

**FINAL REPORT ON ARCHAEOLOGICAL EXCAVATIONS  
ON A SECTION OF THE FARM NOVENGILLA 562LT,  
LETSITELE AREA, NORTHERN PROVINCE**

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**SUMMARY**

**Final report on archaeological excavations on a section of the farm Novengilla 562 LT, Letsitele area, Northern Province.**

During a survey undertaken to locate, identify, evaluate and document sites, objects and structures of cultural importance within the boundaries of the area in which the proposed Novengilla Factory are being developed, 2 sites of Late Iron Age origin was found. Unfortunately, both sites were extensively damaged through earth workings that had already commenced.

Due to the large amount of Iron Age artifacts (mostly decorated pottery belonging to the Letaba phase of the Late Iron Age) it was decided to carry out rescue archaeological excavations on the one site (2330CD 59) in order to gather as much information as possible before the complete destruction of the site. Two areas on the site were chosen for excavation, a possible midden (Excavation 1) and an area with hut debris (Excavation 2).

This document constitutes a final report on the archaeological excavations carried out on site 2330CD 59.

**CONTENTS**

SUMMARY .....	i
CONTENTS.....	ii
1. AIMS OF THE EXCAVATION.....	1
2. METHODOLOGY.....	2
3. DISCUSSION.....	3
4. CONCLUSIONS.....	9
5. REFERENCES .....	11
6. PROJECT TEAM .....	11
APPENDIX 1.....	12



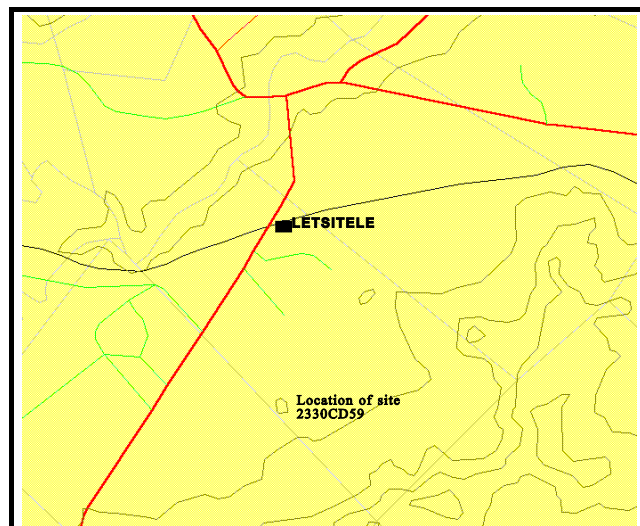
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## 1. AIMS OF THE EXCAVATIONS

The site discussed in this report, coded as 2330CD59 (GPS: 23° 54' 08.4" S; 30° 23' 19" E) lies to the east of a prominent hill called Letaba Kop on the farm Novengilla 562LT in the Letaba 1 district of Northern Province. By using some of the decorated pottery found on the site, it was identified preliminary as belonging to the Letaba phase of the Late Iron Age, dating to between the 16th and 17th centuries AD (Evers 1987). Similar sites occur in the immediate vicinity (Van Schalkwyk 1999).

The archaeological investigation was a rescue operation, and needed to be done before any further damage was done by development and all information was irretrievably destroyed. The aim of the excavations was therefore to recover as much information and cultural material in order to:

- reconstruct, if possible, the time-scale of settlement at the site
- determine the cultural identity of the people who lived at the site, and
- to determine the subsistence economy and material culture of the people who occupied the site.



## **2. METHODOLOGY**

Areas that had to be excavated were identified by walking over the site and choosing spots which seemed likely to contain material deposit, such as middens or areas with concentrations of hut wall debris. Two such areas, a midden and a possible hut, were located and excavated. Generally accepted archaeological methods and practises were used during the excavations.

### **2.1 Surface collection**

A collection of surface material, obviously out of context due to development work, was also undertaken. This was done in order to increase the sample size from the site, but also to retrieve interesting and valuable artifacts pertaining to the settlement history at the site. A fairly large number of artifacts were collected in this manner, although by no means were all material visible on the surface removed.

### **2.2 Excavation**

Two areas on the site were chosen for excavation. Excavation 1 was on a possible refuse midden (or what remained of it) and was characterised by the relative large number of broken pottery, and concentration of burnt bone and charcoal. Two layers of cultural material were removed. Excavation 2 was on an area identified by a concentration of hut wall debris and decorated pottery. Only one layer was opened up.

### **2.3 Documentation**

Both excavations, and features found within them, were documented photographically, while Excavation 2 was also mapped and drawn by means of dumpy level. All artifacts recovered were documented on site by Excavation and Layer number, as well as material type.

### **2.4 C14, Faunal and other material analysis**

Normally charcoal is recovered from excavations and given to the CSIR's Quaternary Dating Research Unit for C14 analysis. This is done in order to obtain a possible date or dates for settlement at a site. Unfortunately the amount of charcoal recovered from the excavations on Novengilla was not large enough to enable a successful analysis. All identifiable animal skeletal material (identifiable to species, age, sex, skeletal part) and shell were taken to the Archaeozoology Department at the Transvaal Museum for identification. Faunal material analysis is normally used to determine dietary preferences of inhabitants of a site, the use of domesticated vs non-domesticated animals by the people, as well as the distribution of different animal species in a particular area.

All other material (ceramics, metal, stone, etc...) was analyzed at the Archaeology Department of the National Cultural History Museum. Aspects such as type of ceramic vessel and various styles of decoration, are used in determining the possible identity of the people who occupied the site, as well as to provide a relative date for settlement there. Artifact analysis can also helpful in

reconstructing the subsistence economy and material culture of the Iron Age inhabitants of a settlement.

### **3. DISCUSSION**

#### **3.1 Surface Collection**

Although the cultural material recovered from both Excavation 1 and 2 were discussed together, it was decided to do the surface collected material separately. The reasons for this is that material was collected randomly from the surface, and is therefore not representative of what was/is available at the site, and because the surface material is out of context due to the extensive development work done at the site.

##### **(a) Stone artifacts**

A number of stone artifacts were found, of both Stone Age and Iron Age origin. Some MSA (Van Schalkwyk 2000) stone tools and flakes were found on the surface, indicating that human activity in the area dates back to at least 40 000 years before present (B.P). Hammer stones, lower grinding stones and rubbing stones, dating to the Iron Age settlement at the site, were also recovered. A soapstone spindle-whorl (used for spinning rope or string) was found as well. Spindle-whorls are normally made of pieces of pottery, so this is quite a rare find.

##### **(b) Faunal material**

Both identifiable & unidentifiable animal bone and teeth were recovered from the surface of the site (See Appendix 1). Some of the bones are burnt, and show evidence of cutting and gnawing. The gnaw marks are most probably the result of animals such jackals or rodents gnawing on the bones.

All the teeth and most of the identifiable bone were identified as belonging to *Bos taurus* (cattle). This is not unexpected as most Iron Age settlements of the time were dependent on domesticated cattle for providing most of their meat, skin and other requirements such as milk. Sex (male or female) could not be determined, while the age of the animals are mostly mature adults, with an age of between 30 and 42 months old. Two bones (calcaneums) of a more juvenile individual were found as well. Bone growth on the proximal shaft of metacarpal was identified. This could either be because of old age or illness, although stress due to over exertion could also be a resultant factor.

##### **(c) Human skeletal material**

Part of the right femur of a possible adult female individual (Pers.Comm., Prof.M.Steyn UP Anatomy) was also recovered from the surface of the site. Only about 25% of the femur remains. The bone has been neatly cut and snapped at the distal end, and also seems to have been polished.

The reason for the cutting and polishing is not known. No other human remains were found.

Both the developer (J.Gubbitz) and the NMC (Dr.J.Deacon) were notified about the existence of human remains on site, and the developer told to be on the lookout for any burials during further development and construction.

#### (d) Ceramics

Only decorated pieces of ceramic were retrieved during the surface collection. This was done to get some idea of the types of decoration (styles, motifs) and vessel types (forms) that might have existed at the site. It was also done to increase the ceramic sample size recovered during excavations. The ceramics was analyzed according to procedures proposed by Huffman (1980). In this, multidimensional types are formed by using 3 independent variables: vessel profile, decoration layout (position on vessel) and decoration motif.

A total number of 52 decorated sherds were collected, of which 19 were decorated lip sherds. A total number of 18 individual vessels were identified, of which 16 or a total 76% of all vessels were decorated. The types of vessels are largely bowls, with one or two pots also present. The types of decoration that occurs are mostly incised lines or bands and some comb stamping or punctate. Graphite and ochre bands are also fairly common, usually in combination with incisions. Other combinations that do occur are incisions with comb stamping or punctate.

Decoration motifs found include:

- (a) cross hatching or herring bone within horizontal incised lines
- (b) cross hatching within single incised lines and single bands of comb stamping above and below
- (c) single, double or triple incised bands
- (d) cross hatching with single punctate borders
- (e) wide bands of single, interspersed incised lines
- (f) single bands of punctate and single incised lines, slanting slightly to the left, within single horizontal incised borders.

Graphite and ochre generally occur within incised borders, or interspersed graphite/ochre bands followed by incisions followed by graphite/ochre, and so on. An interesting motif is vertical and horizontal, overlapping bands of incised lines found in combination on one vessel.

The decoration layouts (position of motif on vessel) varies. There are:

- (1) vessels without any decoration
- (2) with decoration just below the lip
- (3) decoration below the lip and on the body of the vessel
- (4) decoration on the lip and on the body
- (5) as well as decoration on the lip, just below it and on the body.

The intersection between profile (2) and layout modes (5) produced a possible 10 classes of vessel, of which 6 are present. They are:

- (1) Bowls without decoration (2)
- (2) Bowls with decoration just below the lip (1)



- (3) Bowls with decoration below the lip and on the body (7)
- (4) Bowls with decoration on the lip and the body (4)
- (5) Bowls with decoration on the lip, just below it and on the body (3)
- (6) Pots with decoration below the lip and on the body (1)

**(e) Other cultural material**

Two pieces of pottery, their edges rounded, were also found. They could have had a few possible (intended) functions. The most likely is that they are unfinished spindle-whorls, but the possibility of ear-plugs or plugs for milk strainers should not be ruled out.

**3.2 Cultural material from Excavation 1 (midden) and Excavation 2 (Hut)**

Excavation 1 was a 3m x 2m trench on a area identified as a possible refuse midden. Cultural material was found up to a depth of about 15cm (layer 1 and 2), with sterile soil starting at approximately this level. A relatively large amount of pottery and bone, as well as a small number of other artifacts, was recovered.

Excavation 2 was conducted on an area identified by a concentration of hut wall debris and decorated pottery. A nearly complete and intact hut floor was uncovered approximately 15cm beneath the hut rubble and thin layer of top soil. Some decorated and undecorated pottery was also found on the floor, as well as a grinding stone. No other cultural remains (faunal material, shell, etc.) were found. At about the same depth the remains of the stone wall of the hut was uncovered. This is only the foundation of a double wall, partially destroyed through the construction work at the site. The original excavation of 3m x 2m was extended to uncover the complete hut. The hut floor and excavation was mapped and drawn using a dumpy level.

**(a) Stone artifacts**

Stone artifacts recovered from the excavations include a number of rubbing stones and a upper grinding stone from Excavation 2. Rubbing stones were used to rub or smooth the mud or dung floors of huts. Upper grinding stones were for the grinding of maize and/or corn and other cereals. A number of broken lower grinders (whereon the maize was put to be grounded) was found scattered on the surface of the site.

**(b) Faunal material**

A fairly large amount of faunal material, mostly unidentifiable bone fragments and tooth (enamel) fragments, were recovered from Excavation 1, while none was found in Excavation 2. A few pieces of identifiable (to species, age, sex and skeletal part) bone and teeth were however also found. These were taken to the Archaeozoology Department at the Transvaal Museum for analysis (See Appendix I). Some of the bones found, have been burnt, and a few also contain cut and/or gnaw marks, and show signs of having been polished.

Most of the identifiable bone and teeth were identified as belonging to *Bos taurus* (domesticated cattle), although a few other species were also identified. From the bone and teeth it was possible

to determine that the individuals represented by the remains were between mature adult and very old in age. A sub-adult was also identified. One *Bos taurus* bone (astragalus) has acid etchings on it, clear evidence that the bone was swallowed whole by the animal that ate it, and passed through its stomach. This bone also has bite marks on it.

Large carnivore (cheetah or leopard size) was also present at the site, with one bone (astragalus) being evidence of this. Small, non-domesticated, buck was also utilised by the inhabitants of the site. A worked metatarsal and a pubis (part of the pelvis) of a small antelope, probably *Oribi* (*Oribia ourebi*) were identified. From the thickness of the pubis it was possibly male. It is not possible to say whether both bones are from the same individual or not, so more than one animal might be represented by the remains. Sheep or goat (*Ovis/Capra*) were also identified, and is represented by a single premolar. Other non-domesticated animals are represented as well, with a possible zebra (cf. *Equus burchelli*) and kudu (*Tragelaphus* sp.) the other two species present. The kudu was a juvenile individual.

### (c) Other bone artifacts

A number of bones show clear signs of having been worked and polished. The worked oribi metatarsal were probably an awl, while a bone needle/awl, manufactured on a long bone shaft, was also recovered. The function of a few of the worked bones were unfortunately not possible to determine.

### (d) Ceramics

A relatively large amount of pottery was recovered from the excavations. By far the largest part of the sample is made up of undecorated body sherds, although some decorated lip and body sherds were also recovered. The same procedures (Huffman, 1980), as used in the analysis of the surface collected ceramics, were used here.

A total number of 430 potsherds were recovered from the two excavations, of which only 87 are decorated. Of the 36 lip sherds, 21 are decorated. The number of individual vessels identified by using lip sherds are 31, with 18 (58.06% of all vessels identified) decorated. Three types of vessel were found to be represented by the ceramics recovered from the excavations. These are:

- (1) Bowls
- (2) Pots without necks, and
- (3) Pots with slightly everted necks

Five (5) decoration layout modes were present. These are:

- (1) no decoration at all
- (2) decoration below the lip
- (3) decoration on the body and the lip
- (4) decoration only on the body, and
- (5) decoration on the lip.

The intersection between vessel profile (3) and layout mode (5) gives a possibility of 15 classes of vessel, with 9 present in the material recovered from Excavation 1 and 2. These classes are:

- (1) Bowls without decoration (12)
- (2) Bowls with decoration on the lip and body (4)
- (3) Bowls with decoration only on the lip (3)
- (4) Bowls with decoration only on the body (5)
- (5) Pots without necks and no decoration (1)
- (6) Pots without necks and decoration below the lip (1)
- (7) Pots without necks, with decoration on the lip and body (3)
- (8) Pots without necks with decoration only on the body (1)
- (9) Pots with slightly everted neck and decoration only on the body (1)

A number of decoration types occur, with incised lines or bands and graphite and/or ochre used the most. A few pieces with punctate and impressed decoration on the lip were however also recovered. Some decoration types are also found in combination with each other, such as graphite and/or ochre in combination with incisions; incisions with punctate; impressed decoration with incisions and graphite and impressed decoration with incisions and ochre. The following decoration motifs are present:

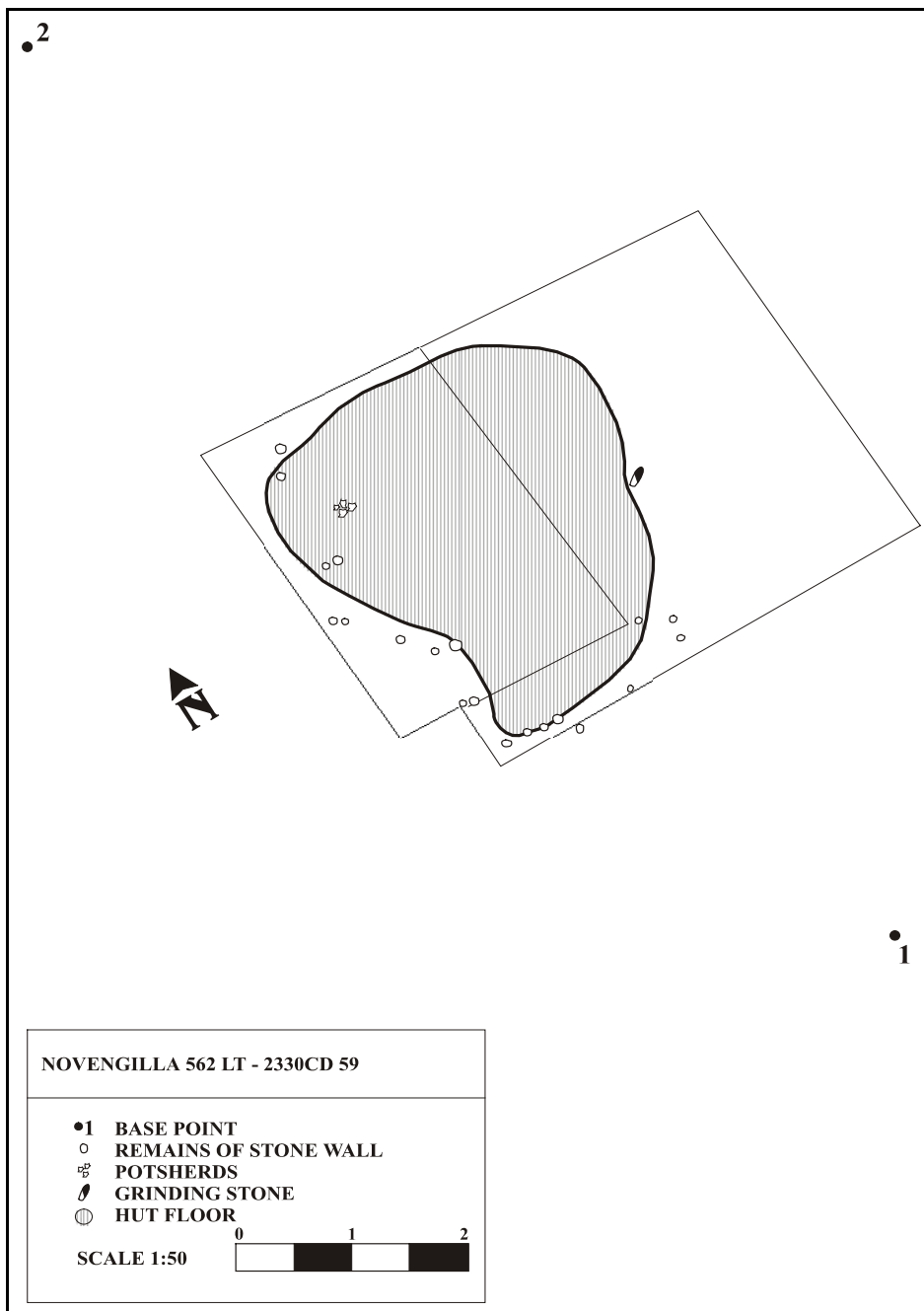
- (a) single bands of impressed decoration
- (b) single, double, triple, or wider bands of incisions
- (c) single, double or triple horizontal lines of incisions alternating between band of graphite and/or ochre
- (d) single incised lines, slanting slightly to the left, sometimes bordered above and below by bands of graphite
- (e) blocks of overlapping vertical and horizontal incisions
- (f) incised lines, slanting to the left, bordered above and below by single punctate lines overlapping with double incised lines above and below
- (g) wide bands of deep, herringbone-like incisions, bordered by single horizontal incisions and vertical incisions cutting across these single lines

(e) **Other ceramic artifacts**

Only one other ceramic artifact was retrieved, in layer 2 of Excavation 1. This is a small, rounded piece of pottery, broken in half. It is probably an uncompleted spindle-whorl, or could also have been a plug for a milk strainer.

(f) **Shell**

A total number of 9 fragments and larger pieces of achatina (freshwater mussel) shell were recovered from Excavation 1. Achatina shell are found at almost all Iron Age sites, and were probably utilised both as food source and for the manufacturing of beads and other decorative artifacts.





#### 4. CONCLUSIONS

The archaeological excavations conducted at site 2330CD 59, on the farm Novengilla 562 LT, in the Letsitele area of the Northern Province, helped to reconstruct certain aspects of the history of Late Iron Age settlement at the site.

Although research on the site concentrated on the Iron Age occupation of the site, it is clear that the site and area have been utilised since much earlier times. Stone tools dating to the Middle Stone Age (140 000 - 30 000 years B.P.) was found scattered on the surface of the site, indicating that human activity in the area was not limited to the Iron Age only. Stone artifacts, such as rubbing and grinding stones, dating to the Iron Age, is evidence of more permanent settlement at the site, showing that huts were a feature, as well agriculture and the production of food. The soapstone spindle-whorl found at the site, as well as the few possible pottery spindle-whorls, indicates that clothing might also have been manufactured at the settlement.

Human remains, in the form of a femur, recovered on the site, is evidence of burial at the settlement. Unfortunately, no information on burial practise at the site exists, and only in situ burials with grave goods will provide this kind of information. Why the femur was neatly cut, snapped and polished, is not known. According to Prof. Maryna Steyn of UP Anatomy, this femur belonged possibly to an adult female individual, the slender femur head pointing to this. Relatively large amounts of faunal material were recovered both from the surface of the site and excavation 1. Although most of this was unidentifiable bone and tooth fragments, some were identifiable to either species, age, sex and skeletal part (See Appendix 1). All identifiable material were taken to the Transvaal Museum's Archaeozoology Department for analysis.

Mainly *Bos taurus* (domesticated cattle) are represented by the faunal material, but an *Ovis/Capra* (sheep or goat) bone was also identified. The *Bos taurus* individuals range in age between juvenile and very old, but most were mature adults between 30 and 42 months old. The sex (male or female) of none of the domesticated animals could be determined. Although domesticated species dominate the faunal sample, some non-domesticated animals were also identified. These include cheetah/leopard-sized carnivore, small antelope (*Oribi - Ourebia ourebi*), possibly zebra (cf. *Equus burchelli*) and kudu size antelope (*Tragelaphus* sp. The kudu was a juvenile individual, while the oribi was possibly male, indicated by the relative thickness of the pubis of the pelvis of this animal that was recovered.

Some unidentifiable bone fragments have clear signs of having been worked and/or polished. Their functions as possible tools are unknown. A worked oribi metatarsal, probably an awl, and a bone needle, manufactured on a long bone shaft, was found in layer 1 of excavation 1. The needle and awl also indicate that the production of clothing was practised at the settlement. Shell are represented by a small number of pieces of *achatina* (freshwater mussel) shell. *Achatina* was probably utilized both as food source and for the making of beads and other decorative objects.

A relatively large amount of pottery were recovered from the site, mostly undecorated body sherds. The total number of sherds amounts to 482, of which 139 are decorated. Of these, 55 are lip sherds. 49 Individual vessels were identified by using the lip sherds. 34 of these vessels (69% of all identified vessels) are decorated. Bowls, pots without necks and pots with slightly everted necks are the most common types of vessel represented by the ceramic sample. Decoration are found mostly on the body or on the lip and body of vessels, but in some instances decoration also occurs just below the lip or only on the lip. A few vessels have no decoration at all. The types of

decoration include incisions; comb stamping; punctate; impressed decoration and graphite and/or ochre. Of these incisions and graphite and/or ochre are the most common.

A number of decoration motifs occur, but horizontal incised lines or bands (single, double or wider), sometimes in combination with graphite and/or ochre bands are the most common. These are typical of the Letaba phase of the Late Iron Age, dating to between the 16th/17th and 19th centuries A.D (Evers & Van der Merwe 1987; Van Schalkwyk 2000). Interesting motifs are the herringbone-like incisions, incised lines and bands found on a few pieces of pottery recovered from Excavation 2 (on and between the hut rubble). This decoration is similar to decoration found on pottery belonging to an earlier period, termed as Kgopolwe style pottery (Evers & Van der Merwe 1987). Their occurrence on this site is strange, and could point to an earlier occupation of the settlement, but due to the small sample found no definite conclusions can be made.

Although it was possible only to excavate a small portion of the site, and even though the destruction of the site was fairly extensive, we were able to determine (to some extent at least) the subsistence economy and material culture of the occupants of the settlement. It is also by no means possible to claim that the cultural material sample recovered from the site is representative of the total sample that might have existed before development started, or for the whole settlement. The excavations conducted and the amount of material recovered from them is too small for that claim to be made.

It is clear however that the occupants of the settlement relied on domesticated animals such as cattle and sheep or goat for most of their dietary and other requirements. Non-domesticated animals, such as oribi; zebra and kudu, was also utilized, while freshwater mussel was also used as a source of food. Agriculture was practised, perhaps the growing of crops such as maize, corn or other cereals. The upper and lower grindstones recovered and found scattered all over the site is evidence of this. The spindle-whorls and bone needles and awls indicate that the production of rope or string and clothing was perhaps a part of everyday activities in the settlement as well. Ceramics were produced, and a variety of vessel types (such as bowls and pots) and decoration styles used by their producers and users. The smelting of and manufacturing of metal objects can not be ruled out, as a few pieces of iron-carrying ore was retrieved from the site as well. Although settlement layout and features could not be determined, the remains of a single hut was found in Excavation 2. There was probably cattle kraals and small stock pens, surrounded by scalloped stone walls and homesteads (typical of Late Iron Age stone walled settlements).

Reconstructing the time-scale for Iron Age settlement at the site proved a bit difficult. Not enough charcoal was recovered to warrant a C14 analysis, and therefore no accurate date can be provided. By using decorated ceramics found on the site and in the excavations it is however possible to come up with a relative date. Iron Age occupation of the site probably occurred between the 16th/17th and 19th centuries A.D, although it might even be earlier. The site was also utilized by Stone Age people during the Middle Stone Age. Concerning the cultural identity of the Iron Age people inhabiting the settlement, they were probably of Sotho-speaking origin, the decorating of the pottery being typical of the Sotho.

## 5. REFERENCES

### 5.1 Published sources

#### 5.1.1 Books and Journals

Evers, T.M & N.J.van der Merwe. 1987. Iron Age ceramics from Phalaborwa, north-eastern Transvaal Lowveld, South Africa. **South African Archaeological Bulletin 42:87 - 106.**

### 5.2 Unpublished sources

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## 6. PROJECT TEAM

Dr J.A.van Schalkwyk - Principal Investigator  
Mr A. Pelser - Field Supervisor



## APPENDIX 1: LIST OF IDENTIFIABLE FAUNAL MATERIAL FROM SITE 2330CD 59

SKELETAL PART	EXCAV	LAYER	SPECIES	AGE	SEX
Metacarpal	Surface		Bos taurus	Adult	
Calcaneum	Surface		Bos taurus	Juv.	
Calcaneum	Surface		Bov.III (cattle size)	Adult	
Premolars (p3 & p4)	Surface		Bos taurus	Adult (30-42 months old)	
Lower molars (M3)	Surface		Bos taurus	Same as above	
Upper molars (M1/2)	Surface		Bos taurus	Same as above	
2nd phalanges	1	1	Bos taurus	Adult	
Astragalus	1	1	Bos taurus	Sub-adult	
Astragalus	1	1	Carnivore (cheetah/leopard)		
Incisors	1	1	Bos taurus	Adult	
Lower premolar (p4)	1	1	Bos taurus	Adult	
Upper premolar (p1)	1	1	Bos taurus	Very old Adult	
Lower molar (M2)	1	1	Bos taurus	Adult	
Metatarsal	1	1	Ourebia ourebi (oribi)		
Pubis	1	1	oribi		M
1st phalanges	1	2	Bos taurus		
2nd phalanges	1	2	cf. Equus burchelli (zebra)		
3rd phalanges	1	2	Bos taurus		
Metatarsal	1	2	Bos taurus		

Manidible with molars (M2,M3)	1	2	Bos taurus	Over 42 months old	
Upper premolar (p2)	1	2	Bos taurus		
Premolar (p2)	1	2	Ovis/Capra (sheep/ goat)		
Molar (M2)	1	2	Tragelaphus sp. (kudu)	Juv.	