

**REPORT ON THE SKELETAL REMAINS FOUND AT
JACOBSBAAI SEA PRODUCTS FARM (ERF 108),
WESTERN CAPE**



Prepared for Jacobsbaai Sea Products cc.
February 2008

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Executive Summary

This report describes the rescue excavation and exhumation of a prehistoric burial that was accidentally unearthed during trenching activities at the Jacobsbaai Sea Products Farm, Vredenburg (Erf 108). On inspection by a local forensic pathologist, the burial was considered prehistoric and thus protected under Section 36 of the National Heritage Resources Act (1999).

Cape Archaeological Survey cc. (CAS) has since exhumed the skeletal remains of a single prehistoric burial. A forensic assessment of the skeleton suggests that the remains are of a single adult female, likely of KhoiSan ancestry. These remains are currently housed at the Department of Human Biology, Faculty of Health Sciences, University of Cape Town.

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1. Introduction and Background

This report documents the exhumation process and forensic evaluation of a prehistoric burial situated on a portion of the Jacobsbaai Sea Products Farm in Jacobsbaai, Vredenburg. The site is located on portion 2 of portion 18 of the erven, Erf 108 (Vide Figure 1.00).

During the excavation of a trench for a new water tank and filter, the developers at the Jacobsbaai Farm (Vide Figure 1.01) accidentally unearthed the skull of a single unmarked prehistoric burial on the 17th of January 2008. The police (SAPS - Case No 60/01/08), were contacted following the discovery who then informed the local forensic pathologist, Dr. Abrahams (Vide Appendix 1: Letter from Dr. Abrahams to Prof. Morris). Due to the antiquity of the burial, Dr. Abrahams withdrew his services from the site, passing them onto Professor Morris of the University of Cape Town (Vide Appendix 1: Letter from Prof. Morris to Deidre). With the recommendation of Prof. Morris, Cape Archaeological Survey (CAS) was appointed to take over the process of excavating and exhuming the archaeological burial. Photographs of the site and the location of the burial (See Figures 1.01, 1.02 and 1.03) were sent to CAS by the farm manager, Jonathan Venter, requesting professional assistance to handle and remove the human remains from the property.

The area where the burial lies was assessed to be very unstable, due to the constantly shifting sand dune and the action of the nearby water tank, which has been overflowing due to power outages. On the basis of the conditions around the burial, it was therefore decided that CAS act immediately and perform a rescue excavation and exhumation of the human remains.

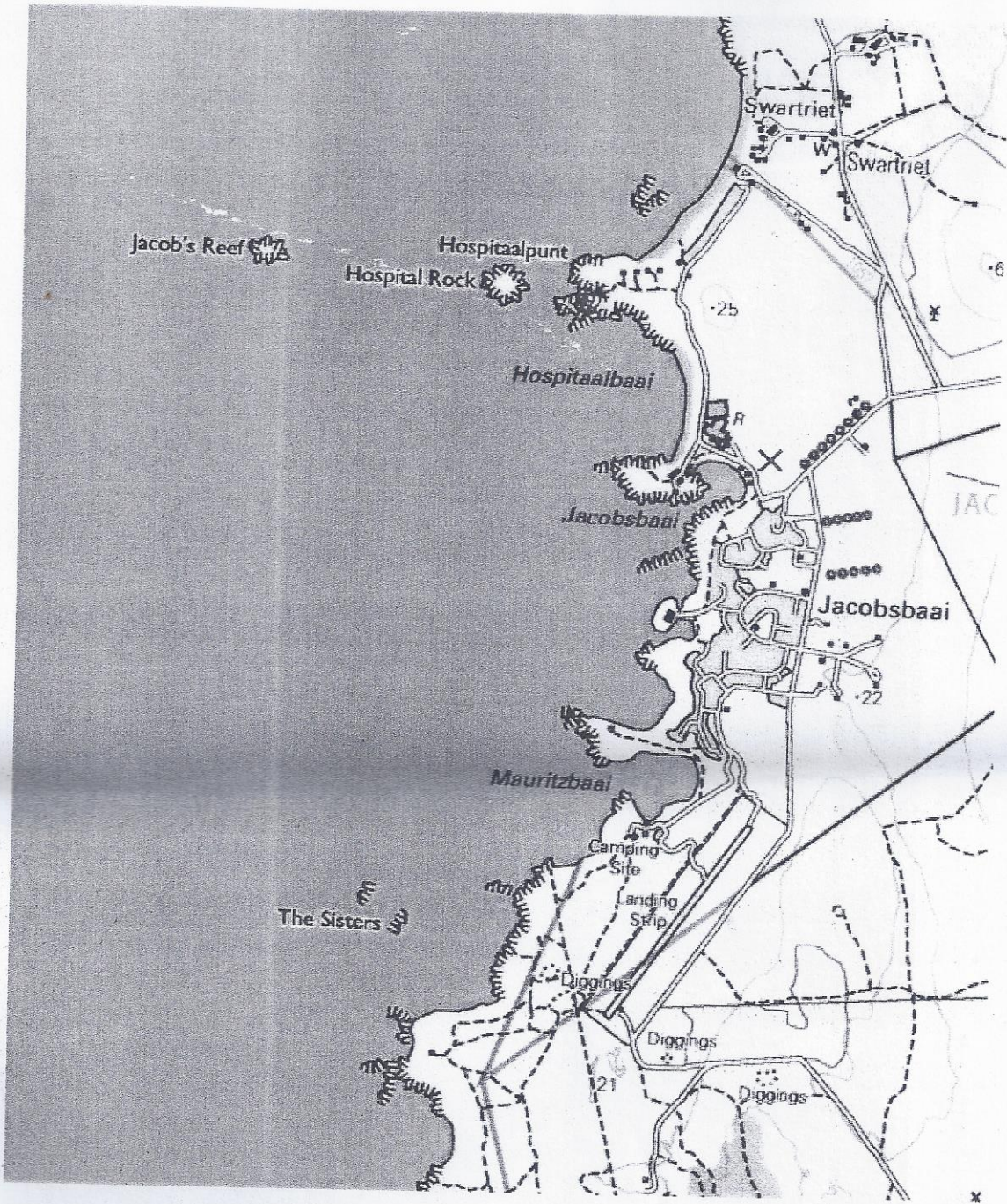


Figure 1.01 Geographical location (red cross) of the Jacobsbaai Sea Products Farm in the Vredenburg area (Map Ref 3217 DB & DD Vredenburg).

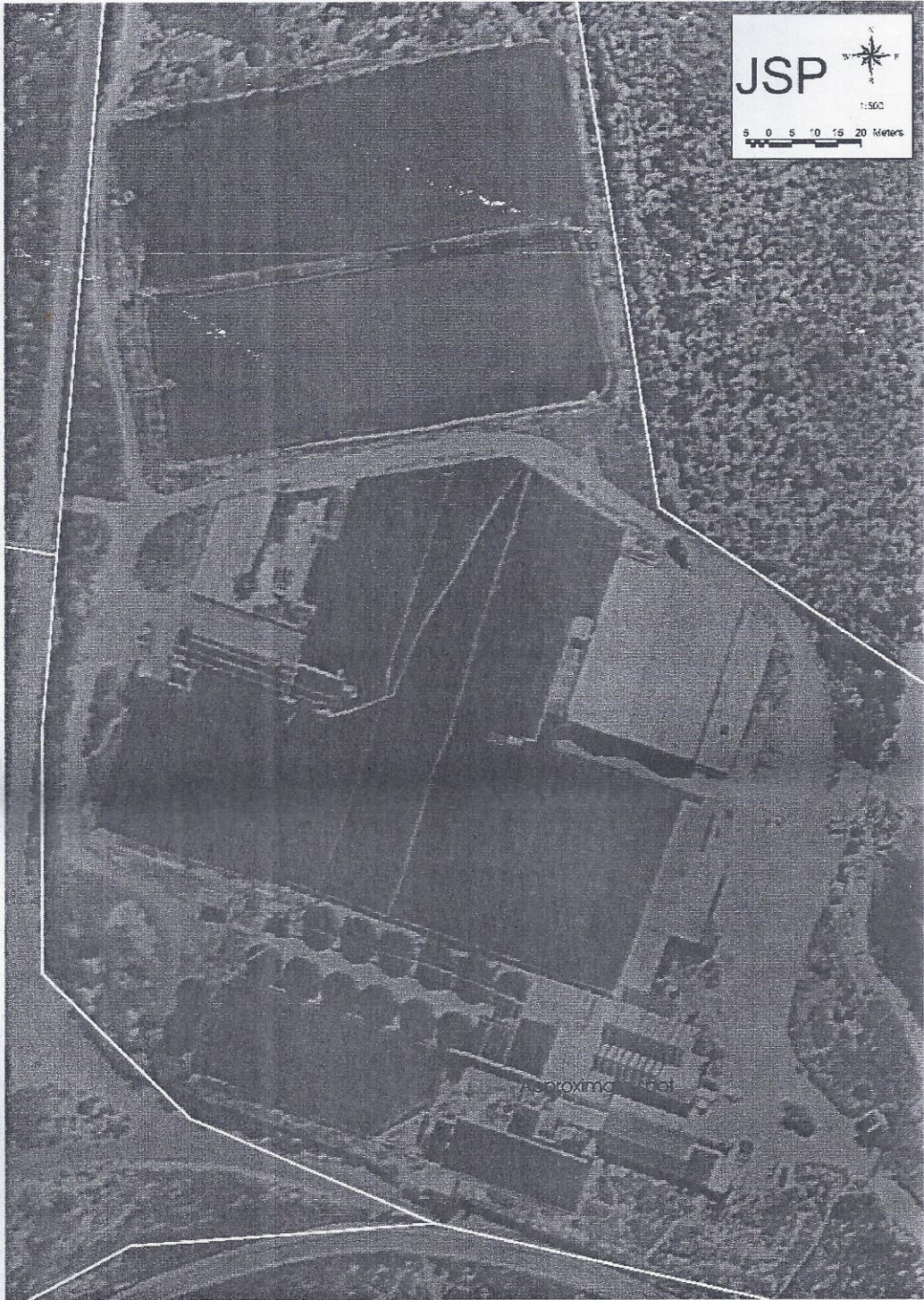


Figure 1.01 Aerial photograph showing the approximate location (red dot) of the burial at the Jacobsbaai Sea Products Farm

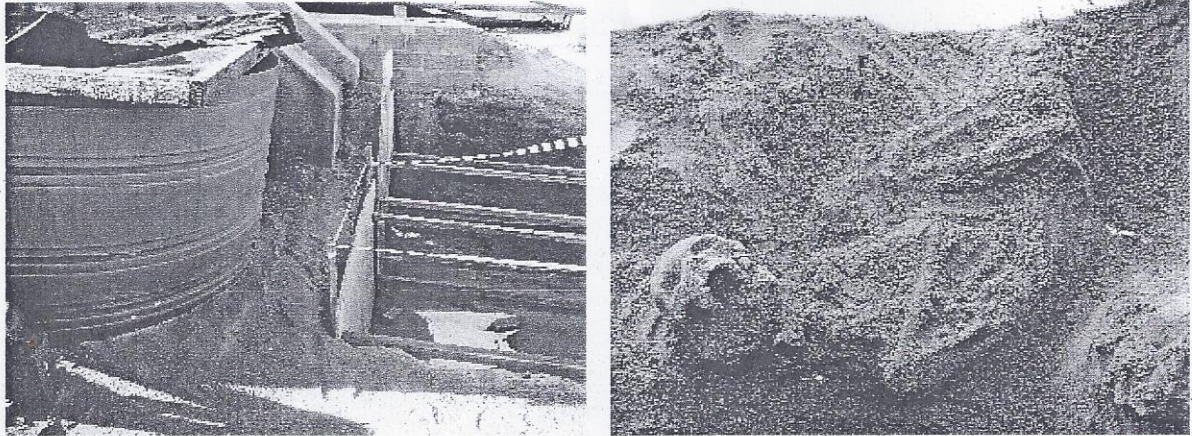


Figure 1.02 Photograph showing the close vicinity of the plastic water tank to the burial (Figure 1.03). The burial lies covered underneath the white correx at the bottom of the trench.

2. Method

On 22 January 2008, Nonhlanhla Dlamini a CAS representative excavated and exhumed the skeletal remains at the Jacobsbaai Farm. Upon arrival at the site, measurements of the already-dug trench, where the burial lay, were taken. The trench measured 4.45 metres in length, 2.60metres wide and about 1.10 metres deep. The burial, which lay in the northeast quadrant of the trench, was found to be in its original position, with the exception of the cranium, and there had been no disturbance prior to the excavation of the current trench by the developers at the site. On completion of the exhumation, the area where the burial was found, including the surroundings were also monitored and examined for the presence of additional burials. The developer and the farm manager were further instructed to inform CAS should they encounter any more burials on the site while earthmoving activities were underway.

Burial Style

The body lay in a foetal position with the legs and arms in a flexed position (Figure 1.04). The orientation of the body was in a southwest direction, with

the head in the west. The individual had been interred on her left side with the right side towards the ground surface.



Figure 1.04 Position and orientation of the burial

3. Demographic Profile

The osteological data recording standards from Buikstra and Ubelaker (1994) are used as a guide in this report

3.1 Preservation and Condition:

The bones appear to be the nearly complete skeleton of a single individual. The bone preservation is relatively poor and the decomposition is complete, with no signs of remaining flesh. The 'bulk' of the cancellous bone has almost fully decomposed. The bones show no signs of exposure to nature, i.e. all the decomposition took place underground. The bones are not greasy and there was no odour of decomposition. From the state of bone preservation and decomposition, the time of death is likely to be more than 100 years and probably more likely within the last 200 to 500 years before discovery. There was no sign of carnivore/scavenger disturbance on the bone.

3.2 Sex Determination:

Generally, the remains of this individual were very gracile and small in size. The greater sciatic notch of the pelvis was wide and the sub-pubic angle obtuse. Cranio-facially, a small-sized mastoid, flat nuchal crest, smooth supra-orbital ridge and a flat glabella were observed. The mandible had a round chin with a slight gonial eversion. In conclusion, the morphological features of the pelvis and cranium pointed towards a female individual.

3.3 Age at death:

All osteological features indicated a mature individual. All long bones were fused at the ends. Cranial sutures had begun the process of obliteration, especially the coronal suture and minimally the sagittal, which suggested an age older than 30 years at death. The vertebral column demonstrated signs of degenerative joint disease, osteoarthritis, in the cervical vertebral region. The above features provided an age range of between 30 and 55 years at death.

3.4 Health and Lifestyle:

Morphological signs of pathology were also examined on the dental and skeletal elements in order to assess the health and lifestyle status of this individual. No signs of growth abnormalities were evident, but evidence of some dental disease was present; mild periodontitis (widespread) as well as mild calculus was observed on the posterior teeth. None of the teeth present had carious lesions; and no teeth were lost antemortem. Disruption in the growth process is attested by the presence of linear enamel hypoplasia on the cervical third of the first mandibular premolar. This episode of metabolic insult was estimated to have occurred between the ages of four and six years. Skeletal manifestation of iron-deficiency anaemia, cribra orbitalia and porotic hyperostosis, were not present on the eye orbits and ectocranial surface, respectively. In general, this individual appears to have had a healthy lifestyle as indicated by the rarity of pathological indicators on the skeletal remains.

4. Population Affinity

Identification of race from single individuals is always difficult, but no cranial features on this individual were consistent with an African/Negroid genetic origin. There was no evidence to be more precise than to say that her facial and cranial morphological features were consistent with someone of KhoiSan genetic ancestry and less likely of Caucasoid genetic origin.

Due to the poor preservation of the remains, with most if not all of the long bone ends destroyed, it was not possible to reconstruct the stature of this individual. The burial style was consistent with that noticed among prehistoric hunting and gathering societies in southern Africa (Morris, 1992). The relatively heavy wear of the anterior teeth with some chipping of the enamel, as well as relatively no dental disease such as caries, was also suggestive of an individual relying heavily on a hunter-gatherer dietary subsistence (Molnar, 1971; Larsen, 1997; Morris, 1992). The cranium of this individual has a very distinctive pentagonal shape, often seen among hunter-gatherer people. All of the above features are consistent with an individual of KhoiSan/'Bushman' ancestry (Morris, 1992).

5. Cause of Death

No sign of cause of death can be identified from the skeletal remains. The cranium and post-cranial skeleton are in good condition and show no evidence of peri-mortem fracturing. There is evidence of a mild infection on the ectocranial surface i.e. a healed periosteal lesion on the frontal bone. However, this infection was healed at the time of death.

6. Associated Clothing and Cultural Remains

There was no clothing and/or coffin found to be associated with the burial. However, a stone flake measuring 2cm in length was found by the position of the right foot.

7. References

Buikstra JE and Ubelaker DH.1994. Standards for Data Collection from Human Skeletal Remains. Arkansas Archaeological Survey Research Series 44.

Larsen CS. 1997. Bioarchaeology: Interpreting behaviour from the human skeleton. Cambridge Studies in Biological Anthropology 21. Cambridge University Press. United Kingdom.

Molnar S. 1971. Human Tooth Wear, Tooth Function and Cultural Variability. *American Journal of Physical Anthropology* 34: 175-190.

Morris AG. 1992. The skeletons of contact: A study of the protohistoric burials from the Lower Orange River Valley, South Africa. Witwatersrand University Press.

8. Appendix 1

Supporting Letters from the Forensic Pathologist and the Department of Human Biology, University of Cape Town



Enquiries: Dr. D.K. Abrahams
 Reference: Skeletal remains - Langebaan
 Date: 2008-01-17



Republic of South Africa
 Provincial Administration of the Western Cape
 Department of Health

To: Prof. A. Morris

Re: Skeletal remains of archeological or historical interest – Saldanha bay CAS: 60/01/08

Scene attendance of human skeletal remains

Dear Prof. Morris

I attended a scene pointed out by Forensic Officer, Mr. D. Murray and Rene van den Hoek (Manager of Jacobsbaai Sea Products) on Thursday 17th January 2008 at ±11h30.

Skeletal remains, buried longer than 60 years, possibly of historical and or archeological interest were found in a fetal position in a depth of ±1.7m in compacted chalky sea sand where excavation was taking place for placement of a water tank.

The remains appear intact except for damage to the skull occurring during digging. The remains appear to be that of a khoisan male, or mixed race male.

It is my understanding that remains of archeological interest are to be dealt with by South African Heritage and Resources Association and Forensic Pathology Services will as from today withdraw from the scene.

I will inform Insp. Arendse at Saldanha bay SAPS to ensure the site is further protected until excavation takes place by a qualified archeologist.

The CAS number is Saldanha CAS 60/01/08.

Thank you for your advice regarding the above matter.

Yours sincerely,

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