

AN INITIAL INVESTIGATION OF AREAS OF LAND TO BE DEVELOPED ON THE FARM CAIRNBROGIE, PLETTENBERG BAY.

Prepared for

Mr Chris Liebenberg

October 2003



Prepared by

D.J. HALKETT

Archaeology Contracts Office

Department of Archaeology

University of Cape Town

Private Bag

Rondebosch

7701

Phone (021) 650 2357

Fax (021) 650 2352

Email DJH@beattie.uct.ac.za

CONTENTS

1. INTRODUCTION	3
2. CURRENT LAND STATUS	3
3. METHOD	3
4. FINDINGS	5
4.1 Site CB 8	5
4.2 Site CB 9	5
4.3 General archaeological observations	8
5. DISCUSSION AND CONCLUSIONS	8
6. RECOMMENDATIONS	8
7. APPENDIX 1	9

1. INTRODUCTION

A portion of the farm Cairnbrogie (approximately 12km west of the town of Plettenberg Bay) was investigated in 1997 as part of a proposal to develop a golf course¹. The golf course proposal did not transpire and the current investigation has been undertaken to assess areas proposed for housing development, not addressed in the previous study. A map showing the area studied previously, and the area looked at during this assessment is shown in Figure 1.

Four areas on site were identified by the client where dwellings are likely to be built. The development will have two parts. A lodge development situated on a coastal bluff immediately above the cliffs in the west, area 1², and a small number of individual private dwellings on the coastal bluff set back from the cliffs, to the east, areas 2 and 3 or area 4³. A proposed plan of the layout of the lodge development with access and services has been supplied, but precise planning of the location of the dwellings in the east has not yet been made, and no access or service provision routes were finalised at the time of the study. Existing farm tracks will be used for access where possible.

2. CURRENT LAND STATUS

All the proposed developments would be in areas not previously used for farming (except for a part of area 4 where some disturbance is evident), and are generally characterised by steep slopes covered by dense coastal fynbos and occasional pine growth. Coastal cliffs angle down steeply to the sea and the coast is accessed via a few existing fisherman's tracks.

The coastal bluffs are punctuated with occasional outcrops of rock while the ground is generally covered with a sandstone rock scree of variable size, most evident around the outcrops and at the head of the cliffs.

Areas 1 and 4 can be accessed by existing tracks, while areas 2 and 3 must at present be accessed on foot.

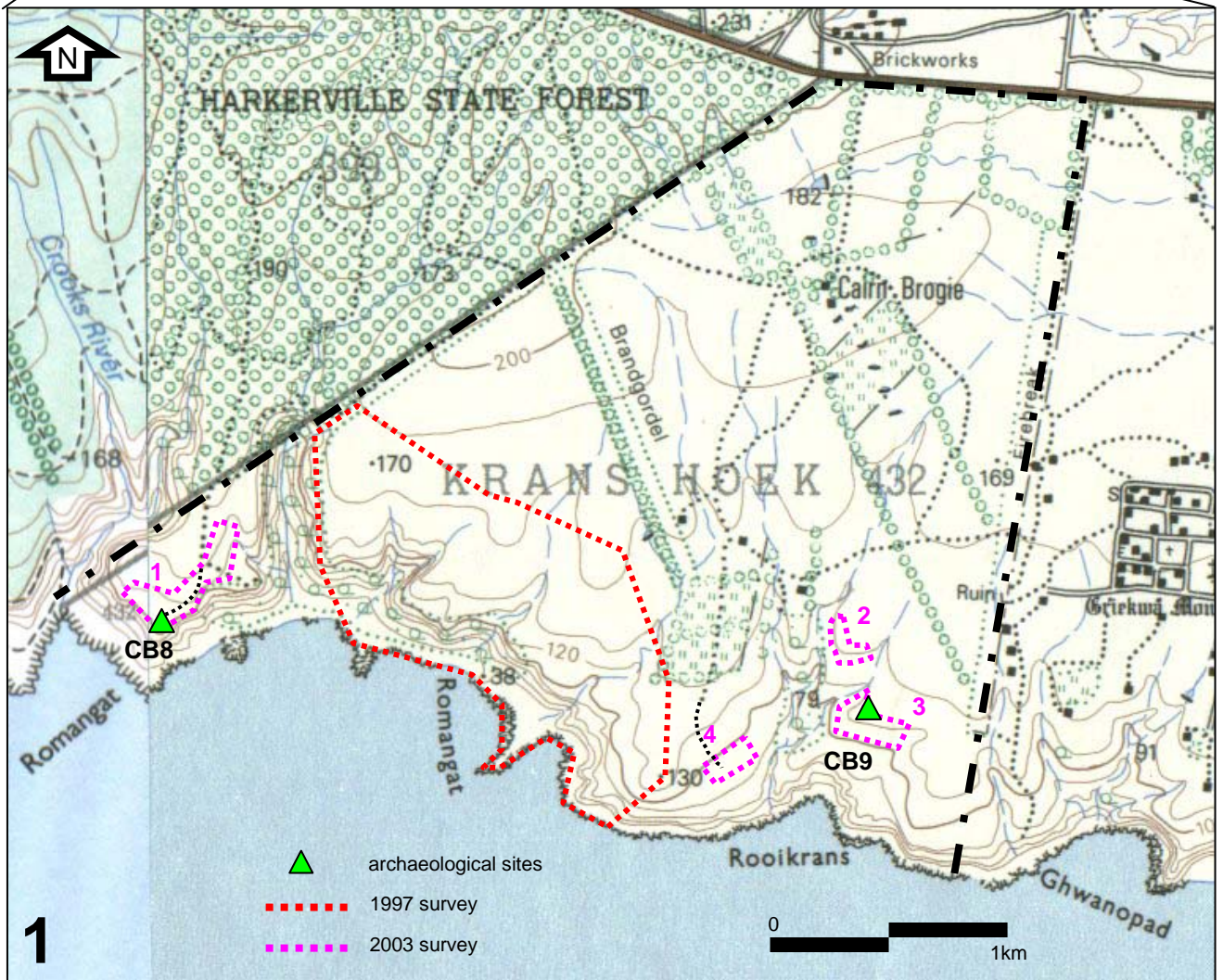
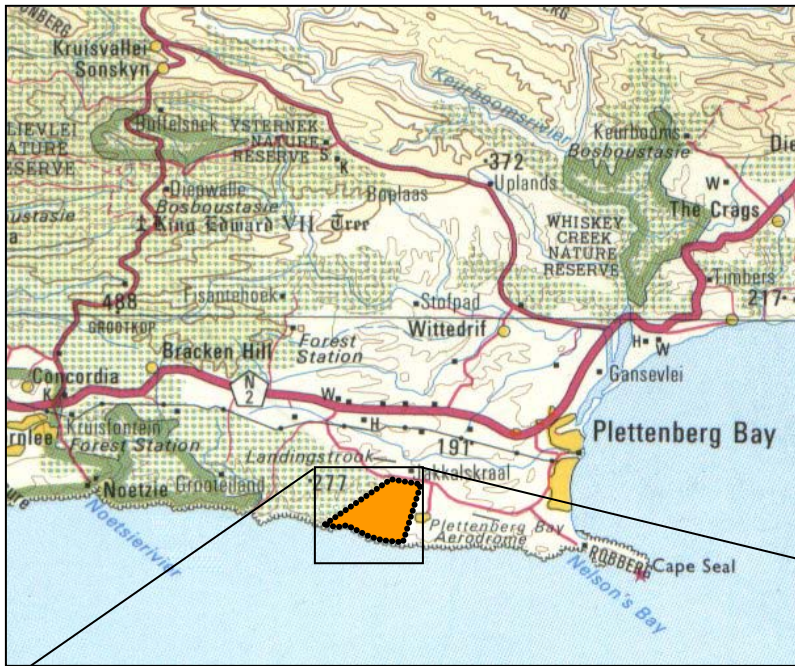
3. METHOD

All the areas were searched as far as possible on foot. The density of the coastal fynbos limited the archaeological study by virtue of the ground not being easily accessible and visible in many instances. Taken in overall terms of what has been observed in accessible areas, the limitation is not believed to change the conclusions of the study. Positions of archaeological sites on the landscape were recorded by a hand held GPS receiver utilising the WGS84 datum. I was instructed by the client to limit the study to the development footprints.

¹ Yates, R. 1997. An archaeological assessment of a portion of the farm Cairnbrogie, Plettenberg Bay. Unpublished report prepared for The Planning Partnership. Archaeology Contracts Office, University of Cape Town.

² the authors numbering system

³ the authors numbering system



Compilation from 3423 AB PLETTENBERGBAAI and 3423 AA KNYSNA. Chief director of Surveys and Mapping.

4. FINDINGS

Two areas having moderate archaeological significance were located. Their positions are shown on figure 1. The numbering used is based on the system used in the 1997 survey.

4.1 Site CB 8

Location: 34° 05' 32.4" S 23° 15' 01.0" E

Description: The site consists of scattered stone artefactual material of low density broadcast over a wide area, and mixed in with the general stone scree that covers the area. The material consists of flakes, chunks and cores, radial and single platform types were noted. No hand axes were observed. Raw material utilised is mainly whitish quartzite, although some pink quartzite was also observed.

Significance: The occurrence shows that the flat area immediately adjacent to the cliffs were used by people in the distant past. The material is likely to be of Middle Stone Age origin. It is likely that rock outcrops have been quarried for raw material. No shell middens or other associated organic material was observed.

Impact: The lodge development will impact the artefact scatter.

Mitigation: A representative sample of the material should be collected prior to development.

A series of photographs showing the site and surroundings is presented in Plates 1 - 4.

4.2 Site CB 9

Location: 34° 05' 44.5" S 23° 16' 50.4" E

Description: The site consists of a stone scatter of moderate density lying on the northern side of a prominent rocky outcrop towards the top of a hill on the coastal bluff. The material consists of flakes, chunks and cores, radial and single platform types were again noted. Raw material utilised is mainly whitish quartzite with some pink varieties also observed. The material here is similar to that described and photographed by Yates (1997) at the coastal site CB7 (See Appendix 1). Mostly visible in the fisherman's path.

Significance: The material is likely to be of Middle Stone Age origin. It is likely that rock outcrops have been quarried for raw material. No shell middens or other associated organic material was observed.

Impact: The residential development *may* impact the artefact scatter but as yet we do not have detailed locations of the house footprints.

Mitigation: If it will be impacted, a representative sample of the material should be collected prior to development.

A series of photographs showing the site and surroundings is presented in Plates 5-7.

Looking south along the access road to the lodge site



Looking west from the lodge site showing the nature of the coastal morphology



Looking north toward the lodge site from the cliffs showing outcropping rock



Looking north along the access road showing the rocky scree where the artefacts are found



Looking from area 4 east to areas 2 (left arrow) and 3 (right arrow) showing the location in relation to the coastal cliffs. Archaeological site CB 9 (green arrow)



5

Looking from the rock outcrop in area 3 west to area 4. Disturbed areas of vegetation are visible



6

A selection of artefactual material from CB 9



7

4.3 General archaeological observations

Scattered stone artefactual material is found in all the locations examined and is therefore widespread, although no foci could be identified other than those highlighted in points 4.1 and 4.3. One concentrated ESA (Early Stone Age) artefact scatter was located, and a number of isolated artefacts of this type were also observed particularly in areas of disturbance to the topsoil has exposed underlying strata. Although the concentrated scatter was situated outside of the property next to a road it is mentioned here because both it, and the isolated finds, were found associated with ferruginous gravels and tended to be on slopes away from the cliff line. The ESA material tends to have a pronounced orange patina.

5. DISCUSSION AND CONCLUSIONS

Both this survey and the one undertaken in 1997 have contributed to the knowledge of archaeological occurrences along this part of the coast and shows that the area has been used over a great length of time. Characteristic artefacts from all periods of the stone age are represented.

It is clear that the focus for human occupation, as evidenced by the deposition of stone artefacts and shellfish remains, was primarily on the caves and shelters in the cliffs closer to present sea level. Sites found on the upper slopes (where there are no natural shelters) are likely to have been more *ad hoc* in nature, probably related to the use of rock outcrops that occur there as sources of raw material. No shell middens were identified during the most recent survey, further reinforcing the *ad hoc* use of the upper slopes for activities other than occupation.

It is the conclusion of both studies that thick vegetation cover precludes a comprehensive study, but that the overall observations suggest that even if visibility improved, the overall conclusions would not be substantially altered.

6. RECOMMENDATIONS

6.1 The location of pre-colonial burials cannot be predicted and it is not impossible that such could be located when development takes place. Burials are protected under the National Heritage Resources Act of 1999 (NHRA). If located their presence must be reported to the South African Heritage Resources Authority (SAHRA). Instructions as to the procedure to be followed must be conveyed to all contractors/sub-contractors involved in the excavation phase of any development.

6.2 No access routes, plans for provision of services or precise footprints for the residential component of areas 2,3 and possibly 4 were available at the time of the investigation. When these are available they should be submitted to the archaeologist for comment.

6.3 Surface collections of artefactual material must be undertaken at site CB8 and possibly at site CB9.

7. APPENDIX 1

AN ARCHAEOLOGICAL ASSESSMENT OF A PORTION OF THE FARM CAIRNBROGIE, PLETTENBERG BAY

Prepared for

The Planning Partnership

September 1997



Prepared by

Archaeology Contracts Office

Department of Archaeology

University of Cape Town

Private Bag

Rondebosch 7700

Phone (021) 650 2357 Fax (021) 650 2352

Email rjy@beattie.uct.ac.za

EXECUTIVE SUMMARY

Seven archaeological sites have been identified within the Cairnbrogie study area. Five are Later Stone Age shell middens and two are assemblages of stone artefacts from the Middle Stone Age. Only one site falls close to or in the area of development and a representative sample should be collected if any modification of the vicinity is envisaged. The remainder of the sites should be safeguarded from damage due to human informal recreational activities or the development of walking trails.

1. INTRODUCTION

The Archaeology Contracts Office (ACO) was asked to examine a portion of the farm Cairnbrogie, located 12 kilometers south-west of the town Plettenberg Bay. The portion to be studied is currently zoned for agricultural use. It is under intensive grass cultivation for use as fodder but it includes relatively undisturbed coastal bluffs and slopes and the foreshore. The proposed development will, in terms of built structures and large scale landscaping, be restricted to the presently plowed and grassed area. We were, however, instructed to extend the search to the adjacent coastal margins. The area investigated is shown in Figure 1.

The ACO undertook to:

- i) locate archaeological sites and assess content, age and significance;
- ii) plot site positions on appropriate maps;
- iii) prepare a report detailing the findings of the investigation and make recommendations about ways to mitigate the impacts of development on such sites.

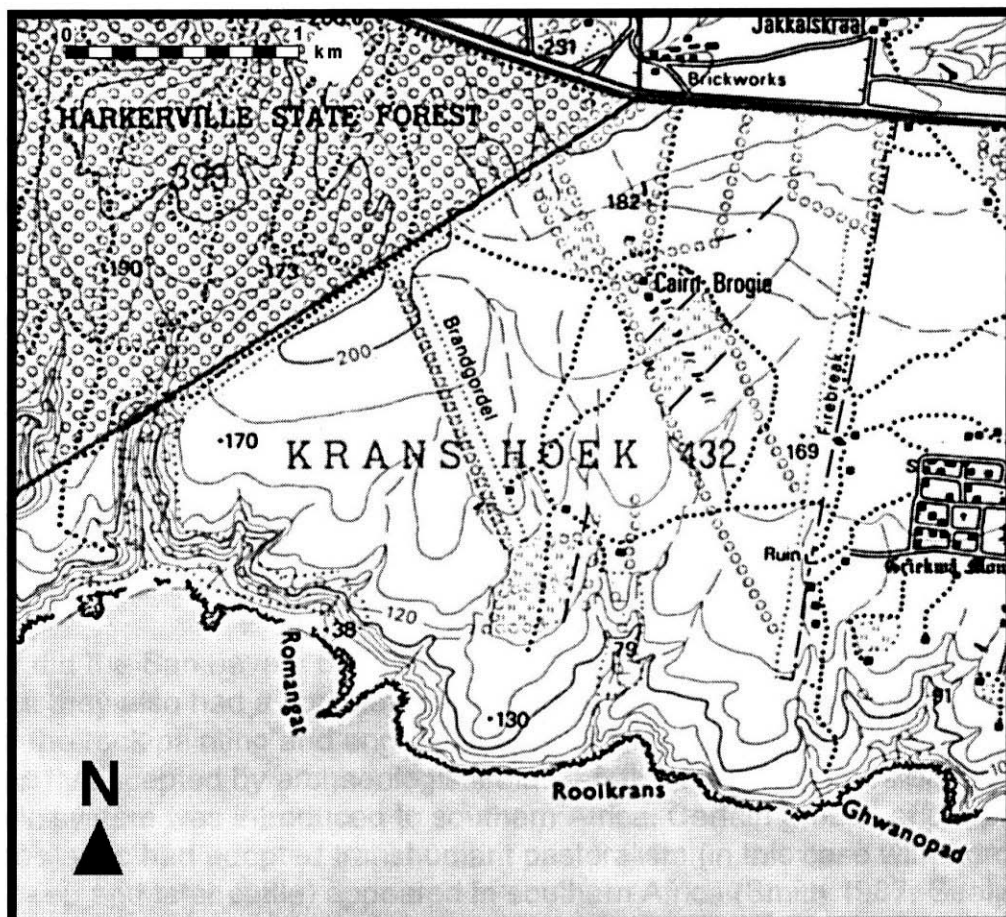


FIGURE 1. LOCATION OF STUDY AREA

2. BACKGROUND HISTORY

Previous archaeological experience of the Plettenberg Bay area reveals that materials from the entire Stone Age sequence could conceivably be located in the study area. To help place the findings of the archaeological investigation in context, the following simplified summary is provided.

2.1 The Early Stone Age (ESA)

In 1911, an amateur archaeologist discovered some ancient stone artefacts on the banks of the Eerste River in Stellenbosch. Among these was an artefact type which he recognised as the handaxe and suggested that they were of extreme age. Modern research has shown that these artefacts were made by people who lived between 200 000 and 1 000 000 years ago. Sites containing these characteristic Early Stone Age artefacts have been found throughout Africa, parts of Europe and the Far East (Sampson 1974) and locally, sites of this period have been found throughout South Africa. The makers of Early Stone Age artefacts are believed to be the hominid type known as *Homo erectus*. Although the population of these hominids was probably relatively small, the sheer depth of time over which they roamed the landscape has resulted in large numbers of sites found in widely differing ecological zones from the coast to the mountainous regions. The raw material favoured for the production of Early Stone Age tools was quartzite. It is no coincidence therefore that ESA sites are often found next to river beds where large quantities of water worn quartzite cobbles can be found.

2.2 The Middle Stone Age (MSA)

Large cave sites discovered in the Kalk Bay mountains on the Cape Peninsula in the 1920s, contained deep deposits with large numbers of more refined stone artefacts in the lower parts of the sequences. These were recognisably different from ESA artefacts and had many similarities to artefacts found in the Palaeolithic sites of Europe. Similar kinds of artefacts have since been found on many open sites and on rare occasions, in the deposits of caves throughout South Africa. A larger selection of fine grained raw material was used for the manufacture of artefacts as new techniques of production, and secondary working into intricate tools, required more predictable flaking properties. Research has shown that these artefacts belong to a period known in South Africa as the Middle Stone Age and date to the period between 30 000 and 200 000 years. In some very rare instances where circumstances permit, fossil animal bone and marine shells have been found in association with the artefacts giving some indication of the diet. MSA people are thought to have been an early form of modern humans (*Homo sapiens*) who were capable of hunting large animals. Current theory is that early *Homo sapiens* evolved in Africa and migrated to Europe and the Middle East some 40 000 years ago (Klein 1989). The Middle Stone Age is well represented in Nelson Bay Cave, located in the Robberg Peninsula reserve located on the outskirts of Plettenberg Bay.

2.3 The Late Stone Age (LSA)

This period has been subjected to detailed study by archaeologists. Late Stone Age people lived in southern Africa from 40 000 years ago up to the arrival of European colonists at the Cape, and co-existed with them for some time. Late Stone Age people were the ancestors of the San (Bushmen) and Khoekhoe (Hottentots) who were present throughout the south-western and northern Cape during the colonial period. Throughout

most of the Holocene (last 10 000 years) southern Africa was inhabited by small groups of San hunter-foragers who were highly mobile. They hunted with bows and arrows, snared small animals and, where groups lived close to the shore, gathered shellfish and other marine resources, a habit which resulted in the use of the term "Strandlopers". They used digging sticks, often weighted with bored stones, to find a variety of vegetable foods, particularly bulbs below the soil.

Not only did the San have a prodigious knowledge of the animals and plants around them, but they also had a complex belief system, aspects of which are represented in many of the rock painting and engraving sites of the northern and western Cape. It is now broadly accepted by archaeologists that shortly after 2000 years ago, a new economic system was introduced to southern Africa. Certain groups of people (the Khoekhoe) who had adopted transhumant pastoralism (in this case with herds of fat-tailed sheep and later cattle) appeared in southern Africa (Smith 1987, Sealy and Yates 1994). While the San groups seem to have co-existed with the pastoralists, it has been suggested that hunter-foragers were marginalised moving into areas where the grazing opportunities were less attractive to pastoralists (Parkington et al 1986). The advent of pastoralism seems to have been accompanied by the technology of making clay pottery. The precise origin of early stock keeping and ceramic technology in southern Africa is still unclear but it is suggested that stock keeping was introduced from the north. As with the MSA, the Nelson Bay Cave sequence has provided the most detailed information on developments within the local Later Stone Age society.

It has not been proven that there were indigenous groups who lived exclusively at the coast and entirely on marine foods, although hunter-foragers may have become more dependent on them when access to traditional food sources was limited by the influx of first Khoe pastoralists and later European settlers.

2.4 Terminology

Shell midden: an accumulation of shells representing the discard of inedible parts of molluscs.

Rock shelter: a relatively shallow area covered by overhanging rock which provides shelter from sun and rain.

Cave: generally a more enclosed space than is the case of a rock shelter, the area more deeply penetrating the surrounding rock.

Flake: a piece of stone that has been deliberately struck off a block of stone known as a core. Flakes exhibit typical features of mechanical fracture which mark them as deliberate human products. Flakes with sub-parallel margins and lengths more than twice the width are termed blades.

Faceted platform: a characteristic of MSA flake production in which the surface from which a flake is to be struck from a core is prepared by the removal of small flakes. The platform is the area hit by the hammerstone. Platforms with many fine preparation flake scars (the imprint of the flake) are termed multiple faceted, whereas those with two scars are known as simple faceted. Unworked platforms are called plain.

Radial Core: another principle feature of the MSA, the radial core is formed by the striking of radially oriented flakes from around the core perimeter.

Retouch: a term applied to the removal of small flakes from the margins of a flake or blade after its production from a core. Depending on how applied, retouch can sharpen an edge or make it blunt for ease of holding or mounting onto a handle.

In situ: a term meaning in the original position of deposition, as opposed to in secondary

context.

3. IMPLEMENTATION

Examination of 1:10000 orthophotos showed that the most likely area for archaeological sites was close to the shoreline. The principle reason for this was the near total cultivated grass cover of the inland and major portion of the property to be developed. Thus, visibility of the ground, a primary requirement of archaeological survey, was essentially absent. This circumstance has limited implications for the survey, as questioning the farm manager Mr. Brian Yates revealed that neither large stone objects nor shell had been noted during plowing. Both of these items can be predicted to be present on sites dating to the last few thousand years. Equally, we know that proximity to the food rich inter-tidal was an important factor in people choosing the location of a site, and coastal bluffs furthermore, often provide suitable sea-cut caves.

The coastal margin was covered on foot as intensively as was possible, looking for both open air and cave sites, and those found were located on the 1:10000 orthophoto or by a Global Positioning System (GPS) fix. The tops of the bluffs were also searched in a number of walked transects. Much of the beach fringe is covered with thick vegetation, including spectacular groves of milkwood, which made access difficult. The large kloof at the western end of the study area proved impenetrable due to the vegetation. Field records of the survey are housed in the ACO offices at UCT.

4. OBSERVATIONS

Seven archaeological sites were located, dating to the Middle (30 000 to 200 000 years ago) and Later Stone Ages (300 to 30 000 years ago). The positions are shown in Figure 2. Compass directions are given as true.

4.1 CB1

lat./long: 34°05'37"S; 23°15'33"E

CB1 comprises an ESE facing rock shelter in a triangular shaped quartzite outcrop which, detached from the landmass, rises up out of the cobble beach. The cobble bed penetrates a gully leading to the site and into the mouth of the shelter. The shelter is 10m deep, 5m wide and the roof varies from 2 to 4m above the floor. Presently used as a fishermen's campsite, there is some disturbance of and modern litter on the surface and the shelter walls are extensively covered by soot. Archaeological deposits are judged to be shallow (0.1 to 0.2m) and comprise a moderately dense shell midden with some bone (fish) and very few stone artefacts. Shellfish species present included the brown mussel (*Perna perna*), a variety of limpets (*Patella* sp.) and alikreukel (*Turbo sarmaticus*). Surface shells patently collected by fishermen show that shellfish are not an important recreational diet, and the midden is thus assumed to be the work of indigenous occupants of the coast. The mid-Holocene high stand of the sea (c. 4000 to 6000 years ago) would have flooded the shelter and the archaeological occupation must date younger than this event and is thus LSA.

Importance: The site is not particularly important but it is relatively undisturbed unlike many sites in this region. CB1 has the potential to provide dietary information but there is unlikely to be a great depth of time represented by the materials.

Impact: The development will not directly effect CB1 but informal recreational use of the coast is already doing so.

Mitigation: No immediate mitigation is required. However, care must be taken that occupants of the development do not dig into the deposits in any way. Education will help but, it should be noted, this can draw potential interest where none may previously exist.

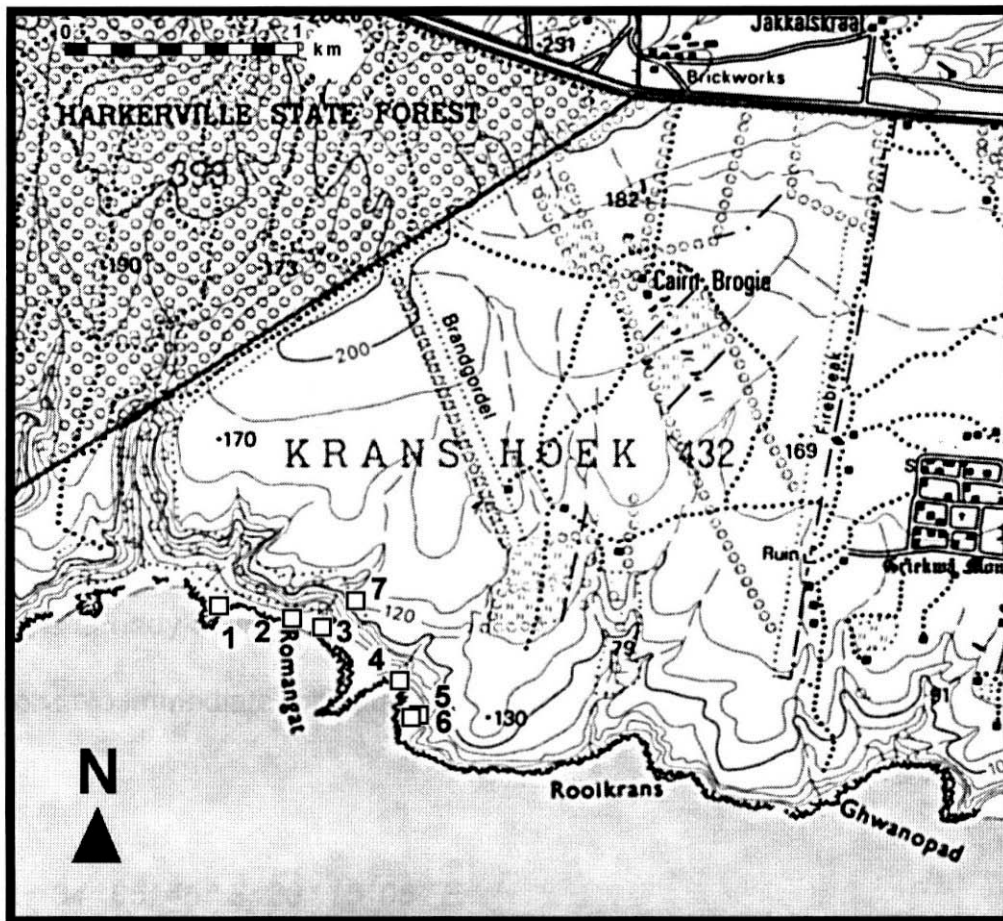


FIGURE 2. LOCATION OF SITES FOUND. EXACT LOCATIONS ARE GIVEN IN LAT./LONG/ FORMAT WITHIN THE TEXT.

4.2 CB2

lat./long: 34°05'38"S; 23°15'47"E

CB2 is an open air shell midden currently covered by vegetation but partially exposed in a footpath. The site is perched on top of a low outcrop of rock, with an inter-tidal gully and another outcrop on the seaward side. The site is estimated to be 6m in maximum dimension and no deeper than 0.2m. A few flakes in quartz, chert / chalcedony and quartzite were present. Shellfish composition is dominated by limpets (*Patella cochlear*, *P. oculus*, *P. argenvillei*, *P. tabularis*, *P. longicosta*) and brown mussels and alikreukel are also present. Stone artefacts were of a LSA type and the site most probably dates to within the last 5 000 years It is likely that only a limited period of time is represented by the deposit.

Importance: CB2 is of limited importance but it does draw our attention to the presence of open air sites. From the point of view of research it will provide information on the composition of the shellfish diet of the inhabitants of this coast.

Impact: The development will not directly effect CB2 but informal recreational use of the coast is already doing so.

Mitigation: No immediate mitigation is required but the same considerations apply as for CB1.

4.3 CB3

lat./long: 34°05'38"S; 23°15'52"E

CB3 is another open air shell midden, again with a very limited exposure in a pathway running through thick bush. The site is located on the foot slopes of an outcrop joined to the major cliffs by a low saddle. A small shelter further up-slope had one or two pieces of shell on the floor. Shellfish composition was similar to CB2 with the brown mussel, *P. tabularis* and alikreukel present. No stone artefacts were noted due to the poor visibility. The site is likely to be shallow.

Importance: CB3 is not a site of importance but could be sampled for shellfish dietary information.

Impact: The development will not directly effect CB3 but informal recreational use of the coast is already doing so.

Mitigation: No immediate mitigation is required but the same considerations apply as for CB1.

4.4 CB4

lat./long: 34 ° 05' 45"S; 23 ° 16' 05"E

CB4, located in a spacious but damp SSW facing cave, is the top ranking archaeological site found in this survey (Figure 3). It's importance however, has substantially compromised by large scale disturbance of the deposits. The cave is situated approx. 30m from the high water mark in the foot of the quartzite coastal bluff. It is 13m wide, 20m deep with a roof varying between 2 to 4m in height above the floor. Fairly dense, low vegetation grows in the mouth and penetrates a short way into the shelter. A jumble of angular quartzite blocks extends below the mouth to merge with inter-tidal rocks and beach cobbles. The surface of the deposit, which is at most a 2m deep shell midden, presently is formed by a series of low mounds (Figure 4.) with a large cobble strewn depression in the rear of the cave. These features can only have resulted from extensive digging down into the deposits. The spoil heaps look well settled and are probably older than twenty years. A few pieces of modern litter indicate that the cave is used by fishermen. Bone is fairly abundant on the surface and includes large, medium and small bovids, seal, bird as well as fish. Very few stone artefacts are to be seen but quartzite flakes and nodules of pigment are present. The shellfish species present include the brown mussel, alikreukel, a variety of *Patella* sp. and some whelks (*Burnupena* sp.) (Figure 5). The materials described here are of LSA vintage but the lower levels of the deposit may extend back into the MSA.

Importance: CB4 in all likelihood preserves materials from a reasonable extent of time in the Holocene and older periods and consequently provides an opportunity to examine changes over time. The deposits are fairly rich in remains and, despite the extent of disturbance, it is certain that some in-situ material survives, be it between the mounds or at depth or both. The site must therefore, be regarded as of great importance at both local

and regional scales.

Impact: The development will not directly effect CB4 but informal recreational use of the coast is already doing so.

Mitigation: No immediate mitigation is required but the same considerations apply as for CB1. Further disturbance must be prevented.

4.5 CB5

lat./long: 34°05'32"S; 23°16'09"E

CB5 is a 11 m wide, 4.5m deep and 2m high N facing rock shelter located towards the bottom of a steep cliff dominating the eastern end of a small bay (Figure 6). The talus below the shelter is heavily vegetated and this has contributed to retaining the approximately 1 m deep shell midden deposit. Baboons are responsible for limited disturbance of the deposit surface and some modern human activity is evident. Quartzite stone artefacts are fairly visible in the drip-line. Bone is fairly common on the surface and includes bovids and bird. The range of shellfish present, on casual inspection, is like that in CB4. The visible deposits are of the LSA period, of which some time depth may be present, but the presence of older materials cannot be discounted.

Importance: CB5 is largely undisturbed, fairly deep and rich in remains. The site is in itself important but increasingly so given the damage noted to CB4. CB5 may house the remains of the same periods of the time as present in CB4 and provide the opportunity of better study.

Impact: The development will not directly effect CB5 but informal recreational use of the coast is already doing so.

Mitigation: No immediate mitigation is required but the same considerations apply as for CB1.

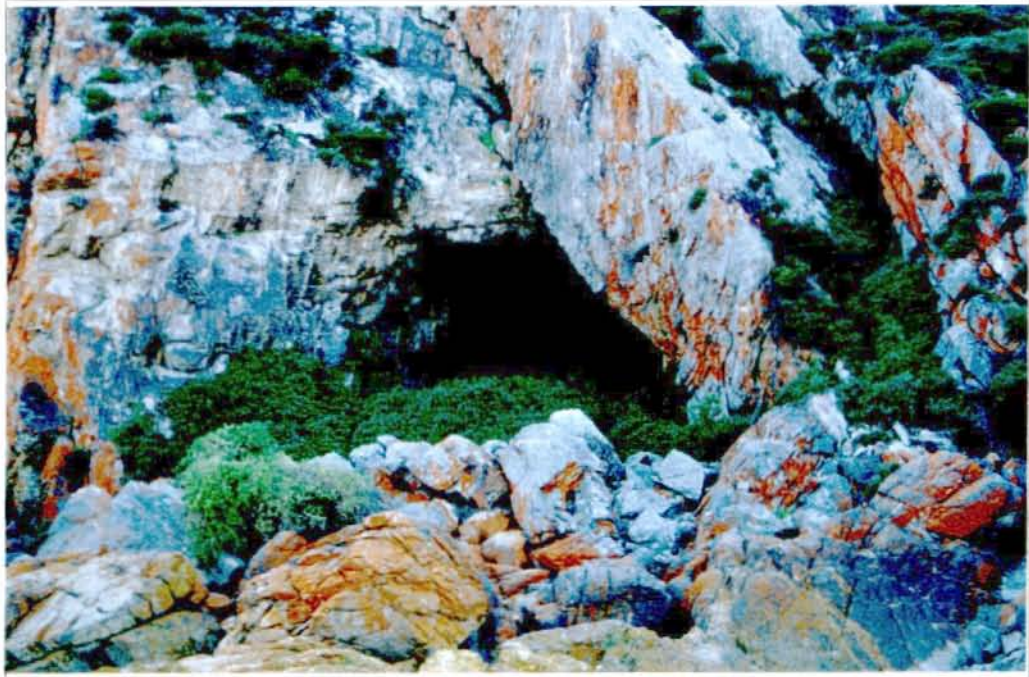


Figure 3. View of CB4 from the inter-tidal rocks below the cave



Figure 4. One of the low mounds of disturbed deposit in CB4 to the right of Mr Jakavula.



Figure 5. Scatter of shellfish in the drip-line of CB4. To the left of the lens cap is *Patella cochlear* and the large limpet right of centre is *P. tabularis*.



Figure 6. View of CB5 (above sloping vegetation on left) and CB6 (triangular shadow to the right).

4.6 CB6

lat./long: 34°05'32"S; 23°16'09"E

CB6 is a mere 10m west of CB5, at a slightly higher level, and is a N facing overhang filled with a clast supported angular quartzite rubble (Figures 6). A pathway transects the rubble mound and has led to enhanced water erosion at the front. The shelter dimensions are 12m wide, 3m deep and 2m high. The overhang is highly jointed and fractured and local exfoliation clearly has contributed a majority of the rubble. The fill is approximately 4m deep and, seen in the pathway erosion, the bottom 2.5m contains reasonably abundant quartzite artefacts of MSA affinity. The shelter may well have been larger in MSA times, the fill now reducing the surface area. The majority of the artefacts are flakes and blades but some cores are present (Figures 7 & 8). Plain, simple faceted and multiple faceted platforms are present and the two cores seen were of the single platform and opposed platform types respectively. Bone and shell do not appear to be preserved, if they were at all present. Beach cobbles represent a good source for the raw material used to make the artefacts, but the material of the shelter wall, although fractured, is also of sufficiently good quality to have served as such.

Importance: Lacking organic preservation, CB6 can only contribute technological information and is thus of moderate importance. It is however, stratified with significant quantities of stone artefacts present and the possibility that different facies of the MSA are present cannot be discounted. This makes CB6 a potentially interesting site for research purposes.

Impact: The development will not directly effect CB5 but informal recreational use of the coast is already doing so.

Mitigation: No immediate mitigation is required but the same considerations apply as for CB1.

4.7 CB7

lat./long: 34°05'33"S; 23°15'59"E

CB7 is located in the open on the top of the bluffs fringing the shoreline, some 60m short of a planted pasture. A large number of stone artefacts are widely scattered in amongst the fynbos. The area of scatter is very approximately 60 by 30m. The pieces are on average larger than those in C86, with a notable blade component (Figures 9 & 10). Some flakes and blades have use modification as well as retouch and plain, simple and multiple faceted platforms were noted. A number of radial cores are present. The assemblage is apparently of MSA affinity as no hand axes were seen, but this cannot be taken as a definitive identification (see below).

Importance: The period between the end of the ESA and the beginning of the MSA is poorly known. The large dimensions of the CB7 artefacts could indicate that the site is older than CB6, and falls into this earlier period. Given such uncertainty, this assemblage is of interest for typological and technological study. The lack of associated organic remains makes the material of only moderate importance.

Impact: Golf course construction may intrude into this area. Any activity proposed for this area must be considered as a negative impact.

Mitigation: Should the above impact occur, a representative sample of the CB7 artefacts should be collected professionally.



Figure 7. Quartzite MSA blades from CB6 (scale in centimeters).

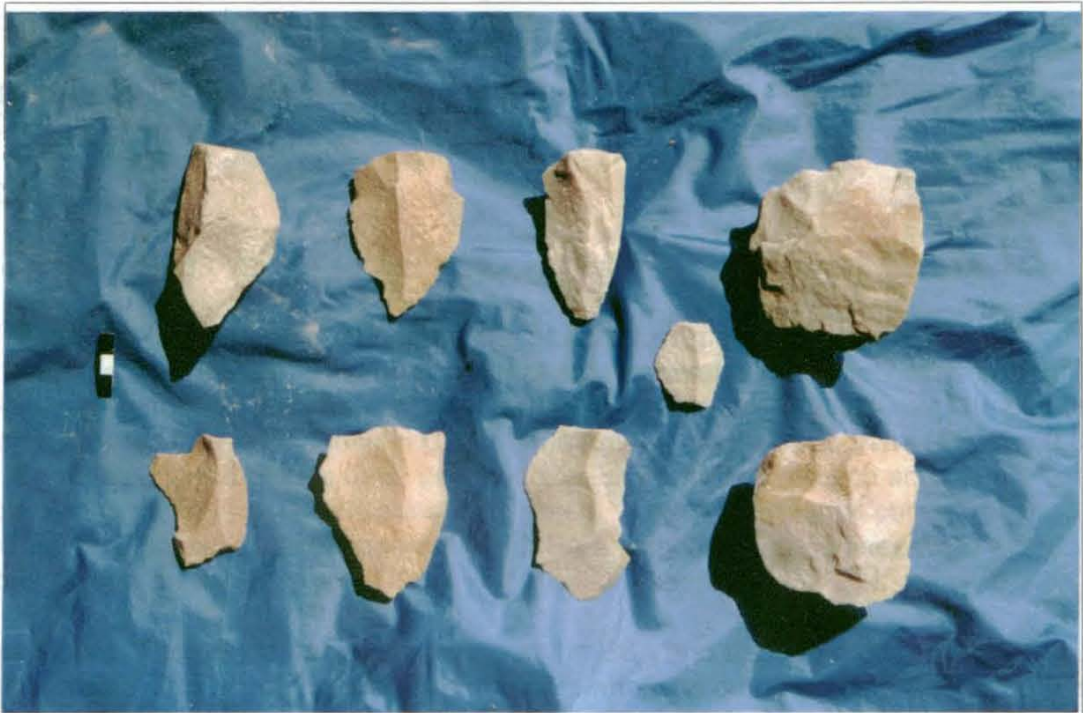


Figure 8. Quartzite flakes and cores (two on the extreme right) from CB6. These forms are unmistakably MSA. (Scale in centimeters).



Figure 9. Quartzite blades and cores from CB7. The three cores (left-hand column) are of the radial type. The blades are both longer and thicker than those found in CB6. (Scale in centimeters)



Figure 10. Quartzite flakes and blades from CB7 (scale in centimeters).

4.8 General comment

The impact statements and mitigatory measures laid out above for all sites except C87, are predicated on there being no development of any sort along the coastal margins. It must be noted that the development of walking trails - cutting of pathways, building of steps and even removal of bush - potentially can have an impact on sites. The introduction of people to previously seldom visited areas also increases the risk of damage to sites. In planning such trails, the National Monuments Council should be consulted.

5. DISCUSSION

The Cairnbrogie environment is not an easy one in which to locate open air archaeological sites, as vegetation cover, be it cultivated or natural, is heavy. Despite this difficulty we do not believe that unknown living sites of any particular significance are likely to be impacted directly by the development. Human burials however, are utterly impossible to locate purposefully, as indigenous graves are frequently unmarked. Pre-colonial human burials are directly protected under the National Monuments Act of 1969 (as amended) and cannot be removed without permission. Should construction uncover such remains an archaeologist must be commissioned to effect the removal and recording of the occurrence. The probability that burials will be encountered where building is to take place is small as interments are most likely to have happened in the vicinity of the shoreline.

The conducted survey reveals an array of sites as has come to be expected for this stretch of shoreline. The revealed evidence indicates human occupation at intervals over the last 120 000 years and perhaps longer. In the later periods shellfish were the primary attraction, but animal bones show that hunting was not neglected. One non-observation is worthy of note: no ceramic remains were seen in any of the sites. This means either that the sites are older than 2000 years when the technology first appeared, or, if indeed they do date to within the last two millennia, that ceramic vessels were seldom used.. Ceramics have been found in excavations in the nearby Nelson Bay Cave on the Robberg Peninsula.

The site of CB4 was an extremely good one before it was badly disturbed. Prior to the widespread establishment professional archaeology in South Africa, the area between Knysna and on past Plettenberg Bay was subjected to vastly destructive amateur searches for human burials in rock shelters and caves. CB4 may be one such instance, as the digging appears purposeful and labour intensive. The site CB5 in combination with what remains of CB4 represents a significant opportunity for research in the future.

6. ACKNOWLEDGMENTS

Thanks are due to Debbie and Brian Yates for warm and generously given hospitality and to the latter for hauling our vehicle out of the mud.

7. ARCHAEOLOGICAL TEAM

Fieldwork: Zukisani Jakavula and Royden Yates
Report: Royden Yates

8. REFERENCES

- Deacon, J. (1992) Archaeology for developers, planners and local authorities. National Monuments Council: Cape Town.
- Deacon, J. ed. (1996) Monuments and Sites in South Africa. ICOMOS Central Cultural Fund Publication No. 206. National Committee of ICOMOS: Sri Lanka.
- Elphick, R.H. 1977. Kraal and castle. Khoikhoi and the founding of white S New Haven: Yale University Press.
- Klein, R.G. 1989. The human career. University of Chicago Press: Chicago & London.
- Parkington, J.E., Yates, R., Manhire, A. & Halkett, D. 1986. The social impact of pastoralism in the south western Cape. *Journal of Anthropological Archaeology* 5: 329
- Pistorius, P. 1996. in: Deacon, J. ed. (1996) Monuments and Sites in South Africa. ICOMOS Central Cultural Fund Publication No. 206:1-8. National Committee of ICOMOS: Sri Lanka.
- Raven-Hart, R. 1967. Before Van Riebeeck. Cape Town: Struik.
- Rudner, J. 1968. Strandloper pottery from South and South West Africa. *Annals of the South African Museum* 49: 441-663
- Sampson, C.G. 1974. Stone age archaeology of southern Africa. New York Academic Press
- Sealy, J. & Yates, R. 1994. The chronology of the introduction of pastoralism to the Cape, South Africa. *Antiquity* 68: 58-67
- Smith, A.B. 1985. Excavations at Plettenberg Bay, South Africa of the campsite of the survivors of the wreck of the Sao Gancalo 1630. *International Journal of Nautical Archaeology and Underwater Exploration* 15.1: 53-63
- Smith, A.B., Sadr, K., Gribble, J., & Yates, R. 1991 . Excavations in the south-western Cape, South Africa, and the archaeological identity of prehistoric hunter-gatherers in the last 2000 years. *South African Archaeological Bulletin* 46: 71-91
- Yates, R. in prep. Ostrich eggshell beads and the appearance of pastoralism: a study of size changes in the southern and south-western Cape, and Namibia. M.A. thesis: University of Cape Town.