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ADDO ELEPHANT NATIONAL PARK: UPGRADING OF EXISTING TOURIST ROAD NETWORK AND CONSTRUCTION OF SOUTHERN ACCESS ROAD NEAR COLCHESTER – PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

Prepared For:

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INTRODUCTION

The Albany Museum was appointed to undertake an archaeological impact assessment of the upgrading of the existing tourist network in the Park as well as the construction of a southern access road from Colchester into Park. The aim of the assessment was to identify any archaeological sites, which might be threatened with the construction of the road, and to suggest possible mitigation.

1.1 Background

The terms of reference of this study are to:-

1. To determine if any archaeological sites might be threatened by the upgrading of the existing tourist road network within the Addo National ~~Elephant Park~~ any archaeological sites that might be threatened by the construction of the southern access road into the Addo Elephant National Park. The survey was specifically aimed at surveying the 27 km of the road from Colchester to the existing Park fence.
3. In the event of sites being threatened, to suggest possible alternative routes.

1.2 Study Area

The study area includes the existing Addo Elephant National Park as well as the area between the southern Park fence and the National Road through Colchester. This area will be bisected by the access road which will follow an approximately northerly direction from Colchester, traversing a hilly area, to join with the existing roads in the Park at the approximate location of Spekboom (Map 3325 DB Colchester). This will be an approximate distance of 27 km.

1.3 Approach to study

A one-day survey, together with a botanist Mr T Dold, was undertaken on the 10 June 2003. Members of the contracting team were present to indicate the route that the road would follow. It was not possible to walk or drive the entire 27 km of the road from Colchester, through the farms Oliphants Plaats 214, Zoute Fontein 210, Addo Heights 209 and Glenmore 155 to the Park fence because the exact route which the road will follow, has not been specifically determined. We therefore examined the southern section of the road of most immediate concern (from Colchester to the rest camp) as the contractors were anxious to start with the establishment of the rest camp.

Since the southern section of the road (through a portion of Oliphants Plaats 214) will follow an existing track for part of the way, it was possible to survey the first 4-5 km of the 27 km from a vehicle and on foot. The flood plain adjoining the National Road was not surveyed by the archaeologist as this area is prone to flooding and no *in situ* material will be found in this area. However, a number of gravel exposures

containing archaeological material were discovered in the hilly area adjoining the floodplain. In many cases, artifacts were found in the existing track. The intention is to widen this track by approximately 1 m on either side.

After examining the southern end of the road (a distance of some 4-5 km up to the location of the proposed rest camp), we traveled into the Park in the afternoon to assess the existing tourist road network, as well as the northern section of the access road as far as the Addo Heights. The contractors were less certain about the exact route that the road would follow at this end, and a number of possibilities were suggested. The length of the route, through thick Eastern Cape Valley Bushveld, made any surveying on foot impractical.

The comments made below, are on the upgrading of the existing tourist road network in the Park, as well as the southern section of the access road from Colchester to the proposed rest camp. This survey is not able to express an opinion on the access road between Oliphants Plat and Addo Heights.

2. GENERAL OBSERVATIONS ON THE ARCHAEOLOGY OF THE AREA

A pilot survey in 2002 of the heritage sites in the Greater Addo Elephant National Park (GAENP) indicated the presence of an open Middle Stone Age site in a red gravel donga exposure, on the farm Glenmore on the Addo Heights (S 33.53460; E 25.82950). It is site A0020 on the cultural mapping database. The artifacts comprised mainly quartzite and silcrete flakes and flaked cobbles. There was one possible Early Stone Age handaxe. The location of this site alerted archaeologists to the likelihood that further open sites might be located in the area to be bisected by the new access road.

There is also a reference in Illenberger, Goedhart & Hattingh (1997) to an outcrop of calcareitized Cenozoic sediment on the farm Bosrijk 243, just north of Alexandria (S 33. 61675; E 26.45008). The sediment contained fossil teeth, bone and MSA stone tools. A suggested date of 80 000 to 65 000 years has been proposed for the site. Interestingly, the bone has been identified as belonging to wildebeest, blesbok/bontebok, buffalo and an extinct ass-like zebra.

Early and Middle Stone Age (ESA and MSA) scatters are found on the banks of the Sundays River as well as the Bushman's River. These scatters are found immediately below the top soil, down to a depth of around 30 cm. They are therefore generally invisible, except on occasions when they are exposed in river cuttings and dongas. They appear to be randomly distributed in the top red gravels. The majority of artifacts consist of flaked quartzite cobbles (with cortex) and quartzite flakes. There are very few diagnostic flakes. The extent of the scatters suggests that they are widely distributed and it would appear that they are not *in situ*, but have been distributed by river action. These red gravels are part of the Kinkelbos Formation, which is part of the Algoa Group and these river terraces are geologically of recent origin (some 3 million years old).

3. RESULTS OF THE SURVEY

3.1 Site 1

Immediately after passing the pit, and driving through a set of gates, there is a slope of exposed red gravel on the left hand side of the road (at around PI 4), which contains cobbles and stone artifacts. A black shale core was collected for identification of the raw material. The stone artifacts appear to be located in a gravel band and are widespread along a level parallel to the road. The scatter continues down into the road (Fig.)

GPS: S 33.68337
E 25.79742

3.2 Site 2

A single stone handaxe, at the side of the existing trackway (at around PI 5), suggests an ESA date for the scatters (Fig.).

GPS: S 33.68040
E 25.79919

3.3 Site 3

A further outcrop of stone tools on the left hand side of the road (at around PI 6).

GPS: S 33.68172
E 25.79750

3.4 Site 4

The access road splits at PI 9, and the section to the left runs up a kloof to the proposed rest camp. There is a very large erosion donga running vertically down the slope, right next to the location of the new rest camp. The donga is located some 20 m from the camp, and suggestions were made regarding its possible stabilization. The top section of the donga, which runs to the crest of the hill, appears to consist of a calcrete capping. The lower is red gravels (see Fig.). This donga, too, contains scatters of quartzite flakes but there are no diagnostic tools.

GPS: S 33.67441
E 25.80273

3.5 Site 5

The access road, after its split to the rest camp at PI 9, runs to the right. Some 400 m along this road, the track cuts across red gravel deposits at PI

10, P1 11 and P1 12, and these too contain large numbers of quartzite flakes and flaked cobbles. In this case, the road has actually exposed the artifacts that would otherwise be below the top soil (Fig.).

GPS: S 33.40.38
E 25.48.17

4. IMPACT IDENTIFICATION AND ASSESSMENT

The National Heritage Resources Act (No 25 of 1999) protects all archaeological sites and it is an offense to destroy, damage, excavate, alter, deface or disturb archaeological sites without a permit issued by the South African Heritage Resources Agency (SAHRA).

It is important to note that permits are needed when sites are threatened by development. Where possible, arrangements should be made to conserve and protect sites of significance rather than allowing their destruction by development. Where this is not possible, mitigation must be arranged. Even ephemeral sites may have significance and should be sampled and recorded. A permit is needed for the destruction of a site if this is deemed necessary.

This preliminary survey indicates that ESA and MSA scatters are distributed widely across the landscape between the Sundays and the Bushmen's Rivers. Any disturbance of the topsoil, man made or otherwise, seems to uncover random distributions of stone tools. It is clear that they are not *in situ*, and their location seems to be related to possible water action. It is therefore not possible to talk about 'sites' in the conventional (archaeological) sense of the word, as these distributions have no apparent beginning or end.

These scatters are not found in association with any bone, or other material remains. However, further east, towards Alexandria, MSA stone tools in association with fossilised bone remains have been found in the calcrete capping on top of the red gravel 'Kinkelbos Formation'.

The construction of roads (and rest camps) in southern area of Oliphants Plat 214 is likely to expose scatters of stone artifacts. It is not possible to predict these distributions, and it seems pointless and expensive, to re-route existing tracks that already cut through these stone tools scatters. These scatters have little information potential, and since they cover such a large area, the loss of small areas that will be impacted by the road building, is not likely to be significant.

With regard the upgrading of the existing tourist network in the Park, these roads will either be surfaced or re-gravelled. This will involve the possible widening of the roads, by approximately 1 m on either side. No archaeological sites were observed along these roads which would be affected by the upgrading.

5. CONCLUSIONS

No archaeological remains of significance were discovered during the survey of the beginning (first 4 km) of the southern access road on the 10 June 2003. The entire 27 km of the road could not be surveyed in the course of 1 day. This was because of the density of the vegetation and the fact that the exact route of the proposed road has not been finalized. The degree of confidence regarding archaeological sensitivity in this report extends only from the National Road at Colchester to the rest camp, a distance of some 4-5 km. The upgrading of the existing tourist road network in the Park will not impact on archaeological remains and this phase of the work may continue.

➤ The uncertainty regarding the exact route that the proposed road will follow from Oliphants Plat 214, through Zoute Fontein 210, Addo Heights 209 and Glenmore 155 to the southern Park fence, means that I am not able to make any predictions regarding archaeological sites in this area. It is my opinion that an archaeological survey will be necessary once the exact route has been finalized. I would suggest that this would involve walking sections of the route once it has been cleared of bush. Hilly areas and stream banks would be of particular interest in terms of possible archaeological information.

The archaeological scatters that were found during the survey appear to be part of a large, random scatter of artifacts distributed widely across the landscape from the Sundays to the Bushmen's Rivers. These scatters are exposed on the banks of rivers and streams, in road cuttings and in dongas. It seems unlikely that any of these scatters are in primary context. They have been moved by water action, and their association no longer contains significant information. The majority of these remains are undiagnostic, and it is not clear whether they belong to the ESA or MSA or both. In some cases it is also possible that the split cobbles may be due to natural flaking in old river beds. For this reason, it does not seem necessary to insist that a permit is needed to disturb these scatters of tools, neither does it seem necessary to re-route the first 4-5 km of the southern ➤ access road in order to avoid the tools.

It is recommended that the development of the southern access road from Colchester to the rest camp may continue if the following guidelines are followed:

1. Every care should be taken during the bulldozing of the road. Buried sites may be uncovered which were not visible during the survey. Sites such as graves, as well as stone artifacts together with fossilized bone, should be reported to SAHRA and the archaeologists at the Albany Museum immediately. It is important to make this clear to the driver of the bulldozer so that he is alert to the possibility of buried archaeological remains.
2. The donga adjoining the rest camp should be monitored on a regular basis. Every effort should be made to stabilize it so that it does not offer a threat to the visitors.

3. Visitors to the rest camp should be alerted to the fact that the law protects archaeological remains, and they should be discouraged from collecting stone artifacts. This information could be made available in the form of a pamphlet.

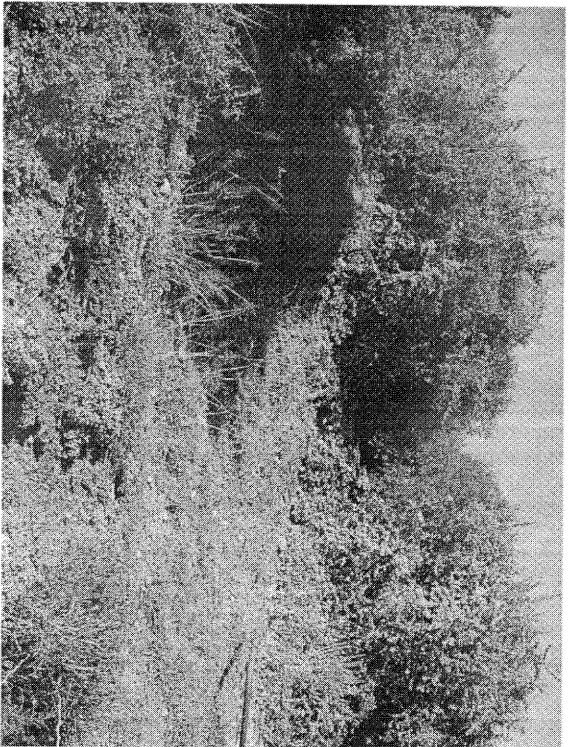
6. TERMINOLOGY

Early Stone Age: the earliest stone tool assemblages date from 1,7 million years ago. By around 1,5 million years ago distinctive stone tools called handaxes appear and seem to coincide with the appearance of *Homo erectus* peoples. These tools were made in the same pattern until around 125 000 years ago.

Middle Stone Age: tools consists mainly of long blades or triangular flakes and reflect a more controlled use of flaking properties than during the ESA. These tools are frequently made on fine-grained raw materials such as silcretes. These tools date between 125 000 and 40 000 years ago. In some circumstances, fossil bone and marine shell have been found in association with the stone tools.

7. REFERENCES

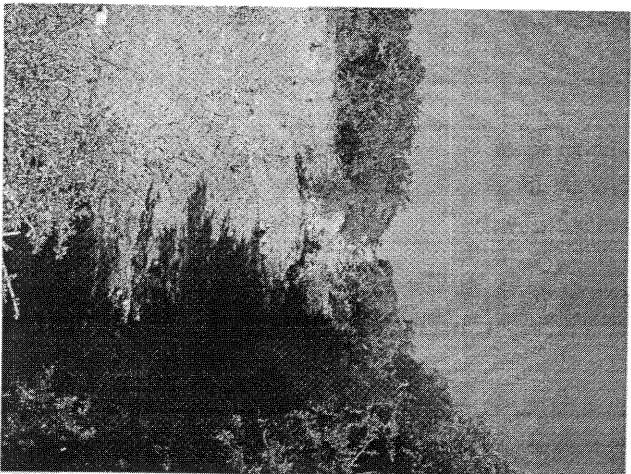
Cocks, M., de Klerk, W., Way-Jones, F. & Webley, L. 2002. Greater Addo Elephant National Park Cultural Mapping Pilot Project. *Albany Museum Internal Report*: 90 pages.



Site 1



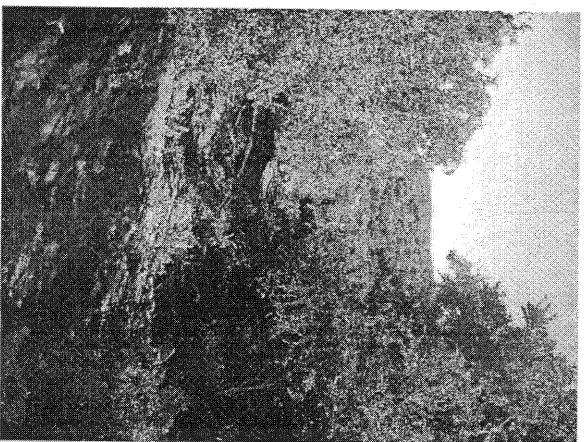
Site 2



Site 4



Site 5



Site 5