# The Archaeological Survey of Phinda Private Game Reserve

# For CC Africa: Phinda Private Game Reserve

Date: 10 May 2007

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# **INTRODUCTION**

Umlando originally undertook a survey of two selected areas at Phinda Private Game Reserve (hereafter referred to as Phinda) in late 2006. This assessment was part of an Environmental Impact Assessment for staff housing and lodges. A few archaeological sites were recorded during the course of this survey.

We realised that the area had archaeological potential and suggested that the reserve has a more systematic archaeological survey. We suggested that we could undertake such a survey if we provided students, and that Phinda provide accommodation, a field ranger and transport. There would be no direct costs to Phinda, and our costs will be covered by students.

We undertook a "trial survey" April 2007 and recorded fourteen archaeological sites over five days. At least two of these sites were of medium-high significance. Several of the sites have tourism potential, or alternatively have artefacts that may be displayed for tourism. This report details these sites and discusses the possibilities for their development.

The aim of this survey and report is to assess the potential for sites in the reserve, and how these sites may be used to further the experience of guests at Phinda. Since these sites are protected by legislation, we discuss the legislation regarding and protecting archaeological sites in KZN.

# **METHOD**

Our "test survey" was a trial run to note the potential of sites occurring in various areas (ecosystems) on Phinda. We targeted those areas that were more likely to have sites given our experience of site locations in other areas in KZN. These areas are:

- Long hills or ridges
- Overhangs at the bases of the above hills

- Floodplains beside smaller rivers
- General cleared areas
- Sand forest

The main difficulty in the survey was poor visibility due to dense vegetation and long grass. We thus concentrated on areas that were less vegetated.

# Assessment of archaeological sites

The first step forms part of the desktop assessment. Here we consulted known databases for previously recorded heritage sites in the general area. This database does; however, tend to be restricted to archaeological and palaeontological sites. No sites had been previously noted for our study area.

The archaeological survey consists of a foot survey where selected areas are covered. The survey results will define the significance of each recorded site, as well as a management plan.

All sites are grouped according to low, medium, and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts, especially pottery. Sites of medium significance have diagnostic artefacts and these are sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips, and decorated sherds are sampled, while bone, stone, and shell are mostly noted. Sampling usually occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features. We attempt to recover as many artefacts from these sites by means of systematic sampling, as opposed to sampling diagnostic artefacts only.

# **Defining significance**

Archaeological sites vary according to significance and several different criteria relate to each type of site. However, there are several criteria that allow for a general significance rating of archaeological sites.

#### These criteria are:

# 1. State of preservation of:

- 1.1.Organic remains:
  - 1.1.1. Faunal
  - 1.1.2. Botanical
- 1.2.Rock art
- 1.3. Walling
- 1.4. Presence of a cultural deposit
- 1.5. Features:
  - 1.5.1. Ash Features
  - 1.5.2. Graves
  - 1.5.3. Middens
  - 1.5.4. Cattle byres
  - 1.5.5. Bedding and ash complexes

# 2. Spatial arrangements:

- 2.1.Internal housing arrangements
- 2.2.Intra-site settlement patterns
- 2.3.Inter-site settlement patterns

#### 3. Features of the site:

- 3.1. Are there any unusual, unique or rare artefacts or images at the site?
- 3.2.Is it a type site?
- 3.3.Does the site have a very good example of a specific time period, feature, or artefact?

## 4. Research:

4.1. Providing information on current research projects

4.2. Salvaging information for potential future research projects

# 5. Inter- and intra-site variability

- 5.1.Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?
- 5.2.Can this particular site yield information about a community's social relationships within itself, or between other communities?

# 6. Archaeological Experience:

6.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

## 7. Educational:

- 7.1. Does the site have the potential to be used as an educational instrument?
- 7.2.Does the site have the potential to become a tourist attraction?
- 7.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. These test-pit excavations may require further excavations if the site is of significance. Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts.

# TERMINOLOGY AND DATES

Various archaeological periods are mentioned in this text. These are summarised in Table 1 with their relevant dates. These dates are for KwaZulu-natal in general and do vary from region to region. Some dates overlap with different Periods. That is, the Periods refer more to a socio-economic group of people than actual dates. Thus once can have hunter-gatherer living besides farming communities.

TABLE 1: TERMS AND DATES MENTIONED IN THE REPORT

Period	Abbreviation	Sub-group	DATE (Years Ago)	
			From	То
Early Stone Age	ESA	-	1 500000	120 000
Middle Stone Age	MSA	-	120 000	30 000
Late Stone Age	LSA	-	30 000	100
Early Iron Age	EIA	Mzonjani	1 600	1 400
		Msuluzi	1 400	1 220
		Ndondondwane	1 220	1 050
		Ntshekane	1 050	970
Late Iron Age	LIA <sup>1</sup>	Formative Nguni	950	
		'Tsonga' / Northern Nguni		
		Zulu / Northern Nguni		1820
Historical Period	HP	Zulu	1820	2007

# **RESULTS**

Fourteen sites were recorded during the course of the survey. All sites begin with a prefix of PND (for Phinda) followed by a number. A description of each site is given, followed by its significance and a management plan. The significance rating and management plan is in relation to developing the site for tourism. The locations of these sites are shown in figure 1 (omitted in this copy).

The report of the three sites previously recorded are in Appendix A. Appendix B contains the site records for the 2007 survey. Appendices omitted in this copy

<sup>&</sup>lt;sup>1</sup> The Late Iron Age varies according to the location in KwaZulu-Natal. The sub-groups referred to in this table are estimates of the sequence of occupation in the Maputaland area based on our work north of Richards Bay. We have omitted dates for the Late Iron Age, as we do not know the sequence for this area.

# PND1

PND1 is situated at the base of a large hill (Ntabankosi Hill) and below 'Bat Cave'. The site consists of a large boulder that has three entrances that form a small cave. The inside of the cave could not be assessed as it was considered unsafe (concerning wildlife). We estimate that the inside of the cave is ~ 4m x 2m in length and breadth. There is an archaeological deposit, inside and outside of the cave that contains artefacts and probably features.

The site consists of scatters of MSA and LSA stone tools. These tools are made on a variety of raw materials that include dolerite, quartz, quartzite, and cryptocrystalline silicates<sup>2</sup> (CCS).

The MSA stone tools include:

- (utilised) flakes
- cores
- one unifacial point (probably used for a spear point).

The LSA stone tools include:

- upper and lower grinding stones
- (utilised) flakes
- cores
- adzes (used for wood working)
- scrapers (used for hide working)

In addition to the stone tools, some pottery was observed on the surface.

Significance: The site is of high significance. Few cave sites are found in this area, and fewer of these have archaeological deposit. The abundance of artefacts on the surface

<sup>&</sup>lt;sup>2</sup> CCS is a general term used by southern African archaeologists that includes jasper, opaline, agate, chert, chalcedony, etc.

suggests that more would be located in the deposit. The deposit probably has features such as hearths, bedding, work areas, etc. The site has excavation potential.

Management plan: The site has potential for tourism; however, the deposit and cave, in general, would need to be protected and restricted to supervised visits. This would entail creating a walk-path to the site and around the boulder. The guide can discuss the site at a central location. A gravelled walk path would be ideal as it restricts the visitors' movements. That is, people have a tendency to pick up artefacts and inadvertently damage the deposit. By keeping them to specific areas, one thus limits their impact on the deposit.

Any visit would need to be under the supervision of staff that has basic training regarding archaeological sites. Moreover, the guide would need to ensure that artefacts are removed from the site, as they are a limited resource. This conservation message, or ethic, can be mentioned to the visitors. A boardwalk is not advised, as this would require archaeological supervisions and/or excavations wherever the wooden poles are inserted into the ground.

A display with an explanation of the site and artefacts site would benefit any visitors. This display can be in various forms:

- 1. a pamphlet with written text about the site, with photographs, or illustrations, of various types of artefacts;
- 2. thin metal posts may be placed along the walkway with signage regarding the site; or,
- 3. A display case with various artefacts and basic text at various lodges.

I would suggest a combination of points 1 and 3. Point 2 may create a negative visual impact to the area in general.

PND2

PND2 is located ~100m uphill from PND1 (also on Ntabankosi Hill). The site consists

of a series of stone walled terraces and at least two circles. The stone walling is very low

to the ground. Either the walling is very old, and thus eroded/covered, or it is the

foundations of more recent settlements that had other structures above the ground (such

as poles). We observed a few grinding stones in the general area, but no pottery sherds.

We cautiously place this site in the more recent past.

Significance: The site is currently of low significance. However, it should be

resurveyed after the area has been burnt, or in late winter before the summer rains. We

could barely observe the walling and thus an "untrained eye" would have more difficulty.

Management plan: The site is currently not practical for tourism. The vegetation needs

to be cleared first and the site has to be resurveyed for potential settlement walling. If

there is walling, then a site plan (or map) can be drawn that illustrates the various features

and their uses.

PND3

PND3 is located on the top of Ntabankosi Hill, and above PND1 and 2, just below the

communications towers. The site is an extensive scatter of LSA stone tools that continue

along most of this hill. The stone tools are mostly on CCS, although a few are on quartz

and dolerite. The stone tools consist of (utilised) flakes, and cores.

<u>Significance:</u> The site is of low significance.

Management Plan: The site is not practical for tourism.

PND4

PND4 is located along the Diliza Road, on the saddle between two koppies. The site

consists of an ephemeral scatter of LSA artefacts made on CCS and dolerite. The stone

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tools include a scraper, a Miscellaneous Retouched Piece (MRP), flakes, chunks, an

irregular core, and ochre.

<u>Significance:</u> The site is of low significance.

Management Plan: The site is not practical for tourism.

PND5

The site is located about 1km southeast of PND4, at the base the hill. The artefacts are

located in the cleared areas amongst the rocks. It consists of an extensive scatter of LSA

stone tools. We observed upper grinding stones, (utilised) flakes, and cores

Significance: The site is of low significance.

Management Plan: The site is not practical for tourism.

PND6

PND6 is located along the Zuka road near a T-junction of the Pitt and Boulders Roads. It

is near the base of a hill and consists of several boulders. The artefact scatter extends

around the boulder and to the top of the hill. Just south of the boulder is possible stone

terracing. The artefacts include MSA and LSA stone tools.

The site may have a deposit, although parts of it have been washed away.

<u>Significance:</u> The site is of medium significance.

Management Plan: The site has tourism potential in that the stone tools are visible.

## PND7

PND7 is located along the northwest side of the hill referred to as aMatshe Mhlope, along the Mkuze Game Reserve fence. PND7 consists of a scatter of MSA and LSA flakes. Most of the scatter appears to be on the Mkuze Game Reserve side of the fence. The LSA tools consist mainly of CCS chips, chunks, flakes, an MRP, and cores. The MSA tools consists of mostly dolerite and are demineralised

We were informed that people had lived on this hill in the past; however, we are not sure on which side of the fence this occurred, when they did live in the area, nor if it was in the general area of the hill. We did observe several areas that appeared to be terraces; however, we did not observe any artefacts in these areas. We would need to interview the informant and look at older aerial photographs before the area is resurveyed.

<u>Significance:</u> The LSA site is of low significance. The more recent sites (when recorded) may be of higher significance.

Management Plan: The LSA site is not practical for tourism.

#### PND8

PND8 is located on the Angels Road, en route to Zuka Lodge from aMatshe Mhlope. The site is located to the left of the road in a cleared area adjacent to the stream.

Site occurs across a  $\pm$  20m area. It consists of a pottery scatter and fragments of iron ore. The pottery appears to date to the LIA. The sherds are mostly undecorated with orange/red colouring, while one sherd has a black burnish. The site has the potential for iron smelting activity; however, the visibility in the grass was poor.

<u>Significance:</u> The site is currently of low significance. However, it should be resurveyed after the area has been burnt or in late winter before the summer rains.

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Management plan: The site is currently not practical for tourism. It would be difficult

to use this site for tourism unless the vegetation was first cleared and then revisited for

potential iron smelting activity. If there is smelting activity, then a site plan can be made

that indicates the various features and their uses.

PND9

PND9 is located near Zuka Lodge on the Angels Road. It consists of a scatter of MSA

and LSA stone tools. The MSA tools consist of (utilised) flakes, and cores. The LSA

material occurs over a 30m x 30m area and is mostly flakes.

Significance: The site is of low significance.

Management Plan: The site is not practical for tourism.

**PND10** 

PND10 is located to left and right of the Tshabalala Road (and on the road itself)

between the junctions of 3 Lion Lane and Saddle Drive. The site consists of a scatter of

LSA and MSA stone artefacts. A possible ESA Olduwan chopper may occur as well: it is

too weathered for a proper identification. The MSA tools include a unifacial point

(spearhead) and general flakes. The LSA material consists of a double-sided scraper,

flakes and various upper grinding stones.

Significance: The site is of low significance.

Management Plan: The site is not practical for tourism; however, it may be used as a

"cache" for displays. That is, one can use the stone tools on this site for display purposes.

It is better to use material from one site/area, than from various sites/areas.

# PND11

PND11 (a and b) is located below the rock face west and beneath Impisi Drive. The site consists of one small overhang (PND11a) and a larger overhang to the right (PND11b).

PND11a was briefly noted as a swarm of bees became active when we entered the overhang. Artefacts were observed on the floor of the shelter. It is +/-5m long and 2 - 3m deep. We observed at least one hearth and several stone tools. The stone tools consisted of CCS flakes and chunks, and two upper grinding stones.

PND11b is probably connected to PND11a. It is +/-10m long, and a maximum of 3.5m deep. The floor of the overhang gradually slopes downwards resulting in much of the deposit being washed away. There is a possible stone wall on one side. Several LSA flakes occur on the surface.

# PND11b is important for two reasons:

- 1. There is a vein of red-brown CCS along the back of the wall. Several pieces have been chipped out. It is thus a possible CCS mine.
- 2. One decorated pottery sherd was also observed. The sherd had comb-stamped (shell impressed) decorations and is related to those grouped with (Thembi) Tsonga pottery in Richards Bay. This pottery dates from AD 1400 AD 1650. While we expect Tsonga-speaking people to have lived in the area, as historical records attest to this, it is the first time we have observed pottery of this kind so far inland.

The occurrence of pottery in the shelter can mean one of two things:

- 1. LSA Hunter-gatherers were in the area up to c. AD 1650 and had some form of trade network with the LIA farmers. Thus, the hunter-gatherers used the overhang and the CCS vein.
- 2. Hunter-gatherers and LIA farmers used the site at different times. The LIA farmers would have used the site as a place of ancestral worship

The lack of deposit makes it impossible to decide which option is valid.

Significance: The site is of medium – high significance due to the rare nature of stone

mines and the occurrence of decorated pottery.

Management Plan: The site is not practical for tourism. While it is an important site,

the average tourist will not make the walk to the site. The site is also small and cannot

hold many people. If the site were to be used, then a walk path would be needed, as well

as some form of floor covering.

PND12

PND12 is located on the outcrop directly opposite PND11a/b, with Elephant Dam

below and to the southwest of site. The site is located near the top of the hill in a small

overhang currently used by baboons. One pottery sherd and one cracked small upper

grinding stone were observed on the path below the rock face west and beneath Impisi

Drive. The pottery probably dates to the LIA or HP. It is not unusual to find pottery in

small caves as this is related to ancestral worship and/or rain making beliefs.

PND13

PND13 is located at the entrance to Nkwazi Camp and it probably extends over the

whole campsite. The site consists of LSA stone tools that include flakes and cores.

Significance: The site is of low significance and has been disturbed.

Management Plan: The site is not practical for tourism.

## PND14

PND14 is located in and above an area locally referred to as Fossil Dam. Some of the fossils were initially exposed by the building of the dam. The fossils occur over a large area and include a variety of small ammonites, and possible plants.

Fossils occur throughout the area; however, they are adequately exposed in this area.

We will send some of the pictures to a palaeontologist in Cape Town in order to get more information regarding these fossils.

<u>Significance</u>: The site is of medium significance.

<u>Management Plan</u>: The site has tourism potential however; tourists will need to be monitored in that fossils are not removed. A display case with the fossils would be the preferred option.

# **DISCUSSION & CONCLUSION**

The initial archaeological survey at Phinda located fourteen sites. Some of these have tourist potential, while others are of low significance in terms of archaeological and tourism value. The survey does indicate that sites do occur in the area and that a more systematic approach should yield many more sites.

The sites date from the MSA, LSA, LIA, and Historical Periods. There is an over representation of Stone Age sites in the surveyed area. We were expecting to observe more Iron Age sites, especially LIA stone walled sites. However, these were very few. We initially thought that this had to do with the area being affected by tsetse fly and malaria, hence the lack of human occupation. However, the high occurrence of Stone Age sites, especially those dating between 6 000 and 1 700 years suggests that is the area was not always afflicted. We also have evidence of LIA and HP pottery in the area, and of stone walled settlements north of Phinda up into Pongola and Swaziland. Historical

records also suggest that people did live in the area, as it was one of the main trade routes to Maputo. LIA and HP settlements should occur in the area.

The low occurrence of Iron Age sites is thus for the following reasons:

- 1. It is possible that tsetse flies and malaria is a result of low human density, or that the low density only occurs in the more recent past.
- 2. The LIA and HP sites simply do not occur in the area
- 3. The thick vegetation and grasses makes it impossible to view stone walled settlements that would mostly be close to the ground (e.g. PND2)

We prefer option three. Any future surveys will involve consulting various aerial photographs to attempt to observe these settlements.

The archaeological sites have the potential to provide guests with a wider range of experiences normally associated with game reserves. The recorded sites suggest that there will be more sites in the general Phinda area. While our initial survey did not record many Iron Age sites, especially those with stone walling, we believe that they may still occur.

# The way forward

In addition to our survey, Phinda staff, specifically the game rangers (Richard in particular), assisted us and anti-poaching unit, in locating specific sites of which they thought may be of interest, e.g. PND11, and PND12. We undertook basic site identification with this unit, and they will be noting any potential sites for future. Moreover, some of the unit are familiar with the history of the area and know of potential the colonial sites. Their interest and enthusiasm should be commended.

We are currently interacting with The Wildlands Trust to bring students over to assist with further surveys. This is for the following reasons:

• We have noted that the area has high potential for archaeological sites

- These sites can be used to increase, or widen, the experiences of the guests
- A systematic survey in northern KZN, over such a large area, has not been undertaken before. We may find a whole range of sites.
- By using students we can cover our costs for the survey, provided that CC Africa provide accommodation, a game ranger (s) and transport for the surveys
- Several surveys will be required to complete Phinda Private Game Reserve survey. The information gained from these surveys can be continually updated and even displayed in various media formats at the different lodges. This can be in the form of maps, photographs, etc.
- CC Africa can develop sites that are more interesting for guests and thus increase their marketing appeal. Furthermore, each lodge can have displays of the general archaeological information and/or artefacts. Artefacts may be placed in display cases at the various lodges. These displays would act as a precursor to what guests may view. This would however need to be done professionally. This cost will need to be covered by CC Africa.
- We will be able to provide visual lectures to guests whilst on site. This can be on general archaeology of the area, or specifically on San (or Bushman) rock art of KZN. If the latter we can order one of Gavin Anderson's rock art books that have been published for the layperson. Guests would be charged a standard rate that may (not) include the rock art book.
- The most important point is that CC Africa has an opportunity to use these heritage sites. However, they need to be managed responsibly and legally. Our role would be to advise CC Africa in this. Responsible use would consist of ensuring that sites are not 'plundered' and damaged (by walking) by guests. Legal use would consist of obtaining the necessary permits and supervision of sites, and/or gathering of artefacts for displays.

A pamphlet dealing with the archaeology and history of the area should be written as a general information guide for guests.<sup>3</sup> One can also produce a site-specific pamphlet

<sup>&</sup>lt;sup>3</sup> We noted that there was a pamphlet regarding the history of the area. This pamphlet is, unfortunately largely inaccurate.

The locations of the various sites should be used by CC Africa as part of their management plan of the reserve. That is, these sites should be considered when new roads, servitudes, etc. are constructed. The sites should also be placed on the GIS system for general reserve management.

We may also provide a training program as part of the field guide course. This program would entail

- basic background to southern Africa archaeological,
- archaeological terminology
- artefact identification
- how to interpret sites,
- how to use a site for visitors
- legislation regarding to heritage sites

This course has several advantages for Phinda. If the ranger course included heritage management (i.e. palaeontology, archaeology, history, etc.) then the heritage bodies would be more amenable to allowing sites to be used for guests. That is, CC Africa would be seen as being proactive regarding heritage site management. CC Africa would also be able to use this in their PR, as we are not aware of other private game reserves where rangers are trained in heritage management.

We will discuss the exact details with Amafa KZN and obtain their approval. We have been informed that the rangers may need a basic THETA level course. However, if they are registered rangers/guides, and if the heritage program is approved by Amafa, then a THETA level may not be necessary.

# Legislation pertaining to archaeological sites

All archaeological, palaeontological, meteorological, and historical sites are protected by various forms of legislation. The KZN Heritage Act of 1997 protects sites in KZN. The legislation explicitly states that no site may be damaged, altered or have artefacts removed unless permission has been granted by KZN Heritage. This permission is in the form of a permit.

If Phinda wants to develop any sites for tourism, they will need to apply for such a permit. This even includes taking people to view the sites. Each site would need a site-specific management plan.

# **APPENDIX A**

Report for previously recorded sites

The archaeological survey of two developments on Phinda Private Game Reserve

For Simpson, Ryder and Associates cc

Date: 9 November 2006

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#### INTRODUCTION

Umlando was contracted by Simpson, Ryder & Associates cc to undertake an archaeological survey of several areas marked for development on Phinda Private Game Reserve. These areas for development are the staff villages and private lodges in Phinda Private Game Reserve. The EIA references are as follows:

- 1. Phinda Staff Village Site EIA / 7307
- 2. Lodge sites on Sutton / Fanie Roberts Game Reserve EIA / 7305

Phinda Private Game Reserve covers several ecozones and we expected to find a variety of sites. These areas included the "sand forest", wetlands, and the hilly areas to the northeast.

Three sites were recorded during the course of the survey for EIA / 7305. No sites were recorded for EIA / 7307. These sites vary in significance and a permit will be required for the partial impact on at least two of the sites.

#### **METHOD**

The initial archaeological survey (i.e. fieldwork) consists of a foot survey where the selected route will be covered. The survey results will define the significance of each recorded site, as well as a management plan.

All sites are grouped according to low, medium, and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts, especially pottery. Sites of medium significance have diagnostic artefacts and these are sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips, and decorated sherds are sampled, while bone, stone, and shell are mostly noted. Sampling usually occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features. We attempt to recover as many artefacts from these sites by means of systematic sampling, as opposed to sampling diagnostic artefacts only.

#### **Defining significance**

Archaeological sites vary according to significance and several different criteria relate to each type of site. However, several criteria allow for a general significance rating of archaeological sites.

## These criteria are:

# 8. State of preservation of:

- 8.1. Organic remains:
  - 8.1.1. Faunal
  - 8.1.2. Botanical
- 8.2. Rock art
- 8.3. Walling
- 8.4. Presence of a cultural deposit
- 8.5. Features:
  - 8.5.1. Ash Features
  - 8.5.2. Graves
  - 8.5.3. Middens
  - 8.5.4. Cattle byres
  - 8.5.5. Bedding and ash complexes

# 9. Spatial arrangements:

- 9.1. Internal housing arrangements
- 9.2. Intra-site settlement patterns
- 9.3. Inter-site settlement patterns

# 10. Features of the site:

- 10.1. Are there any unusual, unique, or rare artefacts or images at the site?
- 10.2. Is it a type site?
- 10.3. Does the site have a very good example of a specific time period, feature, or artefact?

#### 11. Research:

- 11.1. Providing information on current research projects
- 11.2. Salvaging information for potential future research projects

# 12. Inter- and intra-site variability

12.1. Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?

12.2. Can this particular site yield information about a community's social relationships within itself, or between other communities?

#### **13. Archaeological Experience:**

13.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

#### 14. **Educational:**

- 14.1. Does the site have the potential to be used as an educational instrument?
- 14.2. Does the site have the potential to become a tourist attraction?
- 14.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. These test-pit excavations may require further excavations if the site is of significance. Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts.

#### THE SITES

The site record forms are attached in Appendix A

#### PHIN1

PHIN1 is located near the current main gate entrance, along the side of the road. The site is a scatter of artefacts on the surface. These artefacts date to the Late Iron Age (LIA), or Historical Period (HP), and Late Stone Age<sup>4</sup>.

The Late Iron Age, or Historical Period, consists of a few pottery sherds. They are thin-walled and have no decoration. Two of the sherds have food residue on the inside.

<sup>&</sup>lt;sup>4</sup> MSA dates from ~120 000 – 30 000 years ago LSA dates from 30 000 – 100 years ago LIA dates from 900 years ago to 180 years ago HP dates from 180 years ago to the recent past Dates do overlap and are related to various factors.

The Stone Age material consists of general Middle Stone Age (MSA) flakes and some Late Stone Age (LSA) tools. The LSA tools include a small end scraper, and an utilised flake made on banded agate.

More artefacts occur in the general area.

# Significance:

The site is of low archaeological significance. The artefacts are found in a secondary context and are common to the Periods.

#### Mitigation:

The site is unlikely to be affected by development. No further mitigation is required.

## PHIN2

PHIN2 is located at the proposed 'Bush Villas' area. The site is on small "outcrop" overlooking the dam. The site consists of a scatter of MSA, LSA and LIA artefacts. The MSA and LSA consist of general stone tools. These are in a secondary context and common to both Periods.

The LIA artefacts include upper and lower grinding stones, and pottery sherds. There LIA part of the site appears to be part of a living settlement that has been disturbed. Human burials are normally associated with these types of sites, although I did not observe any graves during the survey. If human burials exist in this area, then they are either subsurface, or further uphill.

## Significance:

The site is of low significance, as the artefacts tend to be in a secondary context. If human graves are recorded at a later stage then the site becomes of high significance.

# Mitigation:

No further mitigation is required. However, if the development extends much beyond the current road, i.e. uphill, then a further survey will be required<sup>5</sup>. The servitudes for the lodges had not been

<sup>&</sup>lt;sup>5</sup> The survey was not extended beyond the areas proposed for development. We did not extend beyond these boundaries as the lions could have been in the area.

finalised by the time of the survey. If they extend beyond the current location of the lodges then they will need to be surveyed.

As a general comment, we need to state that according the KZN Heritage Act all lineal developments longer than 500m are required to have some form of assessment. A lineal development includes roads, electricity and telephone lines, sewerage lines, etc.

A permit will be required for the damage, alteration and or destruction of PHIN2.

#### PHIN3

PHIN3 is located in the general eastern area of the tiger cages and about ¾ up the hill, on a less acute slope.

There are three possible graves in the area. The 'graves' consist of semi-circular stone features that are "hollowed" out in the middle. That is it appears that these are not part of the natural rock outcrops of the area (of which one occurs nearby). The area is also vegetated and I could not see the circles completely.

If these are not graves then they are the result of trees growing through natural outcrops and thus creating the "hollow" in the centre. We will re-assess the site after bush clearance has occurred – we did not have permission to undertake bush clearance.

No other artefacts were observed in the area.

The tiger cages may be moved in the future to accommodate alternative houses. If this were the case then the caged areas would need to be assessed as they are in an archaeologically sensitive area.

Significance:

If these are human graves then the site is of high significance. If these are not human graves, then it is not a site.

Mitigation:

The area needs to be reassessed once it has been cleared of some of the vegetation. The area would also need to be surveyed if they tiger cages are moved.

I suggest the following if we are still unclear about the possible graves after vegetation clearance.

- The best example of a grave is excavated.
- If there are no human remains, in the best preserved "grave" then it is unlikely that the other "graves" are graves.
- If human remains are observed in the one area, then the others will need to be excavated
  as well.

A permit from KZN Heritage may be required for this site.

#### CONCLUSION

The archaeological survey of the staff and private lodges recorded three sites (EIA / 7305). No sites were recorded in the eastern side of the development, i.e. staff lodges (EIA / 7307). The sites were restricted to the western side of the Phinda Private Game Reserve. In general, it appears that the archaeological and historical sites are more likely to occur along the (north) western part of the Reserve, although we have previously recorded sites in Makhasa and Nibela area.

Those sites that will be effected by the development will require permits from KZN Heritage. These are sites that will be effected directly (in terms of housing) and indirectly (in terms of servitudes). Some areas still need to be surveyed depending on the outcome of future planning.

# APPENDIX A SITE RECORD FORMS

## **SITE CATEGORY:**

Stone Age: Middle, Late Iron Age: possible

Historical Period: possible

Recorder's Site No.: PHIN1 Official Name: N/A Local Name: Bush Villas

Map Sheet: N/A

Map Reference: S 27<sup>0</sup> 52' 19.9" E32<sup>0</sup> 13' 47.1

GPS reading? yes

Directions to site: Sketch or description.

Near the main gate entrance, along the side of the road.

#### **SITE DESCRIPTION:**

Type of Site: open yes Merits conservation: no Threats: possible

What threats: development

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin Anderson and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner: Phinda Game Reserve

References: Date: 1/11/2006

Description of site and artefactual content.

Site is a scatter of artefacts on the surface.

Scatter consists of Late Iron Age, or Historical Period, pottery sherds. Two sherds have food residue on the inside.

The Stone Age material consists of general MSA flakes and some LSA tools. The LSA tools include a small end scraper made on CCS.



# **SITE CATEGORY:**

Stone Age: Late Iron Age: possible

Historical Period: possible

Recorder's Site No.: PHIN2 Official Name: N/A Local Name: Bush Villas

Map Sheet: N/A

Map Reference: S 27<sup>0</sup> 52' 51.9" E32<sup>0</sup> 13' 44.8

GPS reading? yes

Directions to site: Sketch or description.

At the Bush Villas area. Site is on small "outcrop" overlooking the dam



## **SITE DESCRIPTION:**

Type of Site: open yes Merits conservation: no

Threats: yes

What threats: development

**RECORDING:** 

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin Anderson and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner Phinda Game Reserve

References:

Date: 24/07/2006

Description of site and artefactual content.

Site is a scatter of MSA, LSA and LIA artefacts MSA and LSA consist of general stone tools. LIA artefacts include upper and lower grinding stones, and pottery. LIA appears to be part of a settlement and thus graves should occur in the area.

## **SITE CATEGORY:**

Stone Age:

Iron Age: possible

Historical Period: possible

Recorder's Site No.: PHIN3 Official Name: N/A

Local Name: Bush Villas

Map Sheet: N/A

Map Reference: S 27<sup>0</sup> 52' 35.8" E32<sup>0</sup> 14' 32.9

GPS reading? yes

Directions to site: Sketch or description.

In the general eastern area of the tiger cages – these are the "Fanie Robert's" tiger cages. Site is ¾ uphill and on a "flattened" area.

## **SITE DESCRIPTION:**

Type of Site: open yes Merits conservation: no Threats: possible

What threats: development

**RECORDING:** 

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin Anderson and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner: Phinda Game Reserve

References: Date: 1/11/2006

Description of site and artefactual content.

There are three possible graves in the area. The 'graves' consist of semi-circular stone features that are "hollowed" out in the middle. That is it appears that these are not part of the natural rock outcrops of the area (of which one occurs nearby). The area is also vegetated and I could not see the circles completely. Need to resurvey area after bush clearance



# **APPENDIX B**

Site records for Phinda 2007 survey

**SITE CATEGORY:** (X where applicable)

Middle Stone Age: x Late Stone Age: x Early Iron Age: Late Iron Age: Historical Period:

Recorder's Site No.: PND1

Official Name: Local Name:

GPS reading? Yes S" 27° 51' 49.8" E" 32° 16' 35.7" alt = 111m

Directions to site: Sketch or description.

Site is a large boulder, just below bat cave on main hill



#### SITE DESCRIPTION:

Type of Site: Shelter Merits conservation: Yes

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References: Date: 16/04/2007

Description of site and artefactual content.

MSA and LSA scatter. In front/downhill, CCS, dolerite, 1x backed scraper (broken), 1x adze, MSA points, small UGS, 1x large LGS. Definite deposit in cave.

**SITE CATEGORY:** (X where applicable)

Middle Stone Age: Late Stone Age: Early Iron Age: Late Iron Age: ? Historical Period: ?

Recorder's Site No.: PND2

Official Name: Local Name:

GPS reading? Yes S" 27° 51' 50.1" E" 32° 16' 13.0" alt = 127m

Directions to site: Sketch or description.

Site is +/- 100m uphill/along road from PND1

#### SITE DESCRIPTION:

Type of Site: scatter Merits conservation: Threats:

What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References:

Date: 16/04/2007

Description of site and artefactual content.

Stone terracing and +/- 2 circles. Very fragmentary.



**SITE CATEGORY:** (X where applicable)

Middle Stone Age: x Late Stone Age: x Early Iron Age: Late Iron Age: Historical Period:

Recorder's Site No.: PND3

Official Name: Local Name:

GPS reading? Yes S" 27° 52' 00.4" E" 32° 16' 25.7" alt = 126m

Directions to site: Sketch or description.

Site located on top of the saddle on the hill above PND1 & 2, just below towers

## SITE DESCRIPTION:

Type of Site: scatter Merits conservation:

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References:

Date: 16/04/2007

Description of site and artefactual content.

Extensive scatter of LSA tools, mostly CCS. Has bipolar core, utilised flakes, and flakes.



**SITE CATEGORY:** (X where applicable)

Middle Stone Age: x Late Stone Age: x Early Iron Age: Late Iron Age: Historical Period:

Recorder's Site No.: PND4

Official Name: Local Name:

GPS reading? Yes S" 27° 51' 22.6" E" 32° 15' 58.2" alt = 111m

Directions to site: Sketch or description.

Site located on road to Zuka lookout, on the saddle after the two first koppies



Type of Site: scatter Merits conservation:

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References:

Date: 17/04/2007

Description of site and artefactual content.

Ephemeral scatter of LSA artefacts on CCS and dolerite. 1x scraper, flakes, chunks, 1x irregular core, ochre chunk, 1x MRP.



**SITE CATEGORY:** (X where applicable)

Middle Stone Age: X Late Stone Age: X Early Iron Age: Late Iron Age : Historical Period:

Recorder's Site No.: PND5

Official Name: Local Name:

GPS reading? Yes S" 27° 51' 18.2" E" 32° 16' 05.5" alt = 115m

Directions to site: Sketch or description.

Continue for about 1km from PND4 until next koppie on right



Type of Site: scatter Merits conservation:

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References: Date: 17/04/2007

Description of site and artefactual content.

On the southeast side of hill, there are two cleared areas amongst the rocks where we found an extensive scatter of stone tools. Scatter of site continues southeast. 1x broken UGS, CCS flakes and cores, 1 util. CCS flake, 1x MnO<sub>2</sub>.



**SITE CATEGORY:** (X where applicable)

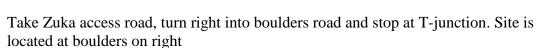
Middle Stone Age: x Late Stone Age: x Early Iron Age: Late Iron Age : Historical Period:

Recorder's Site No.: PND6

Official Name: Local Name:

GPS reading? Yes S" 27° 51' 09.9" E" 32° 15' 50.4" alt = 123m

Directions to site: Sketch or description.





Type of Site: scatter Merits conservation:

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References: Date: 17/04/2007

Description of site and artefactual content.

Scatter of MSA and LSA flakes. Few MSA flakes. Most LSA tools are on CCS (cores, chunks, flakes), also CCS manuports. 1 x utilised dolerite flake. Artefact scatter right round boulder and extends to the top of the hill. Just south is possible stone terracing.



SITE CATEGORY: (X where applicable)

Middle Stone Age: x Late Stone Age: x Early Iron Age: Late Iron Age : Historical Period:

Recorder's Site No.: PND7 Official Name: Matte Hlope

Local Name:

GPS reading? Yes S" 27° 48' 24.6" E" 32° 15' 39.1" alt = 169m

Directions to site: Sketch or description.

North west end of Amatshe Hlope along fence line with Mkuze



Type of Site: scatter Merits conservation:

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References:

Date: 18/04/2007

Description of site and artefactual content.

Scatter of MSA and LSA flakes. LSA mainly CCS chips, chunks, flakes, 1 MRP, LSA single platform core. MSA mostly dolerite demineralised flakes (util.)



**SITE CATEGORY:** (X where applicable)

Middle Stone Age: Late Stone Age: Early Iron Age: Late Iron Age: x Historical Period: x

Recorder's Site No.: PND8

Official Name: Local Name:

GPS reading? Yes S" 27° 50' 03.3" E" 32° 15' 18.7" alt = 87m

Directions to site: Sketch or description.



Follow road from Zuka Lodge towards Amatsh Hlope. Site is located to the left of the road in a cleared area adjacent to the stream

#### SITE DESCRIPTION:

Type of Site: scatter Merits conservation:

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References: Date: 18/04/2007

Description of site and artefactual content.

Site occurs across a +/- 50-20m area. It consists of a pottery scatter and iron ore. Pottery seems LIA, undecorated with orange/red colouring, 1 sherd with a black burnish. Site has iron smelting potential, but visibility in the grass is poor.

**SITE CATEGORY:** (X where applicable)

Middle Stone Age: x Late Stone Age: x Early Iron Age: Late Iron Age : Historical Period:

Recorder's Site No.: PND9

Official Name: Local Name:

GPS reading? Yes S" 27° 50' 12.3" E" 32° 15' 03.0" alt = 77m

Directions to site: Sketch or description.

Site is located on open area visible from Zuka Lodge

#### SITE DESCRIPTION:

Type of Site: scatter Merits conservation:

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References:

Date: 18/04/2007

Description of site and artefactual content.

Site consists of a scatter of mainly MSA flakes, some utilised, cores etc. Some LSA flakes over a 30x30m area.



**SITE CATEGORY:** (X where applicable)

Middle Stone Age: x Late Stone Age: x Early Iron Age: Late Iron Age : Historical Period:

Recorder's Site No.: PND10

Official Name: Local Name:

GPS reading? Yes S" 27° 51' 25.3" E" 32° 17' 47.7" alt = 58m

Directions to site: Sketch or description.

Site is located to left and right of Tshabalala Road and on road itself



Type of Site: scatter Merits conservation:

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References:

Date: 18/04/2007

Description of site and artefactual content.

Scatter of LSA and MSA stone artefacts. MSA, 1 possible Oldowan chopper, 1x MSA point, 1x double-sided scraper, various UGS.



**SITE CATEGORY:** (X where applicable)

Middle Stone Age: x Late Stone Age: x Early Iron Age: ? Late Iron Age: Historical Period:

Recorder's Site No.: PND11a

Official Name: Local Name:

GPS reading? Yes S" 27° 48' 38.8" E" 32° 17' 06.6" alt = 109m

Directions to site: Sketch or description.



Take turn-off to Mziki from district road, follow road towards private dwellings and big dam (Fagolweni?). Site is located on ridge visible towards the left of the last house. (GPS taken +/- 30m downhill)

#### SITE DESCRIPTION:

Type of Site: shelter Merits conservation:

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References: Date: 19/04/2007

Description of site and artefactual content.

Site is +/- 5m long and a max. of 2-3m deep. 1x fireplace, 2x CCS chunks, 2x UGS, 1x UGS/irregular core. Definite dripline.

**SITE CATEGORY:** (X where applicable)

Middle Stone Age: x Late Stone Age: x Early Iron Age: x Late Iron Age: Historical Period:

Recorder's Site No.: PND11b Official Name: Emealie Shelter

Local Name:

GPS reading? Yes S" 27° 48' 38.8" E" 32° 17' 06.6" alt = 109m

Directions to site: Sketch or description.



Take turn-off to Mziki from district road, follow road towards private dwellings and big dam (Fagolweni). Site is located on ridge visible towards the left of the last house. (GPS taken +/- 30m downhill)

#### SITE DESCRIPTION:

Type of Site: shelter Merits conservation:

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs Colour photograph

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References: Date: 19/04/2007

Description of site and artefactual content.

Site is possibly connected to PND11a. +/- 10-12m long, max of 3.5m deep. Gradually slopes upwards. Very definite dripline and a possible built wall. 1x CCS flake, red CCS ridge occurs in the shelter wall, possibly mine-site. 1x decorated Tonga sherd comb stamped.

**SITE CATEGORY:** (X where applicable)

Middle Stone Age: Late Stone Age: Early Iron Age: Late Iron Age : Historical Period: x

Recorder's Site No.: PND12

Official Name: Local Name:

GPS reading? Yes S" 27° 48' 58.9" E" 32° 17' 04.1" alt = 94m

Directions to site: Sketch or description.

Directly opposite PND11a/b. Elephant Dam is directly below, southwest from site.



Type of Site: overhang Merits conservation:

Threats: What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References: Date: 19/04/2007

Description of site and artefactual content.

Small overhang with 1 potsherd on slope. 1x cracked small UGS.



**SITE CATEGORY:** (X where applicable)

Middle Stone Age: X Late Stone Age: X Early Iron Age: Late Iron Age: Historical Period:

Recorder's Site No.: PND13

Official Name: Local Name:

GPS reading? Yes S"  $27^{\circ}$  52' 20.2" E"  $32^{\circ}$  20' 36.8" alt = 26m

Directions to site: Sketch or description.

Nkwazi Camp entrance

#### SITE DESCRIPTION:

Type of Site: scatter Merits conservation: Threats:

What threats:

RECORDING:

Details of graphic record: N/A

Colour slides: Black & White photographs

Tracings Re-drawings

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State: Getty Foundation

References:

Date: 19/04/2007

Description of site and artefactual content.

1x UGS, 1x CCS bipolar core, various flakes.

