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ORIGINS OF MAPUNGUBWE PROJECT

PROGRESS REPORT

2000 - 2001

Prepared for SAHRA, SANParks and the Archaeological Task Group

Professor T N Huffman

Mr M T Murimbika

Ms M H Schoeman

Mrs M Wood

Archaeological Resources Management

School of Geography, Archaeology and Environmental Studies

University of the Witwatersrand

Johannesburg

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I INTRODUCTION

Archaeological Resources Management (ARM) began a three-year project to investigate the role of rainmaking and agriculture in the rise of social complexity in Southern Africa. In comparison to the role of trade these two aspects are poorly known.

Subsistence agricultural societies typically experience what is called 'agricultural insecurity', and a concern with rainmaking would have been an important part of Iron Age society. Ethnographic data show that the ideology of sacred leadership was inter-twined with a new theological position that elaborated the concept of God. To people within the Zimbabwe culture, God made it rain, and it is to God one must turn through the spirits of dead leaders. This process and conceptualization contrasts with rainmaking based on the talent of special people who have learned how to use rain medicines. Thus, there is an important analytical distinction between manipulating an impersonal supernatural force and supplicating a supreme intelligence.

Rainmaking commonly took place on hilltops, such as Mapungubwe, with steep sides and difficult access. Early Iron Age pottery from the hilltop indicates that Mapungubwe was a rainmaking site before it became an elite residence. Indeed, the Mapungubwe leadership moved on top of the hill, among other things, to appropriate its ritual power and to solidify their claim as sacred leaders.

It is difficult to recognize the transition from ritual to residence, however, because of the similarity in deposits: both have pottery, grindstones and dagga structures. Consequently, part of our project focuses on this problem.

In terms of agriculture, we know that the increasing sizes of Schroda, K2 and Mapungubwe

would have had an impact on production. At the least, more fields would have been needed as these capitals grew.

To resolve some of the issues surrounding agriculture and rainmaking, ARM has concentrated on a site survey and the excavations of selected sites dating to the Middle Iron Age (AD900-1300).

II SITE SURVEY

We have completely surveyed Den Staat (SANParks portion), Machete (Dr D McWhirter) and Samaria (H Heyns) for Iron Age sites. The farms Riedel, Rhodes Drift, Little Muck, Armenia and Tuscanen have had preliminary examinations (Appendix). Both Armenia and Rhodes Drift yielded new rainmaking sites. Dense grass cover from the heavy rains in 1999 and 2000, however, have prevented further survey.

Nevertheless, it is clear that there was a substantial increase in population between AD900 - 1300. This increase was supported by the repeated cultivation of the Limpopo Valley. Significantly, the survey data show that most Zhizo settlements within the valley were not oriented towards the floodplains (Figure 1). This orientation developed sometime during the K2 period (Figure 2).

Because of the apparent shift towards the floodplains, we chose a complex of K2 sites on Den Staat to excavate.

III EXCAVATIONS

We approached all sites as if they were part of a CRM project, ie. we wanted the most significant settlement and stratigraphic data in the shortest time. With this principle in mind, we established a datum line through the cattle kraal to the edge of the site, and then used the line as the basis of a 3x3m grid.

Site 2229 A4 19 (ATEN)

The ATEN site (22 12 28S 29 13 56E) is located on an old fluvial terrace overlooking the floodplains to the east. Excavations took place between 18 July and 8 August 2000 (Figures 3&4).

Figure 1. Distribution of Zhizo sites.

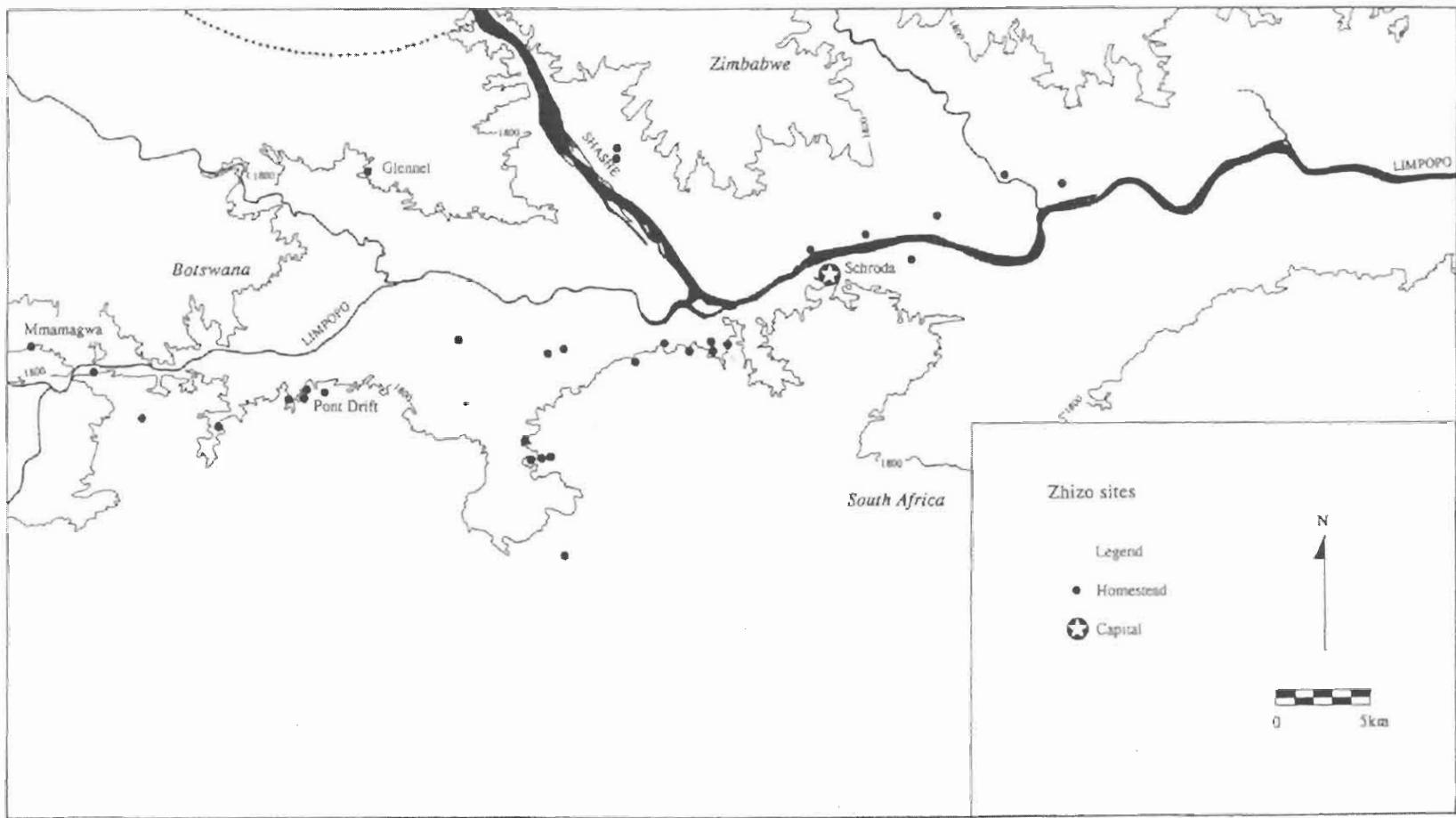
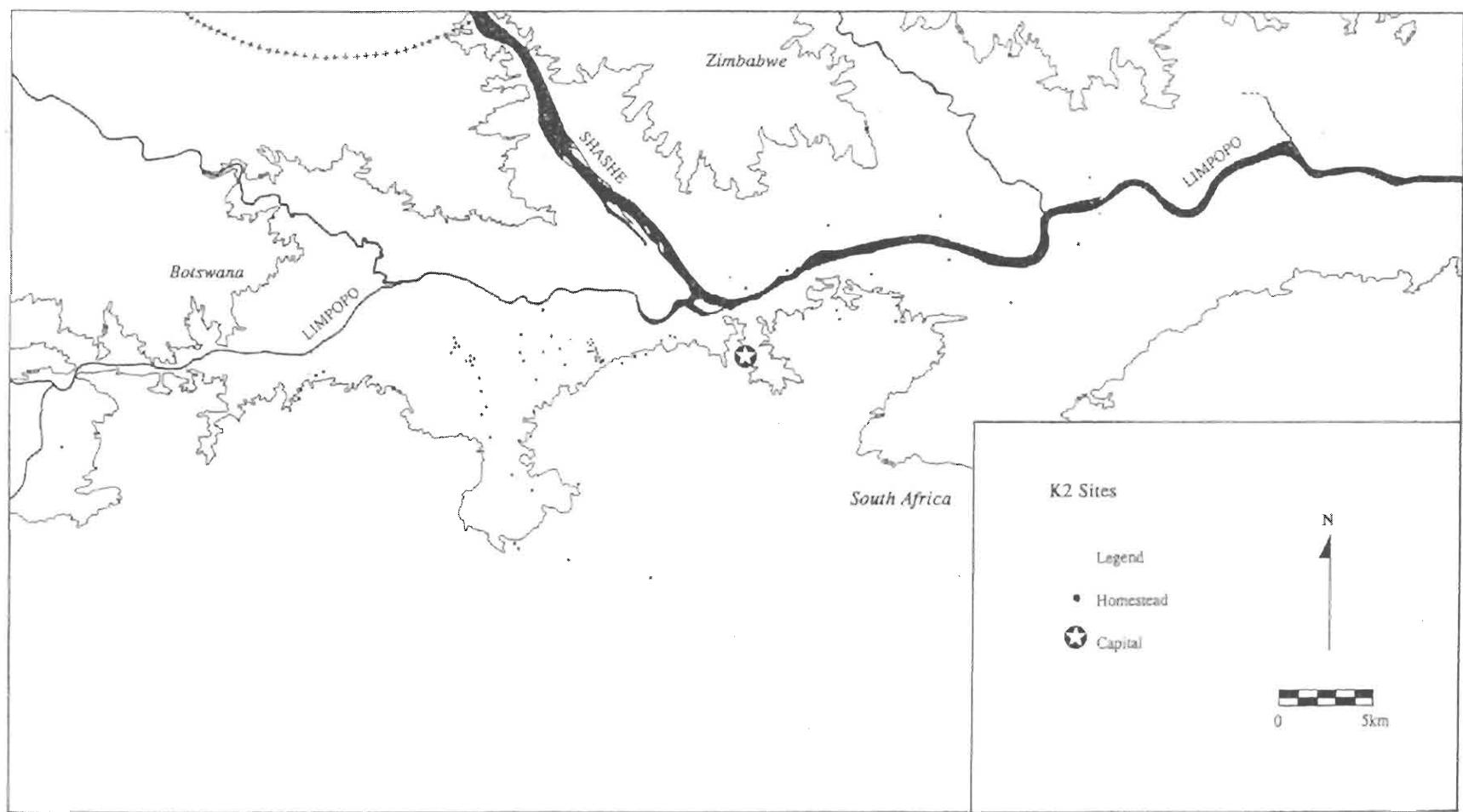


Figure 2. Distribution of K2 sites.



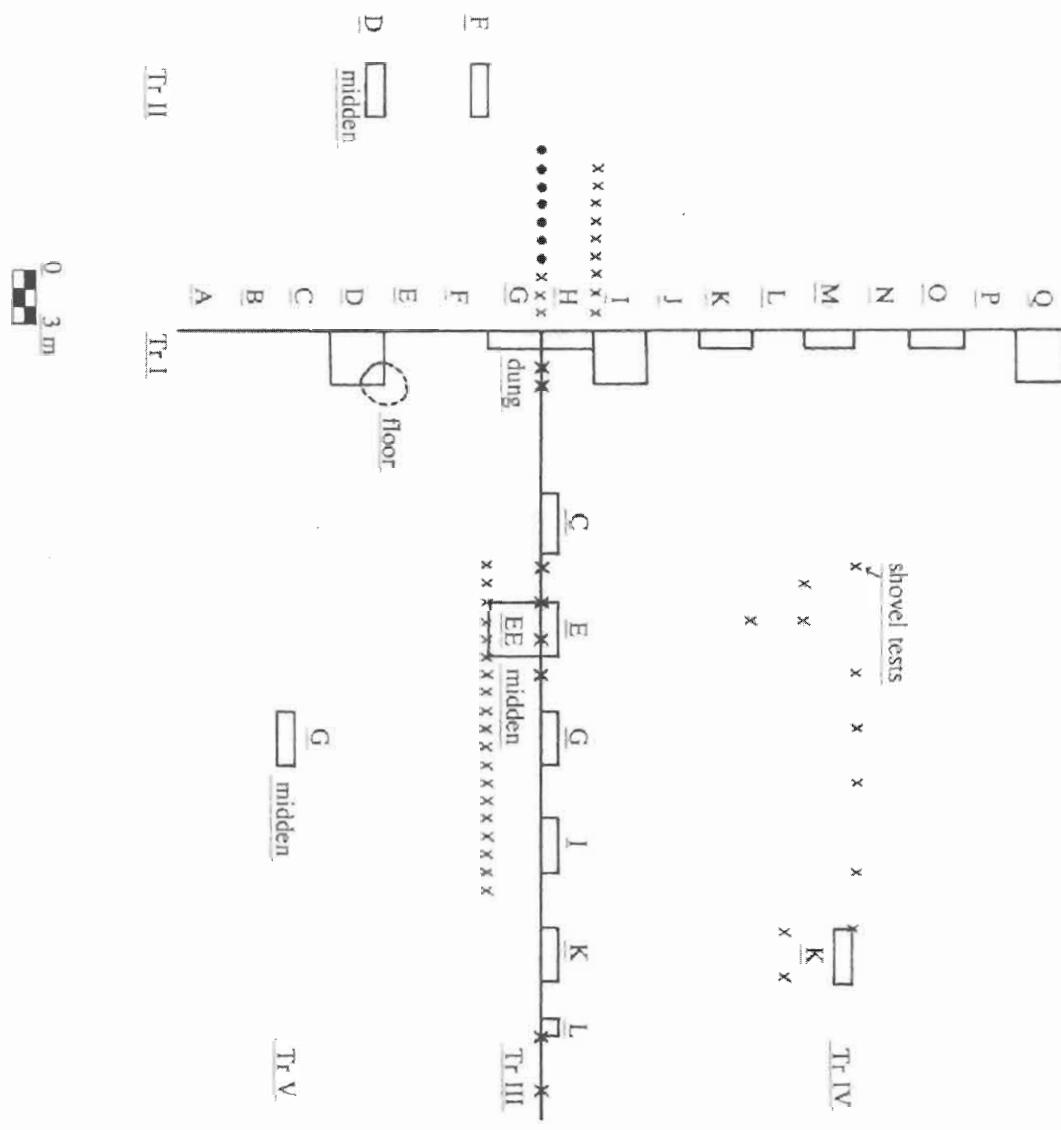


Figure 3. Site 2229 AA 19 (ATEN); excavation plan.

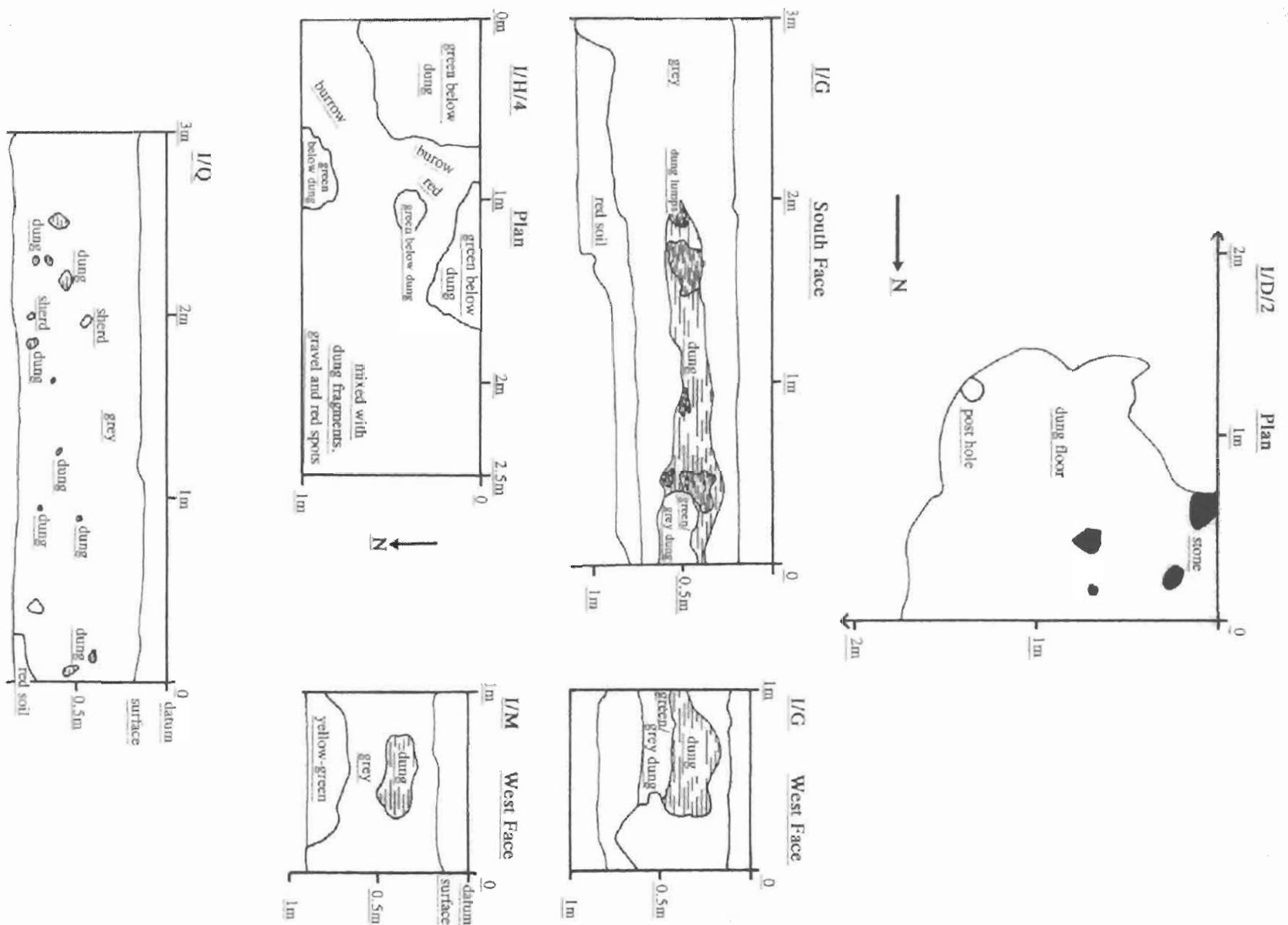


Figure 4. Site 2229 AA 19 (ATEN); cross sections.

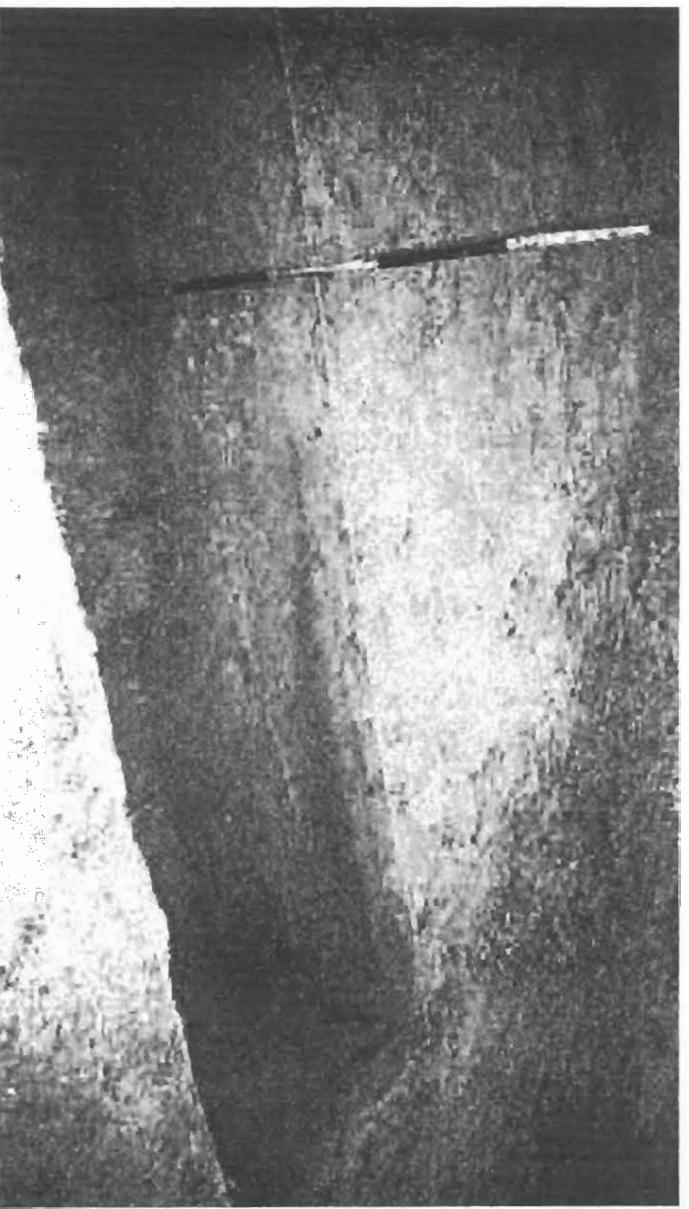


Figure 5B. Site 2229 AA 19: Trench I, Square M. Note red lense at top derived from bottom and disturbed deposit underneath.

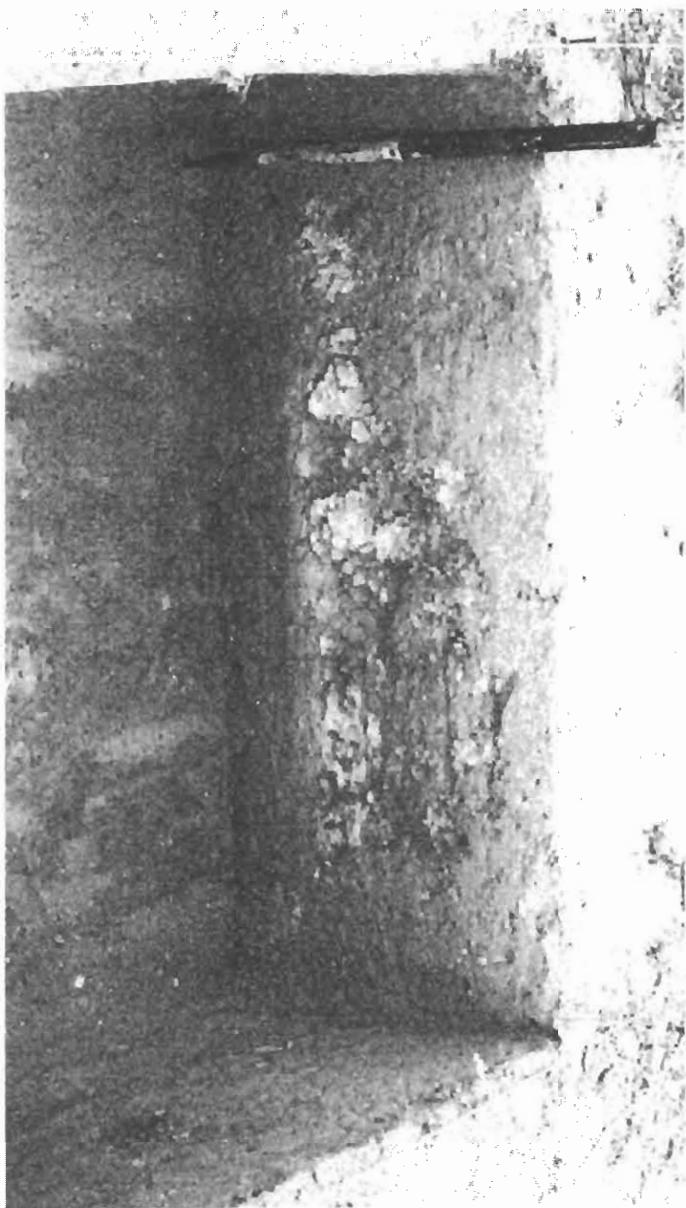


Figure 5A. Site 2229 AA 19: *in situ* dung in Trench I, Square H. Note disturbed deposit surrounding the dung.

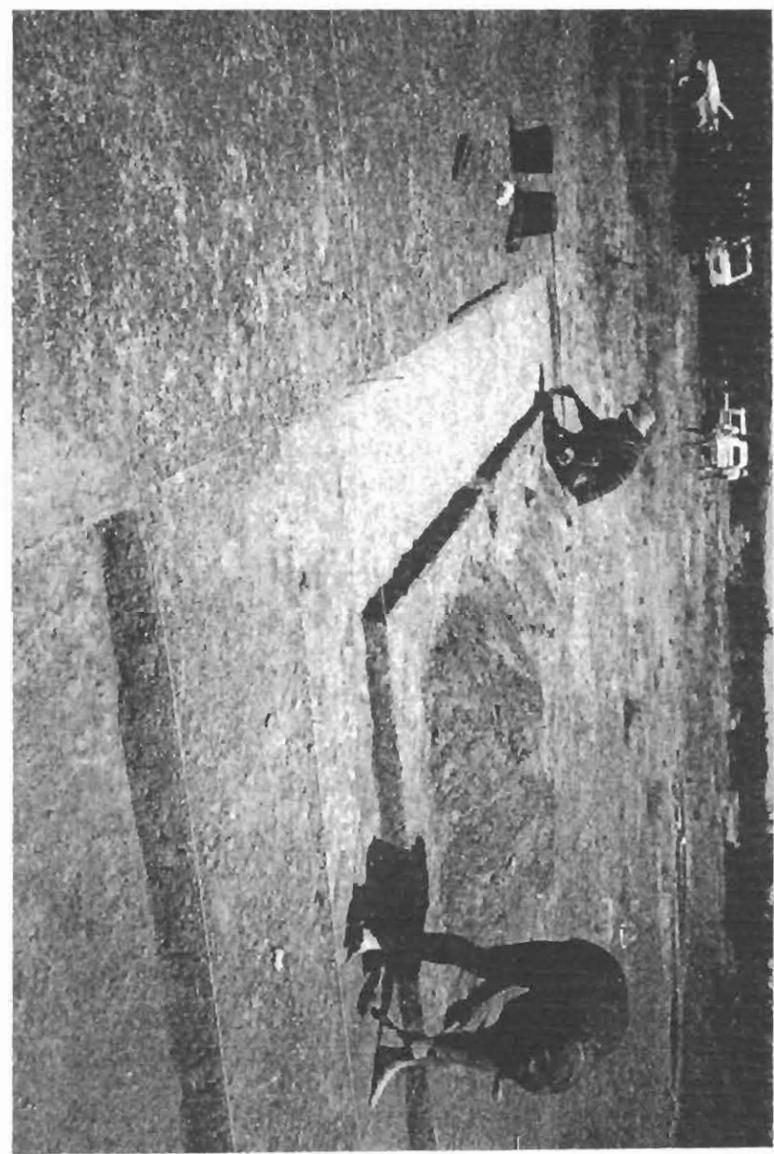


Figure 6A. Site 2229 AA 14B: bottom surface of cattle kraal.

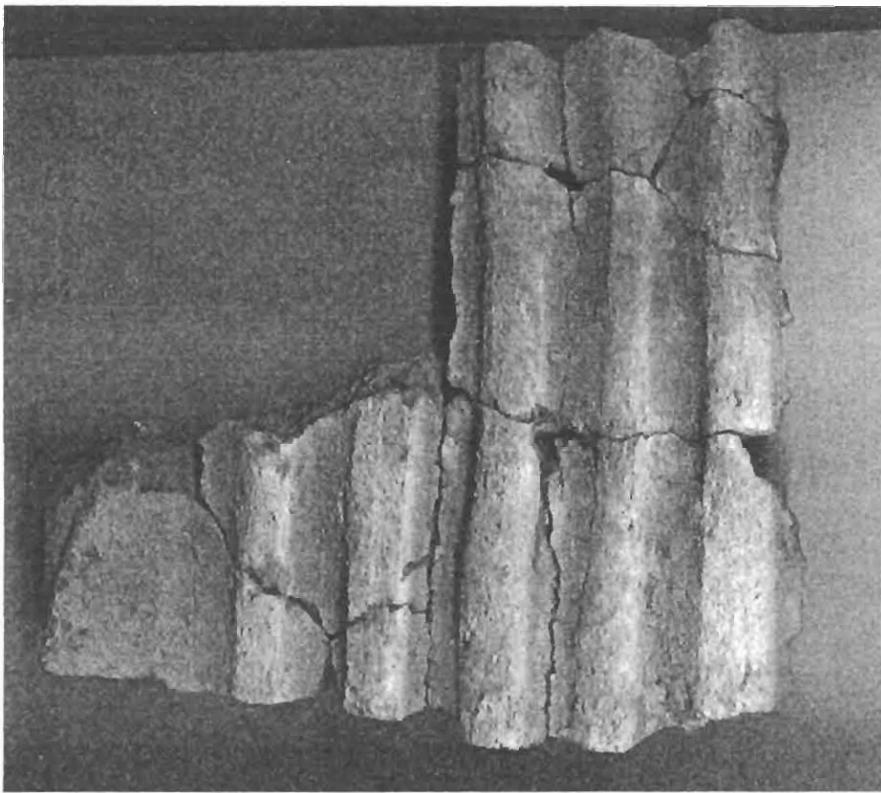


Figure 6B. Site 2229 AA 14B: decorated grainbin from Trench I.

Interesting finds included garden roller beads and a bead mould, as well as clay renditions of garden rollers. Stratigraphically, we thought that a *Zhizo* layer might underlay the main K2 horizon. Unfortunately, the deposit was badly disturbed by animal burrowing, and it was not possible to resolve this issue. One portion of a cattle kraal was found *in situ* (Figure 5), while a second kraal was marked by disturbed dung.

The amount of disturbance forced us to chose another site with better preservation.

Site 2229 AA 14B

This site (22 12 37.5S 29 13 57E) is about 200m south of ATEN on the same terrace. It was test excavated between the 4th and 9th of September, 2000.

Site 14B was chosen because it contained a cattle kraal and burnt daga structures. A hard thin surface marked the bottom of the kraal (Figure 6A). The kraal itself was about 12m in diameter, but only 10 to 12 cm deep. Clearly, several centimetres of soil have washed away. This erosion has exposed several burnt daga structures. Most daga was characteristic of grainbins. Large pieces with a flat upper surface and pole impressions underneath were derived from the floor. The actual grainbin stood on top. Fragments of one such grainbin bore a moulded groove decoration (Figure 6B). The horizontal grooves appear to represent *mihombwe*, also called the ‘breast and furrow’ pattern, found on Shona grainbins, drums and furnaces in the 19th century. If true, these finds are part of a 1000 year old tradition.

Site 2229 AA 14C

The terrace slope below and east of 14B contained another homestead marked by burnt grainbins and a central kraal (22 12 35.6S 29 13 59E). We worked here from 1 to 21 July, 2001 (Figure 7).

The excavations revealed another decorated grainbin and a series of pits (Figure 8). Typically, wide shallow depressions underlay burnt grainbin daga, while the pits were narrower and deeper.

The pits represent two different kinds of structures. The first is the well-known communal storage pit associated with the men’s area in the centre of the settlement. These pits are

Figure 7. Site 2229 AA 14C: general view to northeast.

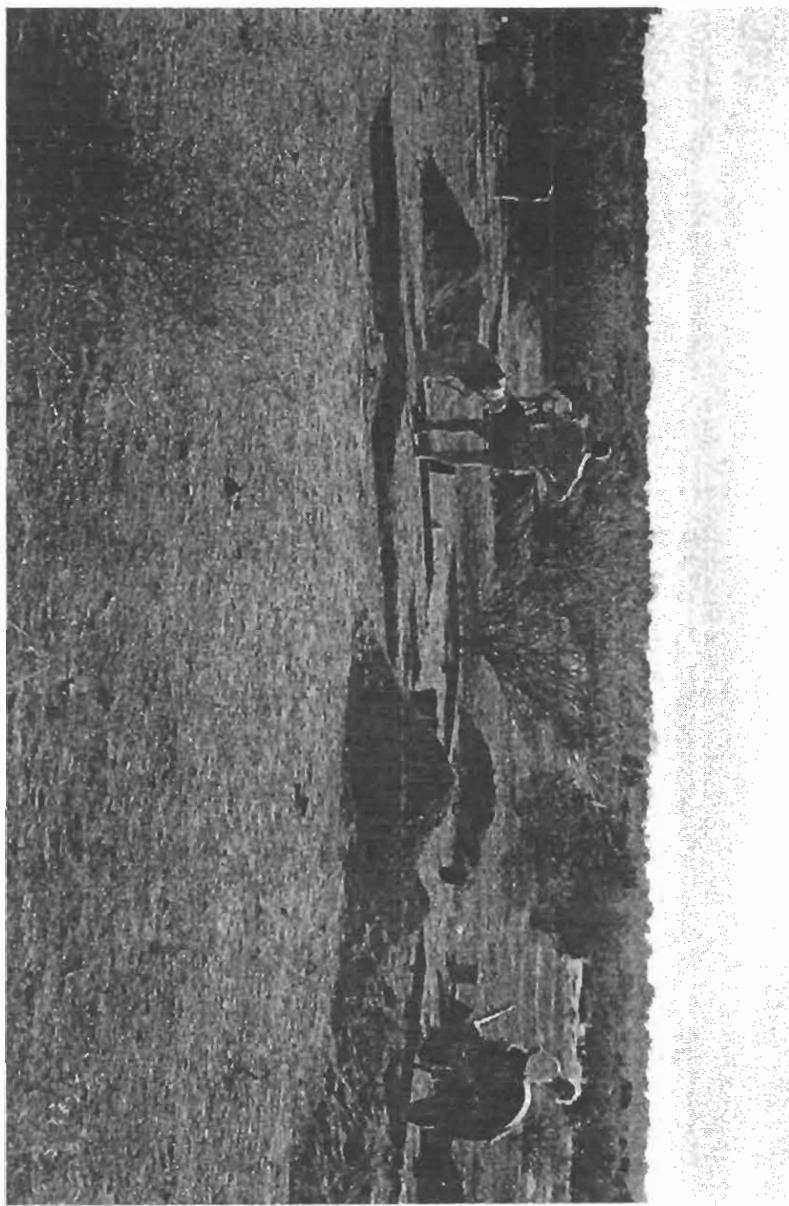


Figure 8. Site 2229 AA 14C; excavation plan.

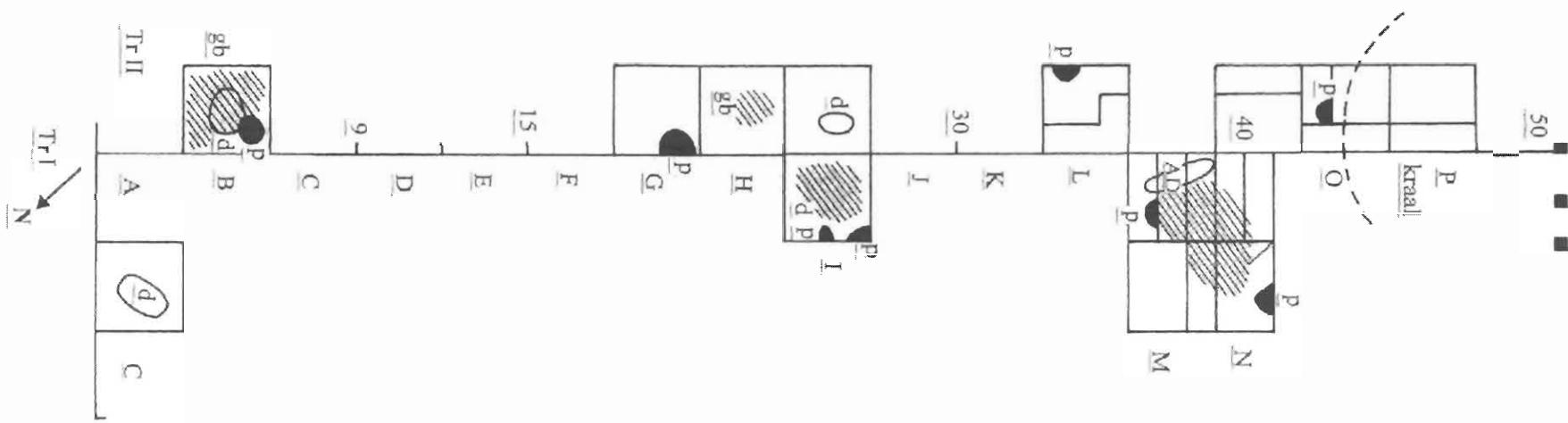
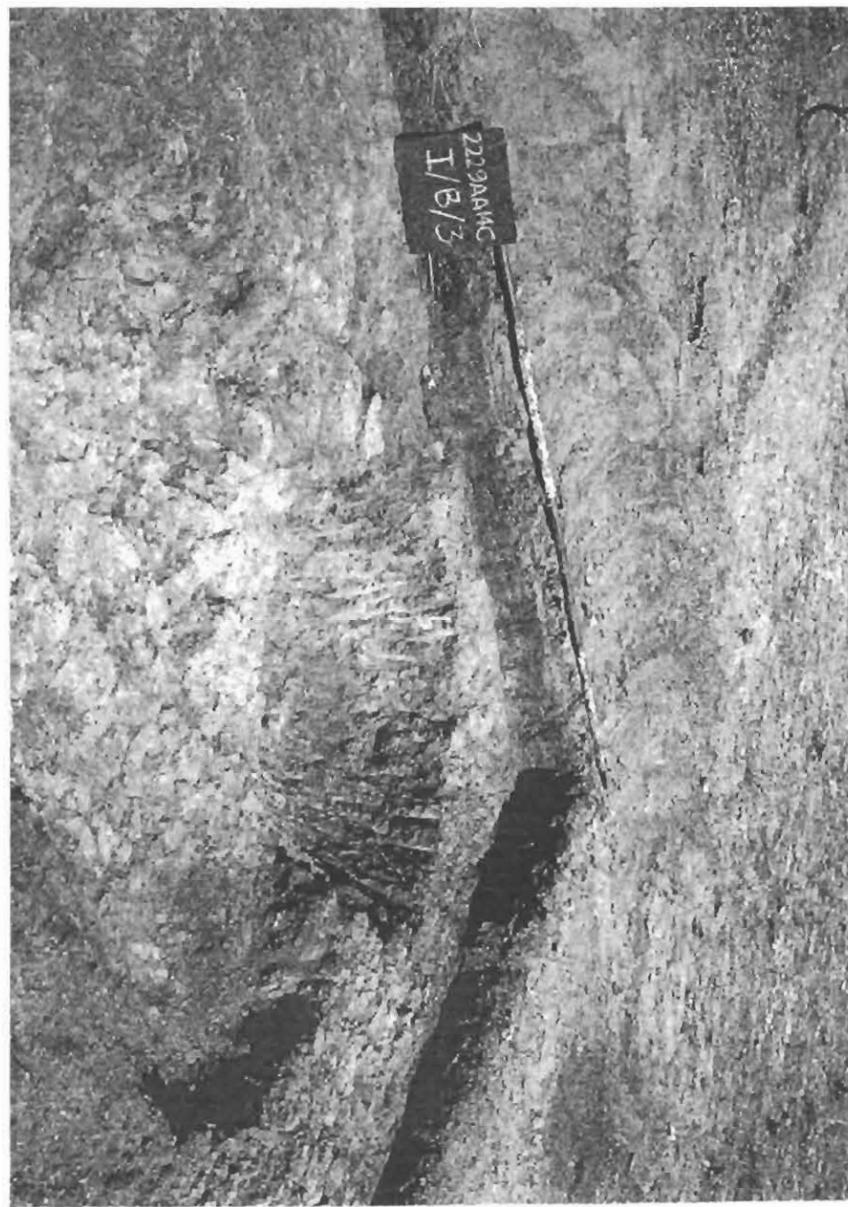


Figure 9. Site 2229 AA 14C: storage pit for underground crops in Trench I, Square B.



typically in or near the cattle kraal and are relatively easy to recognise. The second kind of pit is associated with grainbins in private sections of the residential area and is more difficult to excavate (Figure 9). These pits probably stored food that originally grew underground, such as ground nuts and yams. Today in Zimbabwe, sweet potatoes are allowed to sprout in such pits, and the sprouts are then periodically harvested. This second kind of pit is therefore not sealed, making it more difficult to distinguish from the surrounding deposit.

The different pits, grainbins and cattle kraal all form a single K2 horizon. The stratigraphy first makes this clear: level 1 comprises 3 to 5cm of red sandy soil; ; level 2 on average consisted of about 15cm of village deposit, resting on the red/brown fluvial terrace.

The distribution of ceramics also demonstrates this point. The pottery from Trench I Square B provides a typical example.

level	S	96	20	undecorated		rims		decorated		
				plain	burnished	other	Zhizo	K2	Map	Khami
1		138		13	3	-	-	13	-	-
2		374		27	57	5	-	29	-	-
pit		126		11	6	-	-	12	-	-
3		42		5	3	-	-	-	-	-

IV FUTURE WORK

We will return to 14B to search for more pits, and to both 14B and 14C to search for house remains. The ceramic assemblages from all three homesteads will form a baseline for comparison with the assemblages from rainmaking sites.

Ms MH Schoeman has started excavations on Armenia, and more excavations are planned on Rhodes Drift. The results from these two rainmaking sites will form the background for renewed excavations on Leokwe Hill on Little Muck.

V ACKNOWLEDGEMENTS

We thank SANParks for their cooperation and help during the project. We also are grateful for the generous financial support for M H Schoeman from De Beers. The Mellon Foundation Mentoring Scheme supports M T Murimbika. We thank the 2000 and 2001 Honours Classes and the 2000 Second and Third Year Archaeology students for their assistance. We also thank the various landowners for permission to enter their property. Denise Voorveld typed the report, and Wendy Voorveld prepared the site list. The three sites were excavated under SAHRA permit No. 80/00/07/002/51.

Mapungubwe Culture Area Survey
SOUTH AFRICA

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
Den Staat					
1	2229 AA 10	Hill Complex area	K	22 13 34.2	
2	2229 AA 10	Hill Complex area	K	22 13 40.1	29 14 27.8
3	2229 AA 10	Hill Complex area	R?	22 13 46.6	29 14 28.7
4	2229 AA 10	Hill Complex area	R?	22 13 37.2	29 14 29.4
5	2229 AA 10	Hill Complex area	K2, K, R?	22 13 24.2	29 14 43.9
6	2229 AA 13		K2	22 12 44	29 13 54
7	2229 AA 14a		K2	22 12 40	29 13 57
8	2229 AA 14b		K2	22 12 38.1 - 37.5	29 13 57
9	2229 AA 14c		K2	22 12 36	29 13 58.9
10	2229 AA 15		K2	22 12 30	29 13 34
11	2229 AA 16	Kraal A	K2, M	22 13 2.5 - 3	29 14 28 - 29
12	2229 AA 17	Kraal B	K2	22 13 3.3	29 14 25.9
13	2229 AA 18		M	22 12 59.1	29 14 23.9
14	2229 AA 19	ATEN 99	Z, K2	22 12 28.0/4	29 13 56 2/4
15	2229 AA 20		M	22 12 28 - 26.7	29 13 58 - 57.4
16	2229 AA 21		K	22 12 24.3	29 13 53.7
17	2229 AA 22			22 12 20.7	29 13 58
18	2229 AA 23	Kraal A	K	22 12 13.5	29 13 56.8
19	2229 AA 24	Kraal B	MSA, K	22 12 12 - 11.2	29 13 54 - 56.1
20	2229 AA 25	field hut?	MSA	22 12 00.7	29 13 56.7
21	2229 AA 26		K	22 13 33.4	29 14 41.3
22	2229 AA 27		K	22 13 33.1	29 14 44.2
23	2229 AA 28		K	22 13 32	29 14 42.5
24	2229 AA 29		K	22 13 27.9	29 14 40.6
25	2229 AA 30		K, K2	22 13 27.5	29 14 34.5
26	2229 AA 31		K2, M	22 13 20.5	29 14 35.9
27	2229 AA 32		K	22 13 01.2	29 14 30.1
28	2229 AA 33		K2	22 13 08.7/09.2	29 14 25.5/25.6
29	2229 AA 34		K	22 13 11.6	29 14 26.7
30	2229 AA 35		K2	22 13 08.6	29 14 22.5
31	2229 AA 36		K2?, K?	22 12 37.2 - 5	29 13 43.3 - 41.5
32	2229 AA 37			22 12 50.8	29 13 47.1
33	2229 AA 38	isolated pot		22 12 43.6	29 13 34.3
34	2229 AA 39	field hut?		22 12 48.	29 13 28.7
35	2229 AA 40		K	22 12 43 - 42.7	29 13 41.6 - 39.8
36	2229 AA 41	Kraal A	K?	22 12 36.6	29 13 49.2
37	2229 AA 42	Kraal B		22 12 37.5	29 13 47.4

Mapungubwe Culture Area Survey
SOUTH AFRICA

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
38	2229 AA 43	K	22 12 35.9	29 13 52	
39	2229 AA 46	K?, Icon?	22 12 34.3/5	29 13 53.6/9	
40	2229 AA 47	K, R?	22 12 32.6 - 31.8	29 13 51 - 50.3	
41	2229 AA 48	field hut?	22 12 06.8	29 13 14.7	
42	2229 AA 49	Pastoralist ?	22 12 02	29 13 08	
43	2229 AA 50	K	22 12 11.5	29 13 19	
44	2229 AA 51	K?	22 12 15.5	29 13 14.4	
45	2229 AA 52	K	22 12 14.3	29 13 08.7	
46	2229 AA 53	K	22 12 21.9	29 13 12	
47	2229 AA 54	K	22 12 27	29 13 13	
48	2229 AA 58	K, Icon	22 12 27.2	29 13 19.8	
49	2229 AA 59	K, Icon	22 12 27.3	29 13 27	
50	2229 AA 60	Kraal A	22 12 23.1	29 13 30	
51	2229 AA 61	Kraal B	22 12 22.9	29 13 27.8	
52	2229 AA 62	K?	22 12 26.7	29 13 08.5	
53	2229 AA 63	K2, K	22 12 40.5	29 14 02.3	
54	2229 AA 64	K2, MSA	22 12 40.1	29 14 11.9	
55	2229 AA 65	K2	22 12 39.1	29 14 06.8	
56	2229 AA 66	K2	22 12 37.8	29 14 03.6	
57	2229 AA 67	K2	22 12 33.6	29 14 05.4	
58	2229 AA 68	K2	22 12 30.6	29 14 07.4	
59	2229 AB 32	K	22 13 45	29 15 25	
60	2229 AB 178	K	22 13 37	29 15 10	
61	2229 AB 179	M, V, K2	22 13 43	29 16 30	
62	2229 AB 180	V	22 13 37	29 16 00	
63	2229 AB 181	K	22 13 24	29 15 57	
64	2229 AB 182	K2	22 13 08	29 15 57	
65	2229 AB 183	K, K2	22 12 56	29 15 53	
66	2229 AB 184	K2	22 12 25	29 15 50	
67	2229 AB 185	M, Z?, K2	22 12 53.5	29 16 44	
68	2229 AB 186	?	22 13 05	29 17 12	
69	2229 AB 187	K2, M	22 13 10	29 17 14	

Greefswald

1	2229 AB 1	Mapungubwe	M	22 12 40	29 23 19
2	2229 AB 6	Bambandyanalo	K2	22 13 04	29 22 51

Mapungubwe Culture Area Survey
SOUTH AFRICA

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
3	2229 AB 9	K, Icon	22 11 43 - 44	29 23 50 - 51	
4	2229 AB 10	A	K		
5	2229 AB 11	B	K2		
6	2229 AB 12	C	K		
7	2229 AB 13	D	K		
8	2229 AB 14			22 11 30.1	29 23 48.2
9	2229 AB 15		K, Icon, R	22 11 43 - 44	29 23 50/1
10	2229 AB 16		K	22 12 29.2	29 20 50.3
11	2229 AB 17		K, Icon	22 12 28.8	29 20 53.4
12	2229 AB 18		K?, R?	22 12 24.7	29 20 53.2
13	2229 AB 19		K?, R?	22 12 26.7	29 20 57.7
14	2229 AB 20		K	22 12 24.7	29 20 57.1
15	2229 AB 21		V	22 12 23.8	29 20 58.8
16	2229 AB 22		K?	22 12 23.2/6	29 21 5.8
17	2229 AB 23		K, Icon	22 12 27	29 21 2.4
18	2229 AB 24		M?, R	22 12 21.9	29 21 17.7
19	2229 AB 25	Kraal A	K	22 12 20.3	29 21 44.6 - 45
20	2229 AB 26	Kraal B	K	22 12 20.2	29 21 47.7
21	2229 AB 27	Kraal A	K	22 12 08 - 7.6	29 21 43.7
22	2229 AB 28	Kraal B	K	22 12 08.3 - 9.2	29 21 39.6
23	2229 AB 29		recent S/T	22 12 08.9	29 21 44.7
24	2229 AB 30	metal working ?		22 12 11.3	29 21 38
25	2229 AB 31	Shashe/Limpopo Island	K, M	22 11 47	29 21 57
26	2229 AB 35		K, M	22 12 48	29 23 40
27	2229 AB 87	Collins homestead	Historic	22 11 10.8	29 24 07.7
28	2229 AB 88		K?	22 12 48.1	29 22 03.4
29	2229 AB 89	Skeleton Map 26	K2	22 13 06.3	29 21 32
30	2229 AB 90		Z	22 12 08.85	29 21 01.55
31	2229 AB 91		Z?	22 12 46	29 21 10
32	2229 AB 92	field?	K2	22 13 02	29 21 18
33	2229 AB 93		Z?	22 12 42	29 22 14
34	2229 AB 94		K	22 11 40	29 22 59
35	2229 AB 95		V	22 12 50	29 22 59
36	2229 AB 96		V	22 12 53	29 23 05
37	2229 AB 97		M	22 13 06	29 23 06
38	2229 AB 98		K	22 13 06	29 23 17
39	2229 AB 222	Back Valley	Z	22 12 54	29 21 42
40	2229 AB 223	Ryan 1	K2	22 12 55.7	29 21 44.4
41	2229 AB 224	Ryan 2	Z	22 12 58.1	29 21 47.1

Mapungubwe Culture Area Survey
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No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
42	2229 AB 225	Baobab	Z	22 13 01.2	29 21 49.3
43	2229 AB 226	Edge	K2	22 12 47.9	29 21 27.9
44	2229 AB 227	Rock Shelter	LSA	22 12 51	29 21 19

Hamilton

1	2229 AB 100	Mound 1	ESA, K2	22 14 46.5	29 24 33.8
2	2229 AB 101	Mound 2	K2	22 14 49.2	29 24 38.3
3	2229 AB 102	Mound 3	K2	22 14 50.1	29 24 41.7
4	2229 AB 103	Mound 4	K2	22 14 51.4	29 24 47.4
5	2229 AD 32	Mound 5	K2	22 15 02.7	29 25 59.7
6	2229 AB 104	Mound 6	K2	22 14 57.8	29 25 00
7	2229 AB 105	MAP 24	K2, M?	22 14 56.3	29 25 01.4
8	2229 AB 106	Mound 8	K2, M	22 14 55.7	29 25 05.2
9	2229 AB 107	Z	Z	22 14 18	29 24 12
10	2229 AB 108	SA	SA	22 14 24	29 24 05
11	2229 AB 109	K	K	22 14 22	29 24 14

Little Muck

1	2229 AA 69	Kraal [6/1]	K2	22 14 25.5	29 14 51
2	2229 AA 70		K2	22 14 20	29 14 59
3	2229 AA 136	Vitrified dung 6/1 and small kraal	K Icon	22 14 28.5	29 14 50.9
4	2229 AA 137	Field Area? +/-300 x +/-100		22 14 54.5	29 14 37.7
5	2229 AA 138	burnt daga 6/2	V	22 14 32.4	29 14 52.6
6	2229 AA 139	pottery clearing midden	?	22 14 28.7	29 14 48.5
7	2229 AA 140	small grey	K	22 14 31.8	29 14 42.4
8a	2229 AA 141	large mound 5/1	K, K2	22 14 34.2	29 14 44.7
8b	2229 AA 142	sand quarry 5/1	K2	22 14 35.7	29 14 44.8
9	2229 AA 143	burnt daga	R, K2	22 14 48.7	29 14 46.6
10	2229 AB 45	Little Muck Shelter 1	LSA	22 14 40	29 15 36
11	2229 AB 46	Little Muck Shelter 2	LSA, IA	22 14 45	29 15 32
12	2229 AB 110	Ritual ?	K2, M	22 13 58.3	29 17 08.8
13	2229 AB 111	Z	Z	22 14 00.8	29 16 44.1

Mapungubwe Culture Area Survey SOUTH AFRICA

Mapungubwe Culture Area Survey
SOUTH AFRICA

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
12	2229 AD 39		K		
13	2229 AD 40		MSA, K?	22 15 10.5	29 17 15.1
14	2229 AD 41	Kraal A	K	22 15 20.6	29 18 14.4
15	2229 AD 42	Kraal B	K		
16	2229 AD 43	Kraal C	K		
17	2229 AD 44	D Cairn			
18	2229 AD 45		K?, Icon		
19	2229 AD 46		LK		

Rhodes Drift

1	2229 AA 71	Walling	K	22 13 28.8	29 11 03.2
2	2229 AA 71a	Rock Shelter	MSA	22 13 29	29 11 06
3	2229 AA 72	Rock paintings	LSA	22 13 41.6	29 11 02.1 - 01.7
4	2229 AA 72 a	Porcupine den		22 13 41	29 11 01
5	2229 AA 73	Ritual	EIA, K2	22 14 09.3 - 8	29 10 58 - 59.2
6	2229 AA 74		K	22 13 12.1 - 4	29 11 00.6 - 1.0
7	2229 AA 75		K	22 12 17.8	29 10 40.2

Riedel

1	2229 AB 123		K2?, Historic	22 11 50.9	29 29 32
2	2229 AB 124			22 11 55	29 28 48
3	2229 AB 125			22 11 38	29 27 52
4	2229 AB 126		M	22 13 27	29 28 16
5	2229 AB 127		ESA	22 12 46	29 28 06
6	2229 AB 128		?	22 12 18	29 28 12
7	2229 AB 129		?	22 12 09	29 28 25
8	2229 AB 233		Historic, K2	22 11 50.9	29 29 46
9	2229 BA 32		R?	22 12 43.8	29 30 16.1
10	2229 BA 33			22 12 52	29 30 58.9
11	2229 BA 34		K, R	22 12 45.8	29 31 23.6
12	2229 BA 35		K	22 12 51.8	29 31 21.2
13	2229 BA 36	walling			

Mapungubwe Culture Area Survey
SOUTH AFRICA

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
Samaria					
1	2229 AB 33	Samaria 1	K	22 13 05	29 19 39
2	2229 AB 36	Samaria 2	K2, M	22 12 40	29 20 10
3	2229 AB 37	Samaria 3	K, K2?, M	22 12 33	29 20 35
4	2229 AB 38	Samaria 4	K2, M	22 13 12	29 19 02
5	2229 AB 39	Samaria 5	LIA, ESA	22 13 19	29 19 36
6	2229 AB 40	Samaria 6	Z	22 13 09	29 19 37
7	2229 AB 41	Samaria 7	K2	22 13 13	29 19 24
8	2229 AB 42	Samaria 8	Z	22 12 45	29 20 23
9	2229 AB 43	Samaria 9	M	22 12 36	29 19 14
10	2229 AB 44	Samaria 10	LSA	22 13 05	29 20 15
11	2229 AB 130	TSM 2/1	M	22 13 22	29 18 15.7 - 16.4
12	2229 AB 131		K2	22 13 20.8	29 18 17.9
13	2229 AB 132		?	22 13 14.7	29 18 23 - 25
14	2229 AB 133	A clearing	M, Historic		
15	2229 AB 134	B Kraal	M	22 13 18.4	29 18 27.4
16	2229 AB 135	2 Kraals	K2?, M	22 13 14 - 14.6	29 18 02 - 03.4
17	2229 AB 136		M?	22 13 16.2 - 7	29 18 03.5 - 7
18	2229 AB 137		M	22 13 14.5/6	29 17 59.6/7
19	2229 AB 138		M, K	22 13 7.7 - 8.6	29 17 51.6 - 52.1
20	2229 AB 139		K2	22 13 4.2 - 5.1	29 17 53.3
21	2229 AB 140		M?	22 13 5.5/6	29 17 50.2/5
22	2229 AB 141	Airstrip kopie	K	22 12 32.7	29 17 33
23	2229 AB 142	Kraal B	K	22 12 33.6	29 17 30.3
24	2229 AB 143	Kraal C	K	22 12 30.4	29 17 31.4
25	2229 AB 144	D midden	K	22 12 -----	29 17 -----
26	2229 AB 145	Kraal E	K	22 12 30	29 17 30.1
27	2229 AB 146		K	22 12 33.2	29 17 24.9
28	2229 AB 147		K2?	22 13 03.4	29 17 50
29	2229 AB 148		K2	22 13 00	29 17 51.4
30	2229 AB 149		K2	22 12 56.4	29 17 50.2
31	2229 AB 150		K2	22 12 56.3	29 17 46.9
32	2229 AB 151		K2	22 12 55.9	29 17 41.8
33	2229 AB 152		K2	22 12 55.6	29 17 42.8
34	2229 AB 153		LK	22 12 53.5	29 17 49.5

Mapungubwe Culture Area Survey
SOUTH AFRICA

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
35	2229 AB 154	Kraal A	K2	22 12 49.5	29 17 49.7
36	2229 AB 155	Kraal B	K2?	22 12 49.5	29 17 51.2
37	2229 AB 156		K2	22 12 45.1	29 17 52.7
38	2229 AB 157	EOMH	K2	22 12 42.2	29 17 52.4
39	2229 AB 158	midden	?	22 12 42	29 17 49.5
40	2229 AB 159		K2	22 12 44.3	29 17 48.8
41	2229 AB 160		K2, M?	22 12 47.3	29 17 48.7
42	2229 AB 161	Khami complex	K, Icon	22 12 41.8	29 17 46.2
43	2229 AB 162	Walling - 2 kraals	K	22 12 40.9	29 17 44.7
44	2229 AB 163	Khami complex, circle		22 12 40.5	29 17 45.6
45	2229 AB 164			22 11 44	29 16 29
46	2229 AB 165		Z, K2, M, K	22 12 22	29 16 52
47	2229 AB 166		K, K2	22 12 49.5	29 17 10
48	2229 AB 167		M	22 12 38	29 17 53.3
49	2229 AB 168		K	22 12 56.8	29 17 53.3
50	2229 AB 169		M	22 13 19	29 18 20
51	2229 AB 170		?	22 13 10	29 18 32
52	2229 AB 171		M	22 13 03.4	29 18 47
53	2229 AB 172		R	22 12 17	29 19 27
54	2229 AB 173		R	22 12 32.7	29 19 53
55	2229 AB 174		K	22 12 56	29 20 00
56	2229 AB 175		?	22 12 55	29 19 46
57	2229 AB 176		K2	22 12 37	29 20 35
58	2229 AB 177		K2	22 12 35	29 20 29
59	2229 AB 229		ESA	22 13 34	29 19 05

Tuscanen

		LSA	22 12 08.64	29 12 04.66
1	2229 AA 76	LA, MSA	22 12 09.95	29 12 05.9
2	2229 AA 77	Small stone circle	R?	22 12 04.74
3	2229 AA 78		R?	22 14 02.47
4	2229 AB 99		R?	29 15 03.17

**Mapungubwe Culture Area Survey
SOUTH AFRICA**

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
1	2229 AA 2	K	22 13 45	29 08 30	
2	2229 AA 11	Pont Drift Shelter	LSA, LA, V	22 14 08.5	29 08 08
3	2229 AA 12	Pont Drift Complex	K2, Z	22 14 03	29 09 04
4	2229 AA 79			22 14 14	29 08 02
5	2229 AA 80		LSA	22 14 10	29 08 32
6	2229 AA 81	Z		22 14 03	29 08 37
7	2229 AA 82	K2, Z		22 13 54	29 09 04

Modena

1	2229 AA 83	WK Z/K walling	Z, K	22 13 32	29 10 00
2	2229 AA 84		K2	22 13 21	29 09 47
3	2229 AA 85		K2	22 13 23	29 09 36

Nekel

1	2229 AB 120	M	22 14 37	29 26 35
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Schroda

1	2229 AB 7	Z	22 10 59	29 25 32
2	2229 AB 8	K, K2	22 11 01	29 26 42
3	2229 AB 188	ESA	22 12 32	29 26 54
4	2229 AB 189	K2	22 12 10	29 27 36
5	2229 AB 190		22 11 84	29 27 39
6	2229 AB 191	K2	22 11 06	29 25 48
7	2229 AB 192	K2	22 11 55	29 25 45
8	2229 AB 193	?	22 11 54	29 25 51
9	2229 AB 194	ESA	22 11 16	29 25 35
10	2229 AB 195	Shelter	22 11 22	29 26 17
11	2229 AB 196	Shelter	22 11 24	29 26 27
12	2229 AB 197		22 11 20	29 26 32
13	2229 AB 198	Shelter	22 11 08	29 26 54

Mapungubwe Culture Area Survey
SOUTH AFRICA

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
14	2229 AB 199		M	22 10 50	29 26 38
15	2229 AB 200		K	22 10 46	29 26 29
16	2229 AB 201		K	22 10 50	29 26 17
17	2229 AB 202		?	22 10 36	29 26 30
18	2229 AB 203		?	22 10 36	29 26 20
19	2229 AB 204		M, LSA	22 11 05	29 25 33
20	2229 AB 205	Shelter		22 11 08	29 25 00
21	2229 AB 206	Shelter		22 10 34	29 25 15

Weipe

1	2229 AB 34	K Ruin	K,M	22 10 43	29 29 09
2	2229 AB 207		Z	22 10 23	29 28 09
3	2229 AB 208		?	22 10 14	29 28 20
4	2229 AB 209		?	22 10 23	29 28 24
5	2229 AB 210		?	22 10 23	29 28 44
6	2229 AB 211		M, K2	22 10 23	29 28 51
7	2229 AB 212		?	22 10 27	29 28 51
8	2229 AB 213		M	22 10 27	29 29 10
9	2229 AB 214		K	22 10 47	29 28 46
10	2229 AB 215		?	22 10 52	29 28 56
11	2229 AB 216		?	22 11 08	29 28 37
12	2229 AB 217		M	22 11 12	29 28 39
13	2229 AB 218	K wall	K	22 11 03	29 28 59
14	2229 AB 219		K, M	22 11 03	29 29 45
15	2229 AB 220		?	22 11 20	29 29 37
16	2229 AB 221		?	22 11 32	29 29 33
17	2229 BA 37		Zb	22 11 33	29 30 34
18	2229 BA 38		K2	22 11 40	29 31 09
19	2229 BA 39		M	22 11 48	29 31 22
20	2229 BA 40		K	22 11 55	29 30 59
21	2229 BA 41		K	22 11 57	29 31 18
22	2229 BA 42		K?	22 11 59	29 31 26

**Mapungubwe Culture Area Survey
SOUTH AFRICA**

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
Balerno					
1	2229 AC 4		LSA, EIA, LIA	22 16 04	29 11 14
2	2229 AC 5	Tsohwe Hill		22 17 40	29 10 50
3	2229 AC 6		LSA	22 17 35	29 11 24
4	2229 AC 7	Balerno shelters 2 & 3	LSA	22 17 29	29 12 05

Hilda

1	2229 AC 9	walling		22 18 07	29 13 56
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Armenia

1	2229 AC 10	M	22 16 54	29 12 57
2	2229 AC 11	K2, V	22 16 52	29 13 07
3	2229 AC 12	V	22 16 56	29 13 12

Skutwater

1	2229 AD 90		22 15 01	29 20 45
2	2229 BA 1	Skutwater	M	22 11 09
3	2229 BA 43	Mine		22 12 01
4	2229 BA 44		M	22 11 48
5	2229 BA 45		M	22 11 40

Mapungubwe Culture Area Survey
BOTSWANA

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
Mashatu					
1	2229 AA 4	Mmamagwa	K2, M, R	22 12 22	29 00 33
2	2229 AA 55	T 40 (height marker 1917)		22 13 11	29 01 09
3	2229 AA 56	Motlouisi River bank	M	22 13 01	29 03 00
4	2229 AA 57	K Ruin	K	22 12 17	29 07 57
5	2229 AA 97	Air Strip	K?	22 04 14.3	29 06 45.4
6	2229 AA 98	Air Strip	K?	22 04 15	29 06 45.8
7	2229 AA 99		K	22 04 13.6	29 07 01.0
8	2229 AA 100		K	22 04 12.5	29 07 01.0
9	2229 AA 101		K	22 04 09.8	29 06 59.2
10	2229 AA 102	Matabola & Nysakewa		22 07 16.0	29 08 21.2
11	2229 AA 103	Matabola & Nysakewa		22 07 29.00	29 08 19.3
12	2229 AA 104		K	22 08 17.4	29 07 43.1
13	2229 AA 105	Kanada	K2	22 08 40.1	29 06 55.0
14	2229 AA 106	Kanada	K2	22 08 39.2	29 07 02.1
15	2229 AA 107	Kanada	K2	22 08 41.1	29 06 51.6
16	2229 AA 108		K?	22 08 38.5	29 06 46.1
17	2229 AA 109		K?	22 08 37.3	29 06 41.4
18	2229 AA 110		K	22 08 40.6	29 06 40
19	2229 AA 111	Kraal A	LK	22 08 42.4	29 06 46.6
20	2229 AA 112	Kraal B		22 08 43.7	29 06 45.7
21	2229 AA 113	Kraal C		22 08 45.7	29 06 47
22	2229 AA 114		K	22 08 43.9	29 06 48.8
23	2229 AA 115		K2, MSA	22 08 45.9	29 06 52.1
24	2229 AA 116		K	22 08 46.4	29 06 57.3
25	2229 AA 117	field hut?	Pottery	22 08 51.5	29 06 52.9
26	2229 AA 118		M?, R?	22 12 19.4	29 00 03.6
27	2229 AA 119		K, R	22 12 20.8	29 00 09.9
28	2229 AA 120		R	22 12 10 - 9.9	29 00 15.4
29	2229 AA 121		K	22 11 55.8	29 00 01.7
30	2229 AA 122	Moddergat	K?	22 07 47.4	29 08 59.4
31	2229 AA 123		K	22 07 48.8	29 09 01.7
32	2229 AA 124	2 kraals ?	MSA, IA	22 07 51.8	29 08 52.2
33	2229 AA 125	Cheetakop area	MSA, R	22 08 17.0	29 09 40.7
34	2229 AA 126		K2?, K, R	22 08 17.9	29 09 42.1
35	2229 AA 127		K, R	22 08 22.6	29 09 40.6
36	2229 AA 128			22 08 27.1	29 09 44.2
37	2229 AA 129	Jackal kop	K2, K	22 09 07.4	29 11 39.4

**Mapungubwe Culture Area Survey
BOTSWANA**

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
38	2229 AA 130	Jackal kop	22 09 08.4	29 11 43.4	
39	2229 AA 131	Jackal kop	K, R?	22 09 11.3	29 11 50.1
40	2229 AA 132	Mojale/Limpopo	V?	22 11 03.4	29 11 35.2
41	2229 AA 133	A Merryhill Kopje	K	22 12 16.5	29 07 30.6
42	2229 AA 134	B walling	K	22 12 15.0	29 07 35.2
43	2229 AA 135		R	22 12 13.5	29 07 30.5

Mapungubwe Culture Area Survey
ZIMBABWE

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
Maramani					
1	2229 AB 48		K2, M	22 10 55	29 24 14
2	2229 AB 49		V	22 10 53.3	29 23 58.4
3	2229 AB 50		S/T	22 10 50.2	29 23 58.4
4	2229 AB 51		K, K2	22 06 10.9	29 18 50.6
5	2229 AB 52		K	22 06 15.9	29 18 45.5
6	2229 AB 53		IA	22 06 16.4	29 18 46
7	2229 AB 54		Z	22 07 30.5	29 18 54.2
8	2229 AB 55		Z	22 07 34.5	29 18 45.1
9	2229 AB 56		K	22 07 39	29 18 43.4
10	2229 AB 57		Z	22 07 39	29 18 52
11	2229 AB 58		IA	22 07 30.5	29 18 54.2
12	2229 AB 59	pottery at sacred pool		22 01 21.2	29 16 32.5
13	2229 AB 60	grinding stone		22 01 21.2	29 16 32.5
14	2229 AB 61		LK, K	22 01 21.1	29 16 32.8
15	2229 AB 62		K2, M	22 10 07.9	29 22 08.1
16	2229 AB 63		K	22 10 08.2	29 22 08.7
17	2229 AB 64		K2, M, K	22 10 07.9	29 22 21.2
18	2229 AB 65		K?	22 10 09.8	29 22 30.1
19	2229 AB 66		IA	22 10 08.1	29 22 09.6
20	2229 AB 67		K	22 10 53.2	29 23 58.4
21	2229 AB 68		IA	22 10 54.4	29 23 58.8
22	2229 AB 69	burial ?		22 07 35.5	29 18 45.7
23	2229 AB 70		MSA	22 01 17.6	29 16 33.1
24	2229 AB 71		MSA	22 01 21.2	29 16 32.7
25	2229 AB 72		MSA	22 06 45.3	29 18 34.6
26	2229 AB 73	JCT		22 11 20	29 22 28
27	2229 AB 74	Jowaka	K2, M	22 11 11	29 23 01
28	2229 AB 75		Z	22 10 10	29 25 04
29	2229 AB 76		M	22 09 44	29 25 20
30	2229 AB 77		K2	22 09 24	29 25 20
31	2229 AB 78			22 08 46	29 25 22
32	2229 AB 79		?	22 09 22	29 26 44
33	2229 AB 80	Hai Hai ruin		22 09 51	29 26 27
34	2229 AB 81		Z	22 09 47	29 26 49
35	2229 AB 82		M	22 08 56	29 28 55
36	2229 AB 83		Z, K2	22 09 12	29 28 57
37	2229 AB 84			22 09 23	29 29 47

Mapungubwe Culture Area Survey
ZIMBABWE

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
38	2229 AB 85	M	22 09 34	29 29 30	
39	2229 AB 86	K?	22 09 56	29 25 24	

Sentinel

1	2229 BA 3	Sadengeni	M	22 09 32	29 30 28
2	2229 BA 4		M	22 09 42	29 30 41
3	2229 BA 5		M, K	22 09 50	29 30 50
4	2229 BA 6		M	22 09 56	29 30 45
5	2229 BA 7		M	22 09 20	29 30 59
6	2229 BA 8		Z	22 07 55	29 30 46
7	2229 BA 9		M	22 08 07	29 31 13
8	2229 BA 10		LK	22 07 58	29 31 13
9	2229 BA 11		M	22 07 42	29 31 24
10	2229 BA 12	Elephant		22 07 49	29 31 57
11	2229 BA 13		M	22 08 23	29 32 21
12	2229 BA 14		Z	22 08 20	29 32 50
13	2229 BA 15		M, K2, Z	22 08 13	29 33 29
14	2229 BA 16		K, M	22 08 08	29 33 39
15	2229 BA 17		?	22 07 46	29 34 18
16	2229 BA 18		M	22 07 05	29 33 47
17	2229 BA 19			22 07 56	29 34 34
18	2229 BA 20			22 07 59	29 34 43
19	2229 BA 21		LSA	22 07 56	29 34 49
20	2229 BA 25	Hamba	RP	22 07 22	29 34 59
21	2229 BA 27		M, RP?	22 07 50	29 34 48
22	2229 BA 29		M?	22 02 27	29 31 28
23	2229 BA 30			22 02 00	29 31 09

Nottingham

1	2229 BA 22	Danduli Ruin		22 07 44	29 34 59
2	2229 BA 23		RP	22 07 50	29 35 13
3	2229 BA 24		M	22 08 13	29 34 54
4	2229 BA 26		M	22 06 56	29 36 56

Mapungubwe Culture Area Survey
ZIMBABWE

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
5	2229 BA 28	Zim. Ruin	K	22 08 09	29 42 30
6	2229 BA 31		K?	22 03 40	29 41 56

Mapungubwe Culture Area Survey
South Africa (other)

No.	Site No.	Area or Farm	Ceramic Group/Period	Latitude	Longitude
Parma					
1	2229 AA 1		K	22 13 03	29 07 01
2	2229 AA 86		K, V	22 14 44	29 06 20
3	2229 AA 87		Z, K2, K	22 14 47	29 06 24
Ratho					
1	2229 AA 3		K	22 14 32	29 03 33
2	2229 AA 88		V	22 13 19	29 02 02
3	2229 AA 89		V	22 13 23	29 02 11
4	2229 AA 90		M	22 13 57	29 02 04
5	2229 AA 91		?	22 13 24	29 02 30
6	2229 AA 92		Z, R	22 13 15	29 02 36
7	2229 AA 93		R	22 13 15	29 02 39
8	2229 AA 94		R	22 13 16	29 02 41
9	2229 AA 95		R	22 13 15	29 02 47
10	2229 AA 96		Z?	22 14 26	29 04 02
Breslau					
1	2229 AC 1	Breslau 1	K	22 15 20	29 01 42
2	2229 AC 2	Breslau 2	K	22 16 22	29 03 10
3	2229 AC 3	Breslau 3	K	22 16 10	29 02 30
4	2229 AC 8	Breslau 4		22 15 52	29 03 19
Oriental					
1	2229 AD 47		M	22 23 01	29 22 08

Mapungubwe Culture Area Survey
South Africa (other)

Lizzulea

1	2229 AD 48	K2	22 19 10	29 19 58
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Krone

1	2229 AD 49	V?	22 24 44	29 20 40
2	2229 AD 50	V?	22 24 01	29 18 56

Venetia

1	2229 AD 51	K	22 27 08	29 17 38
2	2229 AD 52	Walling	22 27 10	29 17 44
3	2229 AD 53	M, K	22 26 41	29 20 20

Rugen

1	2229 AD 54	K2	22 25 55	29 20 24
2	2229 AD 55	K2	22 26 05	29 20 40
3	2229 AD 56	K2	22 25 53	29 20 59
4	2229 AD 57	K2	22 26 01	29 21 12
5	2229 AD 58	K2 ?	22 26 25	29 20 40

Faure

1	2229 AD 2	Z	22 16 46	29 19 16
2	2229 AD 59	M	22 17 06	29 19 32
3	2229 AD 60	M	22 17 09	29 19 32
4	2229 AD 61	M	22 18 51	29 19 11

Mapungubwe Culture Area Survey
South Africa (other)

Icon				
1	2229 AD 3	Icon	IA(+/- 1330 AD)	22 25 57 29 15 21

Hartbeestfontein

1	2229 AD 62	walls	M	22 16 26 29 20 14
2	2229 AD 63		K	22 16 31 29 20 05
3	2229 AD 64		M	22 16 40 29 20 09
4	2229 AD 65		M	22 17 00 29 20 02
5	2229 AD 66		K	22 17 04 29 20 04
6	2229 AD 67		K	22 17 12 29 20 10
7	2229 AD 68	Vitrified dung	?	22 17 55 29 20 00
8	2229 AD 69		R	22 19 02 29 19 30

Blyklip

1	2229 AD 4	Kolope	K	22 18 22 29 17 42
2	2229 AD 70		K2	22 16 19 29 15 41
3	2229 AD 71		K	22 16 53 29 15 39
4	2229 AD 72		K2, M	22 16 43 29 16 20
5	2229 AD 73			22 17 05 29 15 51
6	2229 AD 74		K	22 17 08 29 15 38
7	2229 AD 75		K2	22 18 10 29 15 46
8	2229 AD 76		K2	22 18 12 29 15 54
9	2229 AD 77			22 18 16 29 16 00
10	2229 AD 78			22 18 16 29 17 10
11	2229 AD 79		K	22 18 18 29 17 17
12	2229 AD 80			22 18 22 29 17 25
13	2229 AD 81		K	22 18 24 29 17 29
14	2229 AD 83		K	22 18 27 29 17 57

Edmondzburg

1	2229 AD 5	Map1	M	22 18 37 29 17 28

Mapungubwe Culture Area Survey
South Africa (other)

2	2229 AD 6	Baobab	Z, V?	22 18 34	29 17 10
3	2229 AD 84	low walling		22 15 56	29 18 27
4	2229 AD 85		K2	22 16 37	29 17 43

Anglican

1	2229 AD 88		22 18 00	29 15 16
2	2229 AD 89		22 19 27	29 15 00

Athens

1	2229 AB 228	Hackthorne 4	LSA, Pottery	22 14 12	29 20 02
2	2229 AD 90			22 15 01	29 20 45
3	2229 AD 91	Hackthorne3	RP	22 15 35	29 20 12

Bismarck

1	2229 BA 46	M	22 12 05	29 32 29
2	2229 BA 47	M	22 12 26	29 32 24

Konigsmark

1	2229 BA 48	M	22 14 42	29 31 54
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Alyth

1	2229 BA 2	Alyth	K2, M, K	22 10 17	29 34 27
2	2229 BA 49		K2, M, K	22 10 05	29 33 11
3	2229 BA 50		M	22 10 00	29 33 44
4	2229 BA 51	JEV	M	22 09 51	29 33 34

Mapungubwe Culture Area Survey
South Africa (other)

5	2229 BA 52	M	22 09 20	29 34 04
6	2229 BA 53	M?	22 10 31	29 34 46
7	2229 BA 54	M?	22 10 34	29 35 06

Hackthorne

1	2229 AB 231	ESA	22 13 47	29 18 37 - 56
2	2229 AD 92	LSA, RP	22 15 09	29 19 42
3	2229 AD 93	Calcrete borrow pit	22 15 13	29 18 44