

ARCHAEOLOGICAL SURVEY:
BRITANNIA BAY TO STOMPNEUS BAY
CAPE WEST COAST

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FINAL REPORT ON A PRELIMINARY ARCHAEOLOGICAL SURVEY: BRITANNIA BAY TO STOMPNEUS BAY

1. INTRODUCTION

This report was commissioned by Steyn Larsen en Vennote on behalf of their clients. It was also requested that the report be prefaced by some background comment on the importance and nature of archaeological sites.

Conservation of plants, animals, habitats and environments - and here the habitat of prehistoric humans and animals is included - must meet a dual function. It must provide long-term security for the ecosystems which are directly or indirectly exploited by people so as to meet the current and future needs of human society. In the case of archaeology it must also meet the moral obligation of humanity, as the super-dominant species on Earth, to ensure the survival and/or study of Cultural Resources in the form of archaeological occurrences. The need for formal planning and management to ensure the survival of both the natural systems we depend on and exploit and our cultural resources is important.

THE IMPORTANCE OF ARCHAEOLOGICAL SITES

In the southern African context archaeological evidence provides the only information on the existence and activities of prehistoric indigenous peoples. Archaeological evidence also supplements the scanty documentary information which was recorded by the early explorers, travellers and colonists from 1488 onwards.

Coastal sites, especially in the western and southern Cape, are also important as some of the earliest contacts between European navigators and the indigenous peoples occurred in this region. In addition to sites at which people lived and left remains of their equipment, huts, fireplaces and food debris, human burials are often found in the coastal dunes. Such skeletal remains are important in our continuing quest to understand the biology of the indigenous peoples of the region during the various phases of their sociocultural development.

Systematic archaeological research has been carried out in South Africa for only about the past 60 years. During this time, and especially in the last 40 years, research development has resulted in the use of increasingly sophisticated methods, including radiocarbon dating and the study of stable carbon isotopes in human bones to determine diet.

Archaeological sites, whatever their nature, together with the artefacts and other information they contain, are a finite and non-renewable cultural resource and are part of the national heritage.

All prehistoric archaeological sites as well as certain proclaimed cultural-historical sites and shipwrecks from a designated period are protected by the National Monuments Act, No.28 of 1969 as amended. Archaeological sites preserve only the durable parts of the activities that took place on them. Variable conditions have led to different components being preserved in each. Therefore every site has the potential to make a

contribution to knowledge and should be assessed carefully before its destruction can be contemplated. Sites are sensitive and, once exposed or subjected to increased pressure from development, are rapidly destroyed. Preservation or controlled, systematic investigation of such sites is therefore important if we are now, and others in the future, to obtain a better understanding of how the multi-cultural past of South Africa has contributed to the present and may do so in the future.

There is, therefore, a need to preserve archaeological sites. Unfortunately, however, the continued and increasing demand for land developments of various kinds, particularly along the coast, results in the large-scale destruction of such sites.

1). There are relatively few archaeologists in South Africa and they are committed to their research for which funding is extremely limited

2). The problem is compounded by the fact that in many cases there is a lack of archaeological planning by developers places undue pressure on archaeologists who cannot therefore plan ahead.

3). The problem is compounded by the fact that in many cases development commences before archaeologists are advised or consulted, and sites are then destroyed before any meaningful research can be included in existing programmes.

The solution lies in adequate forward planning and consultation with archaeologists to assess localities and to do any archaeological research that is necessary. Major institutions such as The South African Museum and the University of Cape Town have contract archaeology offices which can assist in the planning for and surveying of areas for development.

Coastal housing developments introduce increasing numbers of people to an area. This occurs firstly, during the construction stage and secondly, with the arrival of the new inhabitants. Increased population heightens the pressures on archaeological sites over a wider area than that covered by buildings or individual properties. The negative result of construction, particularly when digging is involved, is obvious. On the other hand some important archaeological sites have been exposed during construction work. Provision should be made for the study of such discoveries, however, or their potential is nullified. Careful forward planning, including the pre-construction involvement of archaeologists, and control during the construction stage can limit the extent of damage to archaeological sites.

After completion of the development the potential danger to archaeological sites may still remain and strict management controls may be required over the longer term. Leisure activities such as braais and the increase in the number of people introduce new hazards to the area. In areas such as the West Coast where the natural vegetation is sparse, and where the sand is mobile if exposed, the short-term threat to archaeological sites is greatly increased by uncontrolled movement of people and the effect on vegetation cover of trampling and of veldfires which can result from their presence. Preservation of vegetation cover and provision of controlled access from housing to recreational areas will help to maintain stable dunes and to reduce the danger of wind erosion which rapidly exposes and destroys archaeological sites.

SITE VISIBILITY

Because of their stabilizing effect on the sandy substrate, as well as their humic content and moisture-retentive quality, archaeological sites, and shell middens in particular, are likely to become vegetated.

As a result, not all archaeological sites are readily visible to the observer. The density, height and type of natural vegetation can affect the visibility of archaeological sites.

The dense scrub and inland vegetation effectively mask the presence of surface archaeological sites.

Drift-sand areas and dunefields often contain sites because sand movement and erosion remove overlying sediments and expose underlying archaeological sites.

PREDICTABILITY OF SITE LOCATION

Generally, sites are located at a convenient distance from available resources such as food or water or a source of raw material for the manufacture of artefacts. This distance is also governed by such factors as the availability of shelter, prevailing wind, aspect or visibility. Since environments have changed, the present-day availability of resources cannot always be used to predict the location of archaeological sites.

However, in the light of what is known from the distributions of sites on the West Coast, it can be predicted generally that archaeological sites will occur near outcrops of intertidal rocks, in caves or rock shelters or where rocky outcrops provide shelter and wherever Middle and Upper Pleistocene calcretes and ferricretes are exposed.

2. TYPES OF SITES

The prehistory of southern Africa is conventionally divided into three Stone Age periods: Early, Middle and Later. The Iron Age, which relates to settlement by black peoples in the eastern and central regions, does not occur in the western Cape.

EARLY STONE AGE

Early Stone Age sites, usually represented only by stone artefacts and debris and very rarely with preserved bone. It should be noted that one of the most important Early Stone Age/fossil bone occurrences in Africa is in Middle to Late Pleistocene sands in the vicinity of Langebaan (Singer & Wymer 1968; Klein 1978). A problem in the study of Early and Middle Stone Age occurrences in particular is the difficulty in distinguishing between human activity and food remains and bones left on a surface by larger carnivores or scavengers, both of which can occur on the same surface over time (Avery 1988).

MIDDLE STONE AGE

Middle Stone Age sites are also usually represented only by stone artefacts and debris but on the west coast may also be associated with fossilized shells and animal bones (Mabbutt *et al.* 1955; Klein 1976; Volman 1978). Such sites are most often in the open along this stretch of coast but they are known to occur in rock shelters in other parts of the province (Schweitzer 1970; Singer & Wymer 1982). Again, it is possible that subsurface sites containing important information may be exposed during construction work.

LATER STONE AGE

Later Stone Age sites are more recent and therefore natural destruction is not as great as for sites from earlier periods. They are generally numerous because they are on or near the surface and therefore tend to be more visible. These may occur in different forms:

Shell middens. Shell middens are the most obvious archaeological remnants on the coast. Shell middens are heaps of food and artefactual debris left by people (Parkington 1976; Robertshaw 1978, 1979; Schweitzer 1979). Shell middens may vary in size from less than one metre in area to more than 0,5 hectare in extent. Most middens contain bone, stone artefacts and pottery as well as marine shell and are usually the most highly visible sites. Their size and frequency are greatest near the shore, particularly in the vicinity of rocky inter-tidal zones. When examining shell middens, it is also necessary to consider the surrounding areas in which people lived and conducted everyday activities, including features such as huts and fireplaces. Unless this is done the information that can be obtained from such sites may be biased. Because shell middens are usually associated with beaches or dunefields which are unstable they are often exposed by wind. Where conditions in the past were suitable middens may extend almost continuously over long distances of coastline.

Fish traps. Fish traps are artificial tidal pools constructed of boulders in the intertidal zone of rocky shores (Avery 1975). In the recent past some examples were rebuilt and used by local landowners.

Graves. Graves are often found in or near shell middens. They are sometimes marked by a cairn of rocks, though this may only occur where the depth of soil was insufficient for adequate burial.

Grave goods are rare, and it is consequently of great importance to record them and their exact context as they provide information on aspects of life and death which is not otherwise available.

3. ARCHAEOLOGICAL SURVEY.

OBJECTIVE

The primary objective of the survey was to locate, identify and plot on maps any archaeological or historical sites in the area of the proposed development. It was anticipated that sites or artefacts from the Middle and Later Stone Age periods would occur in the proposed development area and that Early Stone Age sites would not be found in the area.

SURVEY METHOD

The survey consisted of a detailed examination of existing records in the South African Museum for archaeological or historical sites. This was followed by a comprehensive survey, on foot, of the areas to be developed. Map 1 shows the extent of the area and indicates the positions of the sites located.

ENVIRONMENT OF THE AREA

Mollet *et al.* (1984) have identified the vegetation of the area as West Coast Strandveld which consists of broad-leaved shrublands on the coastal calcareous sands interspersed with fynbos vegetation on the inland areas. The coastal formation is dominated by a sandy beach interspersed with rocky outcrops.

RESULTS

The time-span of the sites located in this survey is relatively recent in terms of the million or so years of human existence in southern Africa.

Twelve sites were located in four distinct areas. Site group 1 is on the dune crests in the vegetated dunefield in erf 3. Site groups 2 & 3 are at the southern end, and site group 4 is at the northern end of erf 1 Stompneus Bay (see Map 1). All site groups are marked by a wooden stake approximately 50 cm high with the number and the letters *SAM*.

ERF 3

SITE GROUP 1

This comprises two middens within the area shown on map 1.

Midden 1 (Figure 1). An extensive shell midden extending on both sides of the track which crosses the dune ridge in an easterly direction. The midden consists of mussel, limpet and whelk shells and a small number of quartz flakes, some pebbles and a few beach cobbles. The site marker is close to the track.

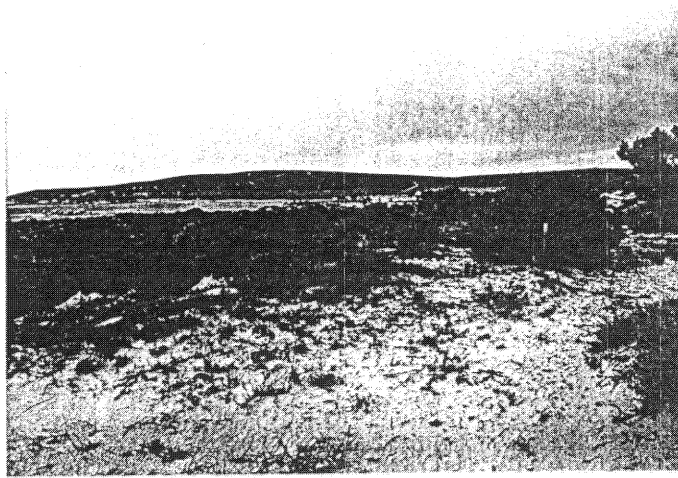


Fig. 1.

Midden 2. A small midden comprising mussel and limpet shells together with a quartzite core and associated flakes.

ERF 1 STOMPNEUS BAY

SITE GROUP 2

This comprises seven closely spaced middens.

Middens 1-4 (Figures 2,3 & 4). A small deflated midden consisting mainly of limpet shells but with some quartzite chunks. This is part of a suite of similar sites extending on both sides of the dune crest in a north/south direction. The site marker is at the crest of the dune. Some 20-30 m south is a midden with *in situ* layer (figure 4). The shell from this layer extends down the dune towards the beach.

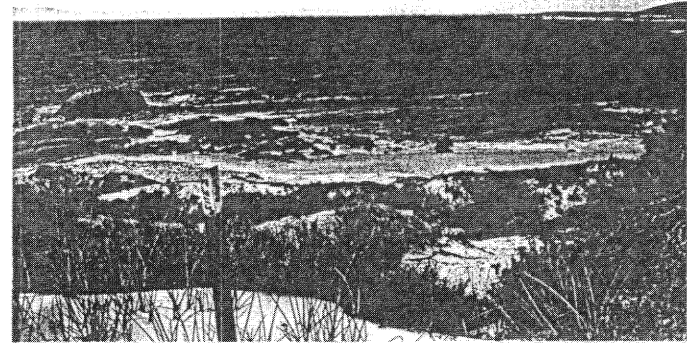


Fig. 2.



Fig. 3.

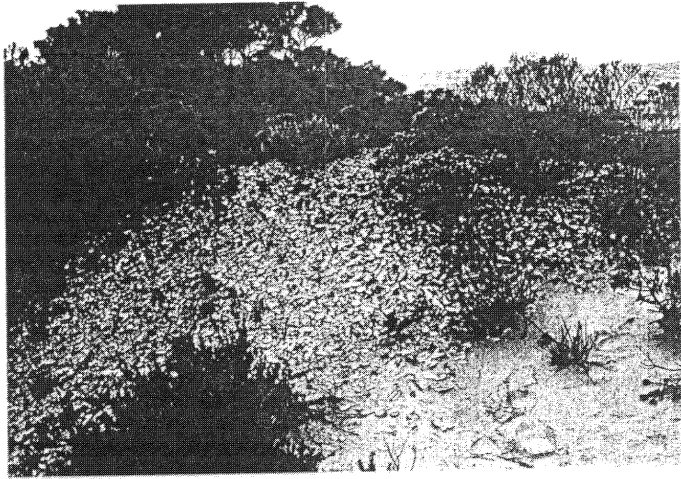


Fig. 4.

Midden 5. A small deflated midden comprising mainly broken mussel and limpet shells in a sterile sand valley about 30-40 m west of the main group.

Middens 6-7. Two deflated mainly mussel and limpet shell middens. The first lies about 25 m west of midden 5 on the east slope of the next dune ridge. The other one lies a further 30 m west at the edge of the track leading to the beach.

SITE GROUP 3

This comprises a suite of very diffuse and deflated middens in the vegetated dunes in the vicinity of the geological test pit. The middens are mainly limpet and mussel shells (Figure 5) but two lower grindstones were noted. The marker is on the crest of the high dune ridge which forms the centre of the complex.

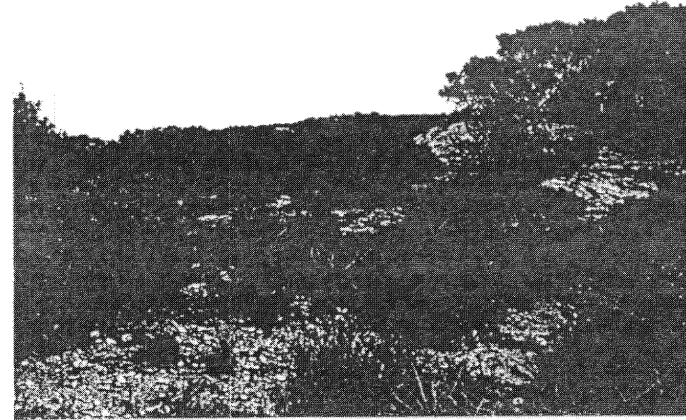


Fig. 5.

SITE GROUP 4

This group of three sites lies at the northern end of the area in the dune field near the marine beacon.

Midden 1 (Figure 6).

This midden consists of an eroded scatter of limpet shells and some quartzite cobbles sloping towards the track on the east side of the dune ridge. The marker is at the top of this site.

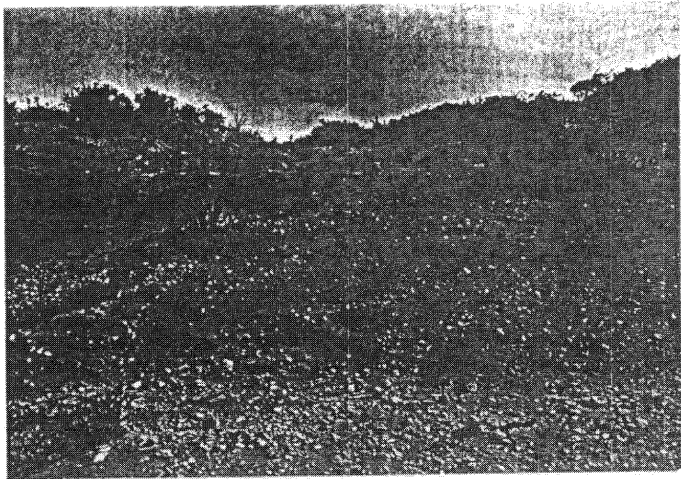


Fig. 6.

Middens 2-3 (Figure 7).

This comprises two adjacent middens consisting mainly of limpet shells eroding down the dune slope.



Fig. 7.

ERF 2 Shell Bay

The flat area behind the beach contains extensive areas of highly fragmented shell. This is also evident in the dune molecat mounds but the composition and fragmentation of shell is identical to the to the other areas and does not necessarily indicate subsurface deposits.

ERF 1 WEST

In the dune area on the western side of Shell Bay Point are extensive scatters of mussel shells which are most likely the result of gull-dropping, not of human activity.

DISCUSSION

Archaeological sites preserve important information that can be used to reconstruct aspects of past human behaviour, environments and human response to the changes in environment.

All of the sites located date to the Late Holocene and are younger than 2000 years old. Sites within site groups 2-4 are considered to be of relative importance in that they contain material which can indicate patterns of resource utilisation. In addition there is a possibility of human remains being recovered from them.

There is a possibility of further archaeological sites being found in all areas once land levelling or subsurface work commences.

4. CONCLUSIONS

1. Once the information in this report has been integrated with the development plans it will be possible to make definite proposals regarding the steps to be taken regarding excavation, salvage or protection of the sites.

At this stage it is important to note that the area within Erf 1 Stompneus Bay is sensitive to erosion and human interference as it contains sites with potentially important archaeological material and information which will be threatened by development.

2. It must be borne in mind that a development of this nature will create immediate and future additional pressure on an already fragile environment.

3. If, however, in designing the development, attention is given to the location of the housing units and amenities in relation to the archaeological sites potential damage may be reduced.

4. The possible exposure of further finds during excavation/construction in the dune areas in the vicinity of all the sites should not be overlooked as the majority of those found have been exposed by wind removal of the overlying sands. Any land clearing or levelling operations in the dunes are likely to uncover further archaeological sites.

5. RECOMMENDATIONS

1. No development be undertaken on Erf 1 Stompneus Bay prior to archaeological investigation of the sites.
2. In consultation with archaeologists who will undertake the work, provision should be made in the development budget for systematic sampling of the sites in the dune valleys on Erf 1 Stompneus Bay.
3. Once development is initiated, an archaeologist must be employed to monitor the area whenever land clearing operations and excavations are undertaken in order to assess the potential for and importance of any sub-surface finds that may be exposed.
4. During all construction activities (roads, trenching, land-clearing, etc.) care should be taken to minimize damage to known archaeological sites.
5. Any new archaeological occurrence must be reported immediately so that its importance can be assessed.

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