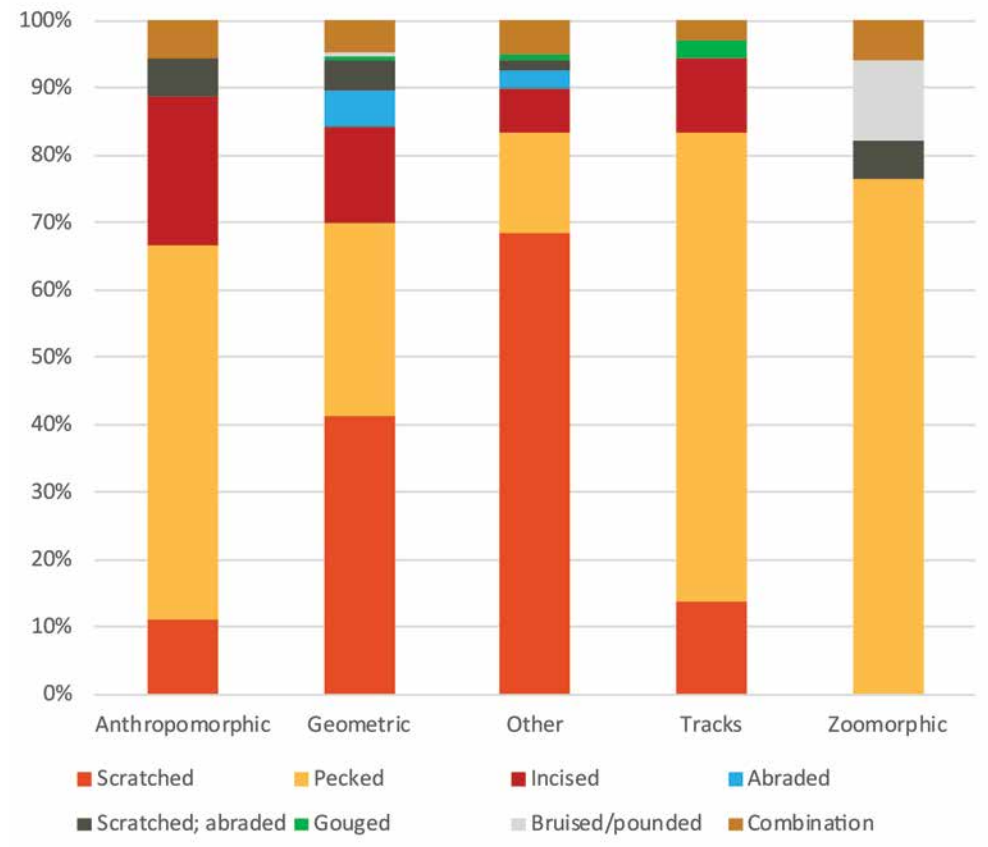


Figure 9.32. West Lewis Area 5: techniques used in each motif class.

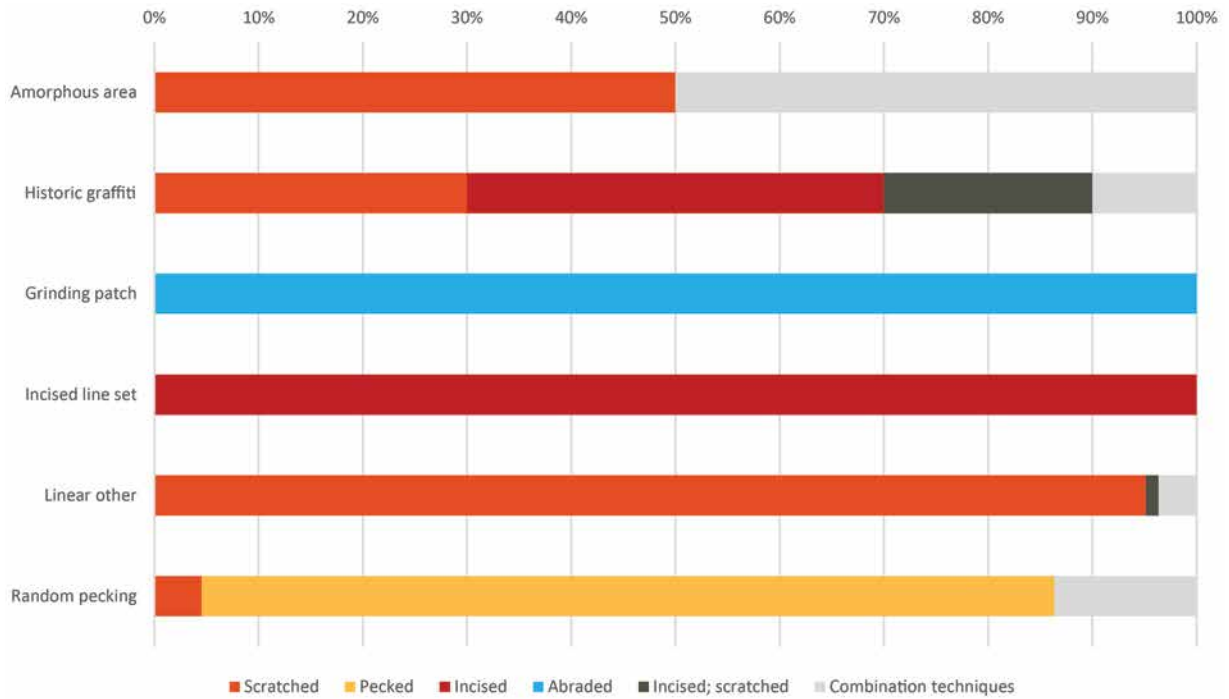


Figure 9.33. West Lewis Area 5: 'other' productions showing the techniques deployed.

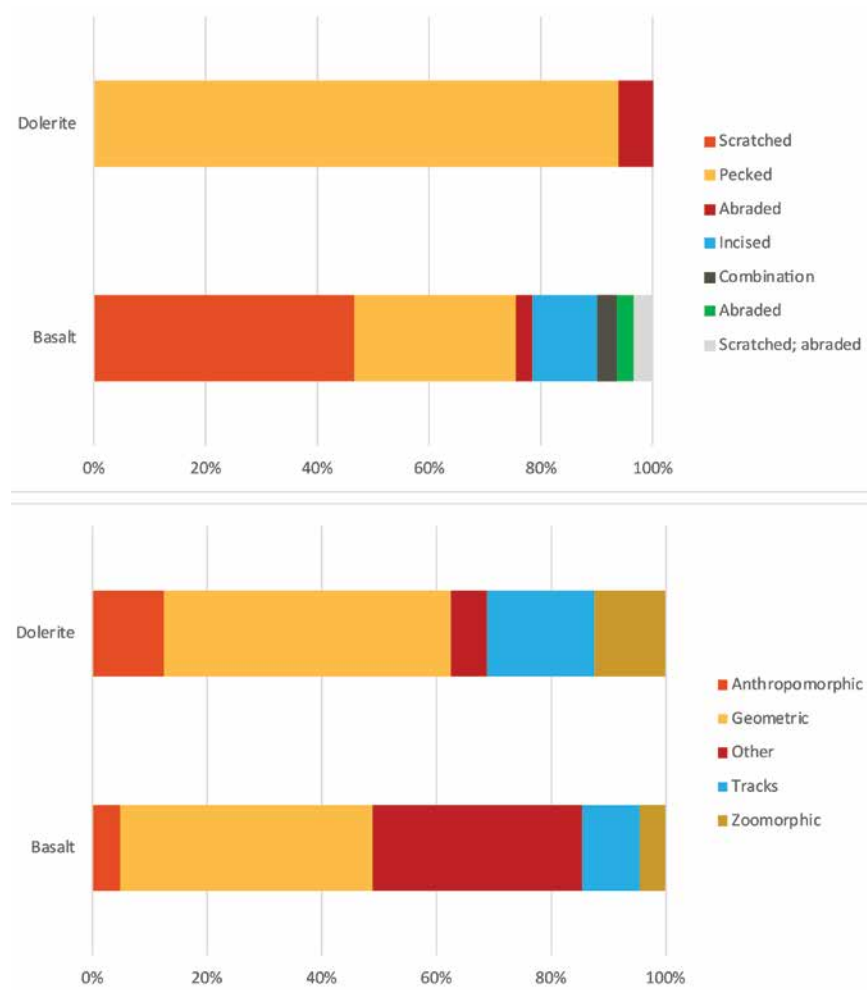


Figure 9.34. West Lewis Area 5: classes depicted and technique proportions on the different geologies. The one abraded basalt entity is a grinding patch.

The motifs found on the 10 dolerite panels (at MPL-WL010) have very different proportions of motifs and techniques used to produce the images. A much smaller proportion of 'other' productions are found on the 10 dolerite panels, with a concomitant increase in tracks, anthropomorphs and zoomorphs (Figure 9.34). When the techniques used on the two geologies are compared (Figure 9.34), a much wider range of techniques are used on the basalt, with no scratching, incision or combination forms found on the dolerite.

It may not be just petrological characteristics driving this result. Scratching/abrading may also be

more recent techniques given these tend to be found superimposed over pecked motifs where they co-occur. This is something that requires further analysis.

Given the dominance of scratched motifs and marks, over half (50.4%) of this assemblage is smaller than 10 cm and almost 90% of the assemblage is smaller than 30 cm maximum dimension (Table 9.24). Only two motifs (0.6%) are larger than 1 m: a turtle and the largest motif in this assemblage, a pair of curved open arcs, which is 112 cm long.

SIZE CATEGORIES	ANTHROPOMORPHIC	GEOMETRIC	OTHER	TRACKS	ZOOMORPHIC	TOTAL	%F
1-10	5	77	71	19	2	174	50.4
11-20	8	49	42	10	3	112	32.5
21-30	2	11	6	6	3	28	8.1
31-40	3	9		1	2	15	4.3
41-50		2			3	5	1.4
51-60		1	1		1	3	0.9
61-70			1			1	0.3
71-80		2				2	0.6
81-90					1	1	0.3
91-100					2	2	0.6
111-120		2				2	0.6
Total	18	153	121	36	17	345	100.0

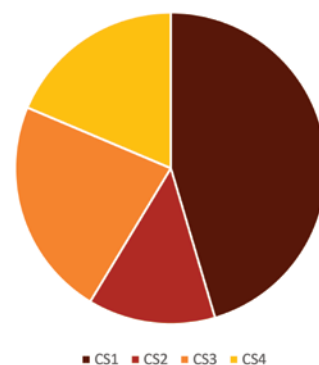
Table 9.24. West Lewis Area 5: size increments in relation to motif class.

Contrast state was developed as an indicator of weathering exposure of the petroglyph surface to provide a temporal guide to artistic traditions and subjects on gabbro and granophyre (Mulvaney 2015). Both these rock types have an extremely slow rate of weathering (Pillans and Fifield 2013). Due to a thin weathered rind and higher erosional rate, measure of contrast state is not as definitive on the basalt. The dated 1842 and other historic graffiti all has no or low contrast, whereas this would be expected to be in CS5. It is concluded that a combination of technique and geology is affecting these results here. Only six petroglyphs are more than two millimetres deep, these being mostly (n = 5) produced by pecking (the other is incised).

Most (44.6%) of this Area 5 assemblage is contrast state 1 (Table 9.25); the second-highest weathering condition index is CS3 (22.3%). A very small proportion of the assemblage (1.7%) has mixed patination or other discolouration such that an accurate assessment of weathering status cannot be made. The combination of superficial or shallow techniques (which have not perforated the surface patina) and the relative softness of the rock (potentially increasing weathering rate) explains the low contrast condition of the petroglyphs, including the graffiti (see Table 9.25). In the WL005 sample, contrast state is not a meaningful index for relative age of the petroglyphs.

CONTRAST	HUMAN	GEOMETRIC	OTHER	TRACKS	ZOOMORPHIC	TOTAL	%F
1	3	70	68	13		154	44.6
2	3	19	18	2	3	45	13.0
3	4	31	25	12	5	77	22.3
4	8	31	7	8	9	63	18.3
N/A		2	3	1		6	1.7
Total	18	153	121	36	17	345	100.0

Table 9.25. West Lewis Area 5: contrast state in relation to motif class.



■ CS1 ■ CS2 ■ CS3 ■ CS4

Occasionally across Murujuga, motifs are observed to include depressions, panel edges or other natural structures within the petroglyph design. At MPL-WL005 an unusual feature was observed with several of the petroglyphs including a xenolith (i.e. a piece of rock within the igneous mass, not derived from the original magma).

Two turtles were found on the same panel (WL05-2017-D021) and each image is centred on an exposed pebble within the parent rock (Figure 9.36). This artistic device is rare, with only a few other documented cases across Murujuga.

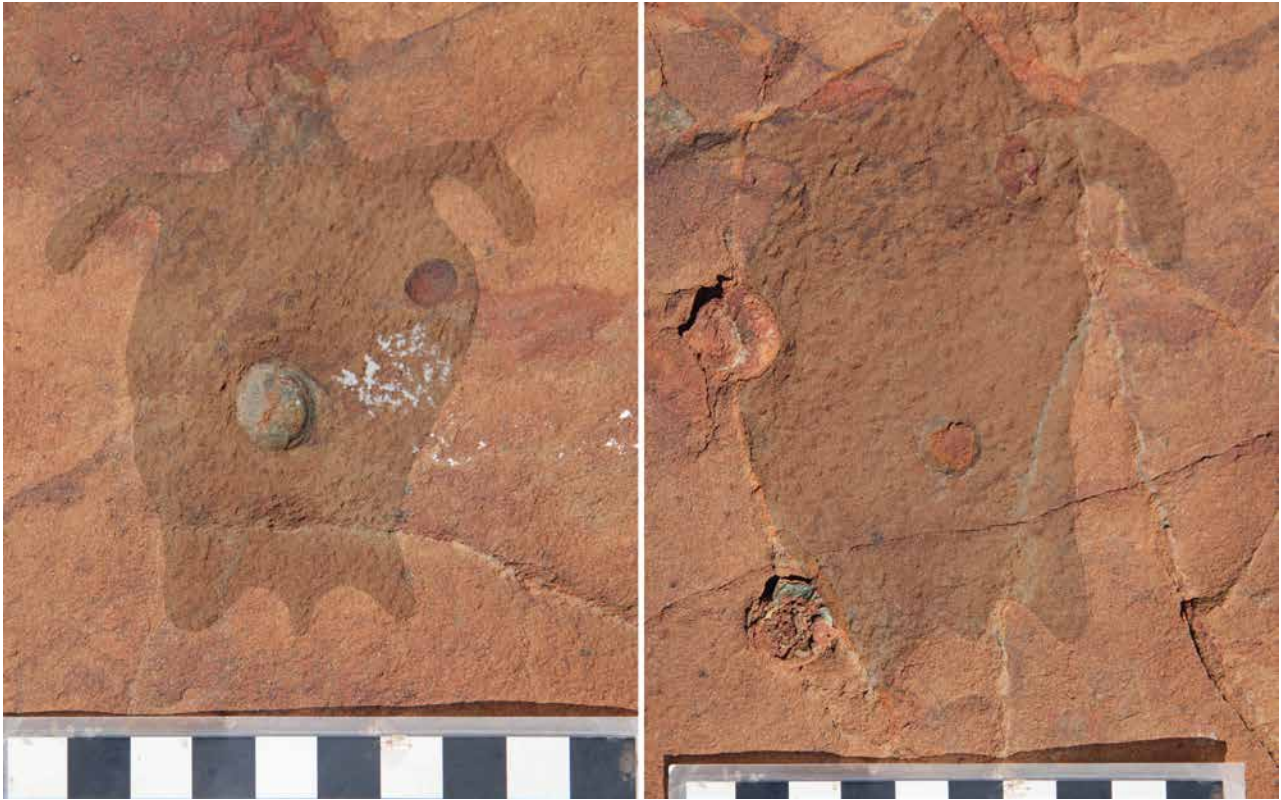


Figure 9.35. West Lewis Area 5: two turtle images which include rock xenoliths inside the carapace shape; examples of this are only rarely seen across Murujuga (images enhanced).

The historic inscriptions

This major focus of the petroglyph assemblage was the low bluff adjacent to the beach which had been reported to contain inscriptions by whalers in 1849 (Paterson et al. 2019a). Recorded as site MLP-WL005, 216 petroglyphs were documented here, most of which are located on one low blocky basalt outcrop with 18 conjoined panels (Table 9.26). Panels here were defined by distinct cracking, changed planes, and surfaces with distinct edges (Figure 9.37).

Eight historic inscriptions clearly relate to the presence of individuals from the American whaling vessel the *Delta*, who visited the island on 12 July 1849 and had a lookout stationed at this location (Paterson et al. 2019a). All these motifs have been recorded with negligible contrast state, being the same colour as the background rock (Table 9.26). Amongst the 216 motifs recorded here is a complex inscribed motif (WLA05-2017-B001-01) which includes the name J. Leek, an

anchor motif and the vessel's name, *DELTA*. The *DELTA* is inscribed three additional times as is the year 1849. These eight items of graffiti are found on five separate panels. The complex inscription on Panel 1 (combining author, ship, anchor and exact date), which also includes some indistinguishable script (Figure 9.38), is not in association with any Aboriginal petroglyphs. In contrast, on all other panels there is no clear separation between the graffiti and the Aboriginal art. In one instance, an Aboriginal motif (an incised line set) is superimposed over the top of the word 'DELTA', obscuring its final letters (WLA05-2017-B011-03), while another of the *DELTA* inscriptions (WLA05-2017-B0121-04) is located on a heavily pecked surface and its superimposition relationship to the Aboriginal productions is unclear. The incised line set over the *Delta* inscription in Panel 11 indicates that Yaburara were still creating art in this location after 1849. While most of these inscriptions are

written on the horizontal panel surfaces of the multifaceted block, the third Delta is written on a vertical panel surface of the adjacent block.



Figure 9.36. West Lewis Area 5 landscape: (a) looking east to site MLP-WL005 on headland; (b) view north-west over outcrop with Aboriginal petroglyphs and America graffiti; (c) panel with the inscription of the vessel *Delta*.

MOTIF ID	DESCRIPTION	CS	LENGTH (CM)	WIDTH (CM)	TECHNIQUE
WLA05-2017-B001-01	<u>J.L. Leek SHIP DELTA</u> July THE 12. 1849. First two rows underlined	1	17	13	Incised; scratched alphanumeric with a scrimshaw
WLA05-2017-B001-02	Indistinguishable script. Double lines for f y ??	1	12	8	Incised; scratched
WLA05-2017-B001-03	Anchor with flume and rope and pointy bit	1	4	3	Incised
WLA05-2017-B005-04	1849	1	4	2	Scatched; incised
WLA05-2017-B005-11	1849	1	5	2	Scatched
WLA05-2017-B005-20	DELTA	1	11	3	Incised scrimshaw
WLA05-2017-B011-03	D E L T. a (under incised parallel lines)	1	7	1	Scatched
WLA05-2017-B012-04	<u>DELTA</u> with a line above and below; perpendicular on a vertical panel; over pecking	1	6	3	Incised scrimshaw
WLA05-2017-B019-01	Initials BD, quite deep, several fainter marks (numbers?) to the right	3	6	6	Incised
WLA05-2017-D009-03	Initials BI, loosely formed	4	14	7	Scatched

Table 9.26. Site WLA05: historic inscriptions related to the *DELTA* found on panels B1, B5, B11 and B12. Other more recent graffiti was found on panels B19 and D9.



Figure 9.37. Site WLA05 Panel B-001: (a-c) the complex DELTA inscription with names, dates, ship's anchor and (d) indistinguishable text (the white stain is bird excrement); (e-f) other examples of 1849; (g-i) the other DELTA inscriptions. (Scales are in cm.)

Additional graffiti, of an unknown age, includes relatively deep incised initials BD located on a separate block 5 m away from the edge of the bluff, while the initials BI were found, with three other motifs, scratched

on another engraved panel down on the beach (Figure 9.38).

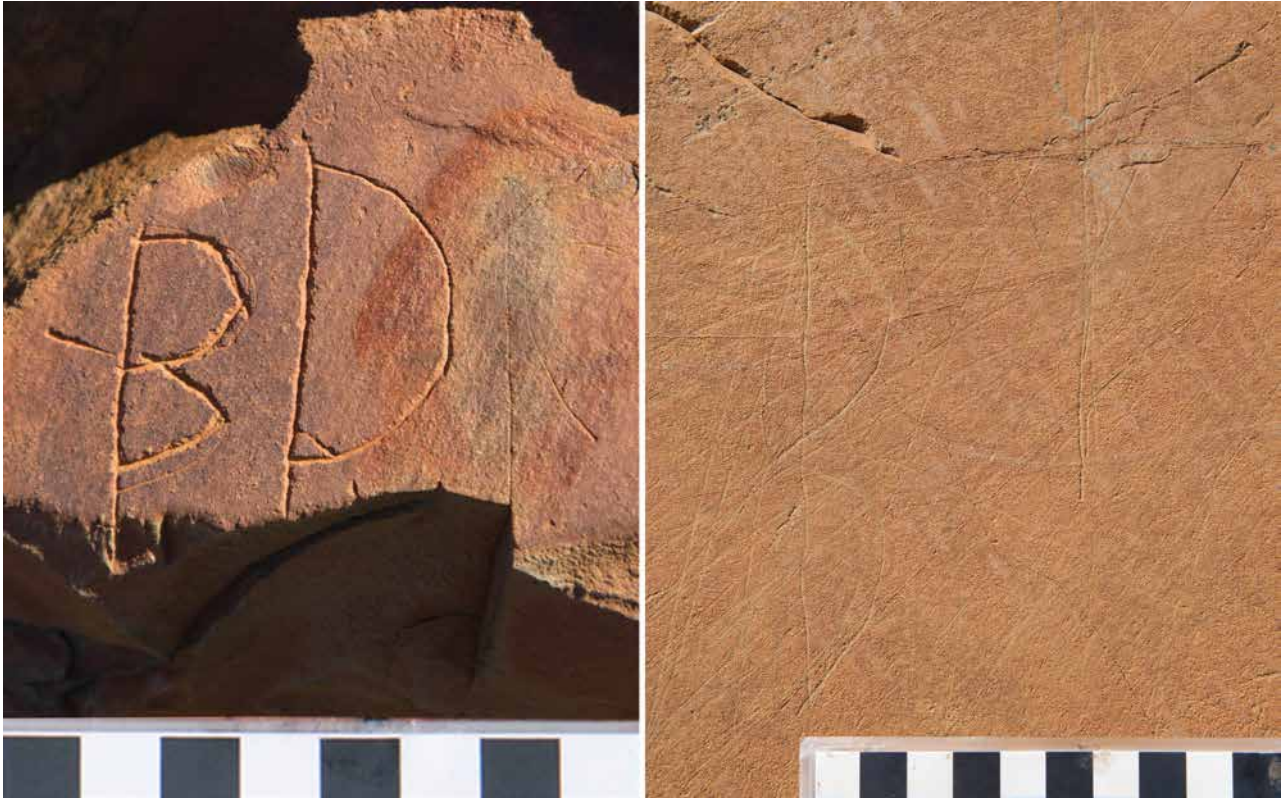


Figure 9.38. Site WLA05 other graffiti: two examples of incised initials B D, probably produced well after the 1849 visit. (Scales are in cm.)

West Lewis Isolated Sites

Six sites are outside the two formal survey areas; these were places encountered while walking between sample areas 1 and 5. They include a rock art site located around an interior waterhole within a short gully (MLP-WL026), a rockshelter with two vertical rock art panels (MLP-WL027), an artefact scatter (MLP-WL035), a standing stone (MLP-WL036) and two historic sites (Figure 9.39). These sites are all located on basalt geology. The single traverse done back to camp from WLA-05 did not constitute a systematic survey of the southern coastline of the island, and there are likely to be more archaeological sites in that part of the island (Figure 9.39).

The small rockshelter site (MLP-WL027) is in the valley running east–west across the island from the historic pastoral station settlement. This has two vertical panels: one at the western entrance of the shelter (with three bird tracks); the other panel on the exterior wall of the shelter has four five-digit tracks in two pairs. This rockshelter is located opposite the minor gully running southwards which contains site MLP-WL026

(this shelter’s rock art and excavation is documented in Chapter 10).

One of the historic sites (MLP-WL039) consists of two water troughs adjacent to a beach facing onto a short, wide valley near the south-east end of the island (Figure 9.41). Size and shape of these galvanised metal troughs are consistent with these being used for watering sheep. There is uncertainty over whether they are here because sheep were kept and watered in this small, isolated valley or whether they have been relocated by subsequent cyclonic events.

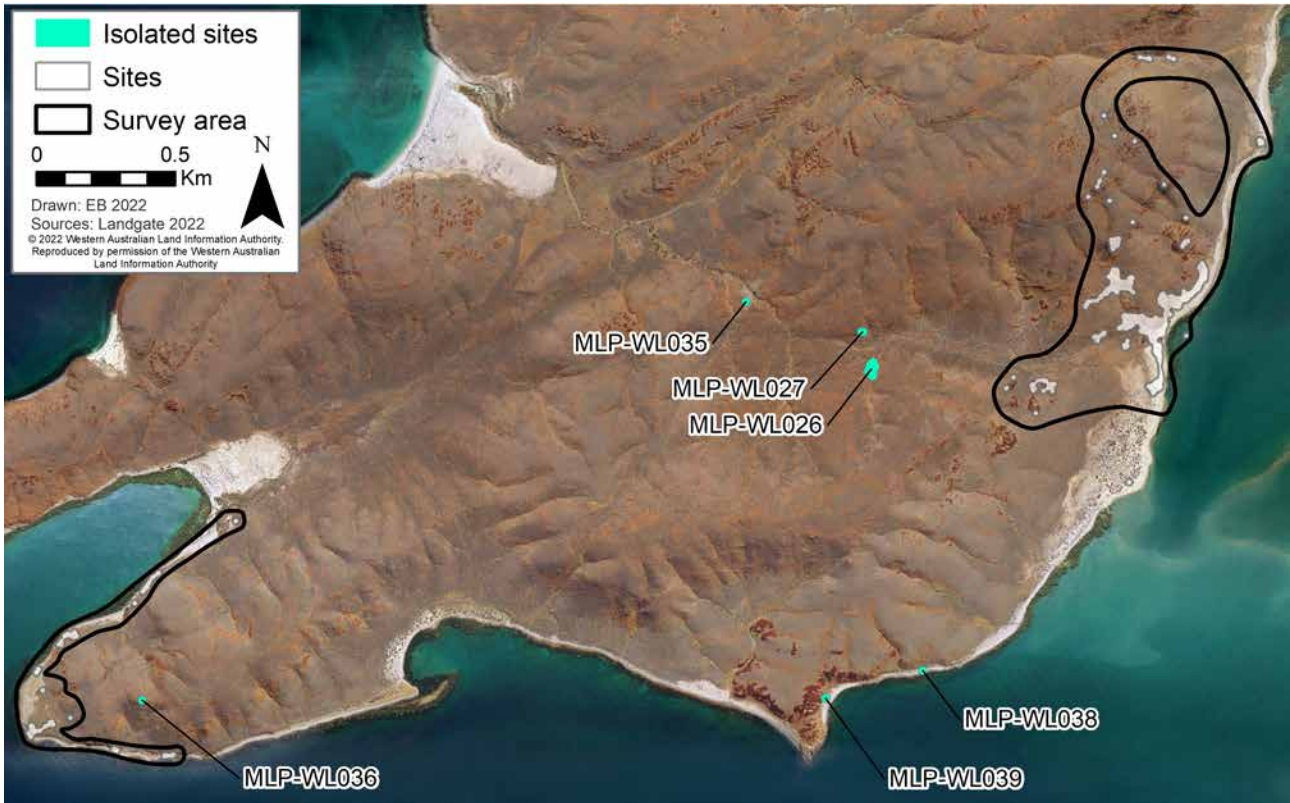


Figure 9.39. West Lewis survey areas showing locations of isolated sites.

The sample from the two isolated sites with petroglyphs is too small for meaningful analysis. These two isolated sites have a high proportion of grinding patches, not small multidirectional linear scratching (see Table 9.27 and Table 9.28). These two assemblages include 56 motifs and 33 grinding patches. The site MLP-WL026 assemblage is distributed along an interior

gully, around and downstream of several significant rock pools. The grinding surfaces take advantage of semi-permanent water available in these rock pools for wet-milling (Figure 9.40). The rockshelter assemblage is anomalous with its seven pecked track motifs on exterior and vertical surfaces.

CLASS	COUNT	%	DEPICTIVE	%
Anthropomorphic	7	7.9	7	16.3
Geometric	18	20.2	18	41.9
Other	46	51.7		
Tracks	14	15.7	14	32.6
Zoomorphic	4	4.5	4	9.3
Total	89	100.0	43	100

Table 9.27. Sites MLP-WL026 and WL027: class proportions.

There is a smaller proportion of geometrics in this assemblage compared to the two WLA sample assemblages (compare Table 9.27 with Table 9.6 and Table 9.19), with track motifs contributing more and anthropomorphs also being present in slightly higher numbers. Four of the anthropomorphic motifs are depicted in profile, a design element not as common as silhouette figures. There is only one marine animal here

(a fish) and two poorly preserved terrestrial animals: an echidna and a lizard (Figure 9.42). These are all pecked. Bird tracks dominate the track assemblage. The five-digit tracks on the rockshelter wall may be hands or are possibly echidna tracks (Peter Jeffries, pers. comm., 2017). The two rayed geometric motifs are not the same phytomorph class as found at WLA-05 (one is scratched asymmetrical, while the other is a pecked star).



Figure 9.40. Site context for MLP-WL026: (a-b) creek line with rock pools; (c) grinding patch adjacent to rock pool; and (d) grasses in an isolated valley away from the coastline.



Figure 9.41. West Lewis Site MLP-WL039, which has two stock watering troughs on the beach. These may have been washed in from another location rather than this small valley being utilised to hold sheep.

SUBJECT	COUNT	%	SUBJECT	COUNT	%
<i>Anthropomorphic</i>			<i>Tracks</i>		
Linear figure	3	3.4	Bird track	10	11.2
Profile figure	4	4.5	Other track	4	4.5
<i>Geometric</i>			<i>Zoomorphic</i>		
Angular	3	3.4	Fish	1	1.1
Arc	3	3.4	Lizard	1	1.1
Linear	7	7.9	Terrestrial other	2	2.2
Oval	3	3.4			
Rayed	2	2.2	<i>Total</i>	<i>43</i>	<i>100</i>

Table 9.28. Sites MLP-WL026 and WL027: subject proportions.

The form of this small assemblage is predominantly solid, although the proportion of linear forms (n = 28) amongst the depictive assemblage is larger (Table 9.29).

FORMS	ANTHROPOMORPHIC	GEOMETRIC	OTHER	TRACKS	ZOOMORPHIC	TOTAL	%F	%F DEPICTIVE
Solid	4	4	33	9	2	52	58.4	44.2
Linear	1	11	12	4		28	31.5	37.2
Outline		2				2	2.2	4.7
Scattered marks			1	1		2	2.2	2.3
Combination	2	1			2	5	5.6	11.6
<i>Total</i>	<i>7</i>	<i>18</i>	<i>46</i>	<i>14</i>	<i>4</i>	<i>89</i>	<i>100</i>	<i>100.0</i>

Table 9.29. Sites MLP-WL026 and WL027: form in relation to class.

The 33 grinding patches contribute to the abrading technique dominating this assemblage (Table 9.30). Otherwise, there is a dominance of pecking (53%), and scratching (at 16%) is less common here than found in either of the two coastal systematically surveyed areas.

TECHNIQUE	ANTHROPOMORPHIC	GEOMETRIC	OTHER	TRACKS	ZOOMORPHIC	TOTAL	%F	%F DEPICTIVE
Abraded			33			33	37.1	
Pecked	5	8	1	8	2	24	27.0	53.5
Scratched		6	12		1	19	21.3	16.3
Incised		2		3		5	5.6	11.6
Pounded	1				1	2	2.2	4.7
Combination	1	2		3		6	6.7	14.0
<i>Total</i>	<i>7</i>	<i>18</i>	<i>46</i>	<i>14</i>	<i>4</i>	<i>89</i>	<i>100.0</i>	<i>100</i>

Table 9.30. Sites MLP-WL026 and WL027: technique in relation to class.

The size ranges in this assemblage are also slightly different to the two survey areas, given the absence of small scratched and incised elements. Over 60% of this assemblage is smaller than 30 cm (Table 9.31), but only 27% is smaller than 10 cm (compare with Table 9.12).

There is no art larger than 1 m in length here – probably due to small available canvas size: although the vertical surface outside the rockshelter is large enough to have housed a bigger art production, albeit on a relatively rough surface texture.

SIZE CATEGORIES (CM)	ANTHROPOMORPHIC	GEOMETRIC	OTHER	TRACKS	ZOOMORPHIC	TOTAL	%F
1-10	3	10	7	4		24	27.0
11-20		6	1	10		17	19.1
21-30	1	2	9		1	13	14.6
31-40	2		2		1	5	5.6
41-50	1		8		1	10	11.2
51-60			2		1	3	3.4
N/A			17			17	19.1
<i>Total</i>	<i>7</i>	<i>18</i>	<i>46</i>	<i>14</i>	<i>4</i>	<i>89</i>	<i>100.0</i>

Table 9.31. Sites MLP-WL026 and WL027: size increments in relation to class.

Again, the lithology and surface weathering appear to render contrast state not useful as an indicator of these petroglyphs' relative age (Table 9.32). This predominantly pecked assemblage is mostly in the earlier contrast state (with no CS4 or

CS5), and it is assumed these deeper art productions did penetrate the outer patina. This, and the focus on terrestrial rather than marine themes, suggest that this assemblage may be older than those found around the outer edges of the island.

CONTRAST STATE	ANTHROPOMORPHIC	GEOMETRIC	OTHER	TRACKS	ZOOMORPHIC	TOTAL	%F
CS1			2			2	2.2
CS2	3	7	8	3		21	23.6
CS3	4	11	3	11	3	32	36.0
N/A (grinding patches)			33		1	34	38.2
<i>Total</i>	<i>7</i>	<i>18</i>	<i>46</i>	<i>14</i>	<i>4</i>	<i>89</i>	<i>100.0</i>

Table 9.32. Sites MLP-WL026 and WL027: contrast state in relation to class.

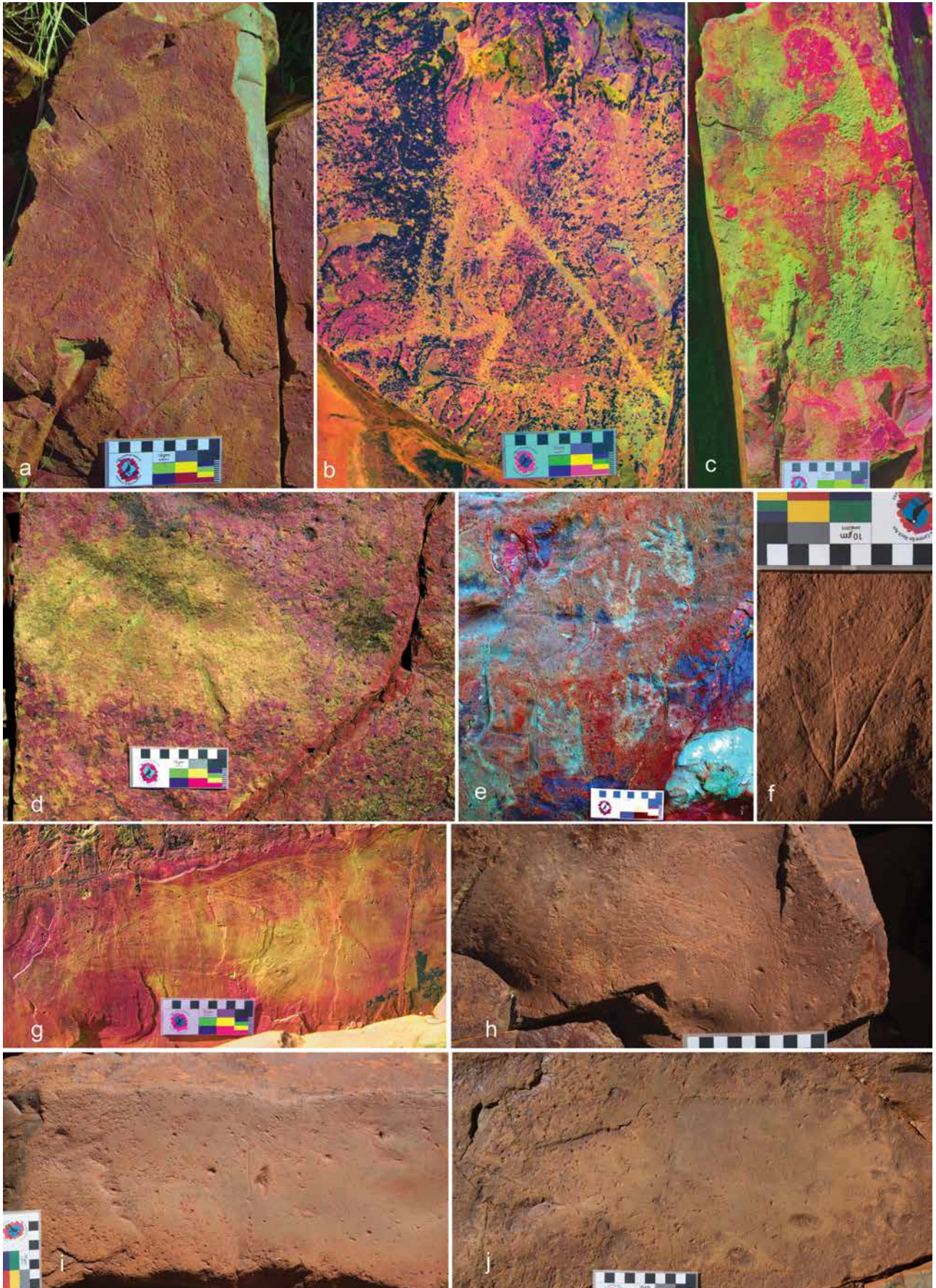


Figure 9.42. Sites MLP-WL026 and WL027 rock art motifs: a, b) human figures in front view and profile; c) lizard; d) abraded echidna; e) pecked echidna tracks; f) incised bird track; g) scratched fish with fins; h) multi-directional scratching, incised lines and random pecking; and i, j) grinding patches, both with dressing/pecking.

Conclusion

Almost 1,430 motifs were recorded in these two sample areas and isolated sites. The following conclusions can be drawn about West Lewis Island rock art:

Rock art was found in moderate to high densities in both sample areas on Lewis Island (Figure 9-43). While mostly on basaltic geology, dolerite dykes were also used to create rock art;

Rock art density is high around identified potable water features (e.g. MLP-WL016, upslope from the settlement, and isolated site MLP-WL026). The promontory on the south-west of the island, where the Delta inscriptions are found (MLP-WL05), however, had the highest density of recorded art (543 motifs/hectare);

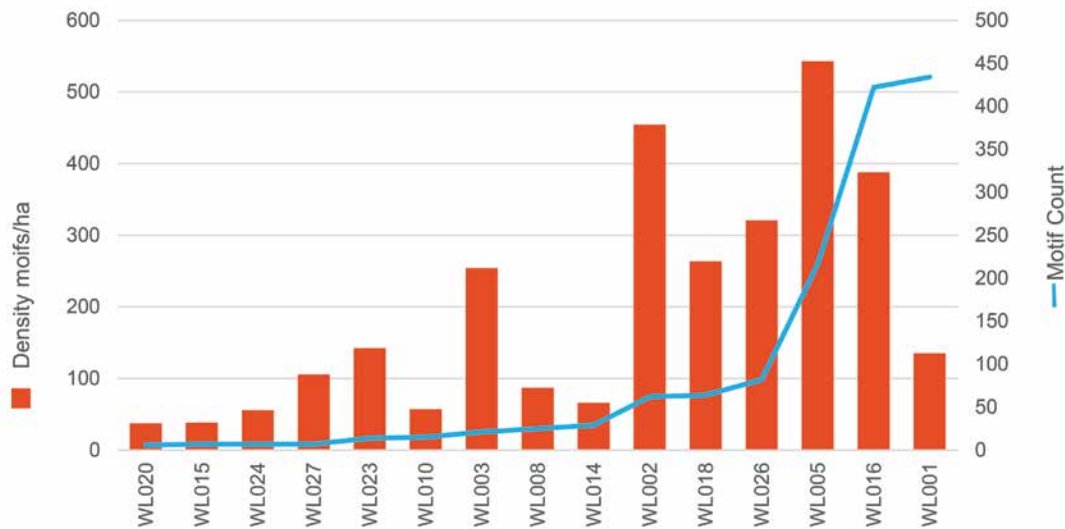


Figure 9.43: West Lewis Island rock art densities, showing motif counts and density (motifs/ha)..

Most of the art found in these two West Lewis landscapes is geometric, but there are almost equally high proportions of 'other' productions (Figure 9-43). Grinding patches make up a significant proportion of 'other' marks made in these areas, but most of these are scratched and pecked marks made at many sites along with classifiable motifs and evidence for grinding. There are smaller, variable proportions of tracks, human figures and animal forms;

Aboriginal stone structures here are isolated standing stones, circular cleared structures and bedrock pits. While our recording focused on the historic structures (buildings, cairns ballast), but there did seem to be lower numbers of Aboriginal stone structures here than observed in other Murujuga samples;

Techniques used to produce rock art here has been influenced by geology with scratching/incising dominates on the finer-grained basalts in both areas (note, pecking dominates on the dolerite in Area 5);

No archaic faces or decorative infill humans were found here, but there are two panels in Area 1 with disarticulated dot head human figures, indicating that some stylistic forms characteristic of the earliest Murujuga art phases were produced in this central part of the Dampier Ranges;

Interpreting contrast state data is difficult given the more superficial marking techniques used on basalt and the fact that dated historic graffiti does not register as having the most recent contrast state (Figure 9-44);

Both rock art assemblages, located mostly on the coastal margins of the island, have marine-focused figurative assemblage, interpreted as a largely mid-late Holocene productions. Turtles dominate the animals depicted here – along with fish and other marine themes. Macropods and other terrestrial animals are found only in Area 1; snakes dominate in Area 5; and birds are common in both assemblages (Figure 9-45).

There is evidence of rock art being produced in both areas during the historic period by Europeans and likely Aboriginal people. Historic inscriptions from 1842 record the visit of north American whalers and superimpositioning directly over the ship's name suggests that Aboriginal people continued to produced art here after that time.

During the occupation of the pastoral settlement in Area 1 there is evidence of inscriptions (e.g. the name Sustenance) and figurative motifs (particularly boats and possibly sheep) being produced by pastoralists/pearlers and possibly Aboriginal people, as well as several phases of European visitors more recently.

Construction of the pastoral station buildings resulted in numerous motifs being moved from their original locations; and there is evidence that further productions may also have been made on these buildings by Aboriginal people present at the pastoral station/involved in pearling.

The high number of random scratching and multi-directional marks on the built structures but also within the broader landscape surrounding the pastoral station makes for a highly complex assemblage which is not easily interpreted.

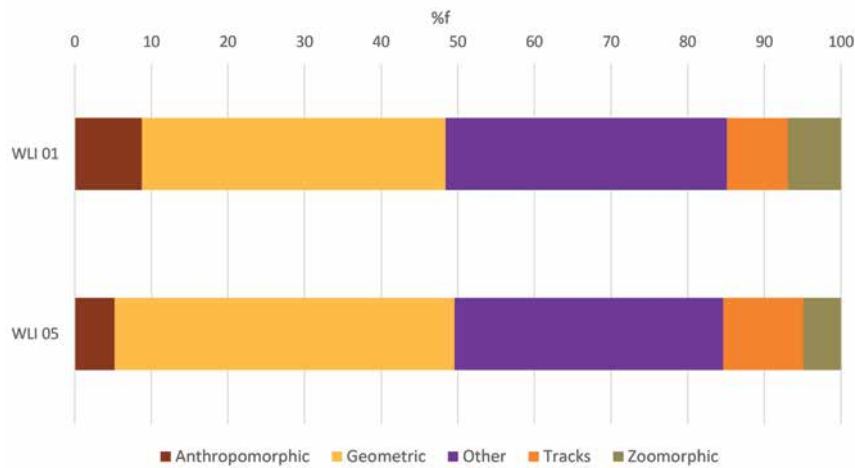


Figure 9.44. West Lewis Island rock art areas comparing subject foci in both assemblages.

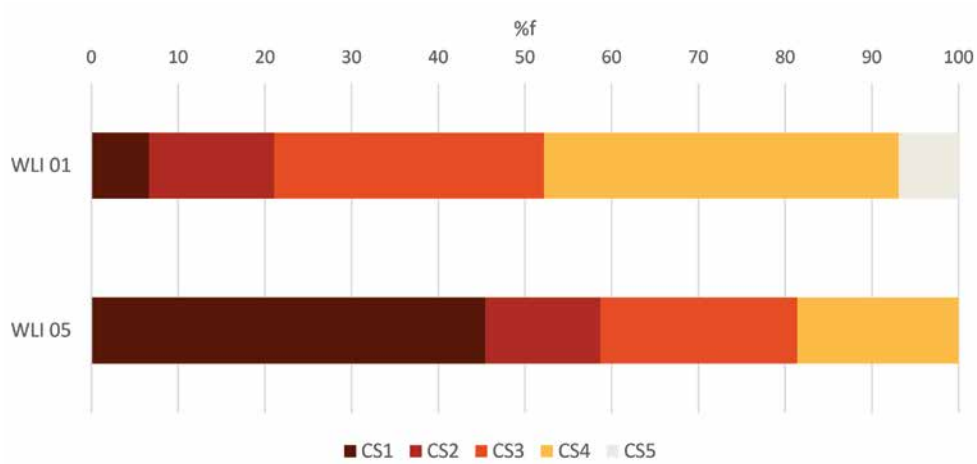


Figure 9.45. West Lewis Island Areas comparing contrast state in both assemblages.

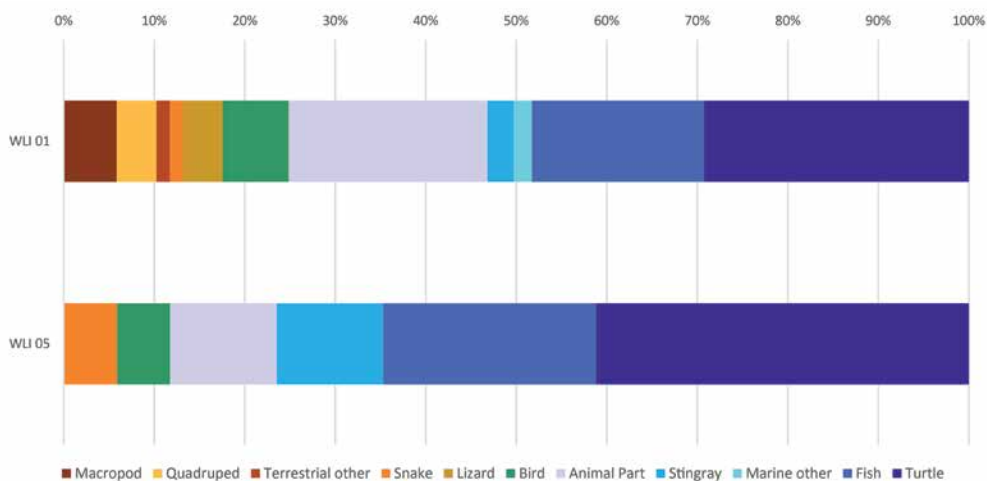


Figure 9.46. West Lewis Island Areas comparing animal foci in both assemblages.

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