N ANCIENT BUTCHER SITE IN THE DUNES

7453

### OF THE NAMIB

B. H. Sandelowsky, Desert Ecelogical Research Unit, Gobabeb

# INTRODUCTION

 $\mathbf{A}$  OUT Rivier or '/U//aib', in the local Nama dialect, is pronounced with an initial dental click and then a lateral click. It is the name of a small Tophaar village situated at the confluence of the Sout Rivier (the salt river) and the Kuiseb river. The main streambed makes a sharp bend here with dunes accumulating on its southern bank and the barren, stony desert extending northward. Annual floods wash away the red dune sand, which falls into the riverbed during the dry months, and thereby effectively prevent the dunes from crossing onto the northern bank. This point is well illustrated further west where the river does not carry water every year. Between Rooibank and the ocean the dunes have crossed the old Kuiseb bed forming the dune strip between Walvis Bay and Swakopmund.

For many years the Kuiseb has not reached the sea. Even after such good rains as were experienced in 1973-74 dunes blocked the flow of water at Wortel or 'Garis' (initial dental click), an old Topnaar settlement a few miles from Walvis Bay. The floods of 1933-34 were high enough for the river to pass through to the sea and according to a missionary's report the year of 1893 saw a similarly good rainy season. Still earlier reports of the Rheinische Mission indicate that over a hundred years ago conditions along the lower Kuiseb were better than today when herds belonging to the Topnaar were grazing in the vicinity of Rooibank. For the last 10 years (1963-1973) the surface water of the river did not penetrate beyond Rooibank.

Looking at the map of the central Namib Desert a situation similar to the one at Rooibank where the dunes block the river, shows itself at Tsondap Vlei. Here dunes moved across the course of the Tsondap River. The progressive pattern of the situation at Tsondap, Rooibank and Swakopmund reflects a gradual encroachment of the sand dune desert. Early Stone Age tools - 60 000 -200 000 years old, which occur in the dune area where younger tools are not found, furthermore indicate that environmental conditions in the central Namib have been deteriorating.

### THE BUTCHER SITE AT SOUT RIVIER

On the windward side of the first ridge of dunes at

Even after such good rains as were experienced in 1974 dunes blocked the flow of the Kuiseb before it reached the sea. (Photo: H. Scholz)

Sout Rivier an accumulation of cobbles, chipped stone and fragments of bone were found. When the stones were lifted the sand beneath them was of dark grey colour due to an admixture of ash and minute pieces of charcoal.

An excavation in this loose dune sand, which is being set in motion by a strong south-west wind every afternoon, is an unfeasible proposition without sophisticated technical assistance. Consequently it was decided to map the position of each object on the surface. A grid of one meter squares was laid out so as to enclose the full extent of this occurrence. The grid measured 20 m by 10 m, with the long axis parallel to the crest of the dune.

With only one or two helpers the work of plotting every item within a single meter square on graph paper and then collecting and labeling it, took the better part of a morning, at the end of which strong wind prevented further work. It nevertheless provided one with a sense of achievement to see the worked area picked clean of all finds leaving behind only many, many small marks in the sand attesting to the hundreds of times that thumb and forefinger had picked up a chip of stone or bone. Beyond the lines of string demarcating the worked squares the surface was covered with a dense scatter of flake fragments, bone splinters, pebbles, cobbles and ostrich egg shell fragments. How great the surprise the next day when the "clean", worked squares were again littered with artefacts!

The marks of the previous day's activities had been blown away completely - finger marks, foot prints and tyre tracks — and a fresh surface of finds was exposed.

The work of plotting continued in the areas not previously worked and the plan therefore reflects the site as it was first seen. Possibly that surface represents only the top of a much larger mound of midden material. As work proceeded at the site it was repeatedly noticed that the wind uncovered pieces of bone and stone many metres beyond the boundaries of the grid. Wherever a heavy object such as the wheel of the car or a bucket had sunk a few centimetres below the surface of the dune sand, the wind, after blowing for a while would expose minute pieces of bone.

The finds collected from this site have not yet been recorded quantitatively. The following description merely serves to indicate the type of material found here.

## Stone

Large waterworn cobbles, some too large to be picked up in one hand, are the most striking feature in this

An accumulation of cobbles, chipped stone and fragments of bone were found on the side of a dune on the southern bank of the Kuiseb River. (Photo: B. Pendleton)





assemblage. Most of them are a dark, fine-grained dolorite or diorite quartz and mica schist. These stones had to be carried to the site unless the river in an earlier course deposited some nearby which are now covered by the dune. Today the closest accumulation of such large rocks occurs 3 km downstream from the site. Signs of working on the surface of these stones are represented by pecking marks and fractures. They may have been used as hammers and/or anvils to break up large bone. Breakage, often in the form of well defined flake release scars, is common on these large artifacts. Accordingly, there also are numerous small chips and chunks and a few well formed flakes which could have come off the large cores. Knives in the form of stones with sharp cutting edges probably were the most basic requirement at this site.

For the purpose of dismembering an animal carcass no carefully shaped tools such as scrapers would have been required, nor do they occur here. A number of stones have flat or slightly concave grinding surfaces and well formed pestles are found as well. Maybe an early bone meal factory? . . .

#### Bone

The bone occurred in the form of minute fragments, too small to be identified according to morphological characteristics. Many of these pieces are partially or completely mineralized. This could imply considerable age but under certain conditions mineral replacement can also take place within a short period of time. An investigation into the local conditions should shed more light on this question.

A few tooth fragments resemble the teeth of large herbivores such as gemsbok or zebra. Both animals can be seen in the riverbed today, particularly towards the end of the dry season.

Ostrich egg shell fragments were also found and isolated ostrich egg shell beads represent the most formal type of artefact at this site.

#### Wood

Small pieces of wood which may also be partially mineralized were found as well. These fragments too, are so small that only the application of micro-techniques can hope to achieve identification. The prospect of finding more plant material is an exciting one because this would provide interesting comparative material with the plants growing in this area today. From this comparison in-

Well defined flake scars are common on these large stones. (Photo: B. Pendleton)



ferences can be made about the environmental conditions in the past.

Neither glass nor metal have so far been found at this site.

## DISCUSSION

When the Sout Rivier site was first investigated it was suggested that it might represent a recent kill site. Consequently the inhabitants of the village were questioned about the place, but they denied any knowledge of it. This information is, however, hard to assess since strict laws against hunting have been enforced in the game park in recent years and people may be afraid of acknowledging awareness of game having been killed in the vicinity of their village. On the other hand the fossilized appearance of the bone chips, the wood and the presence of ostrich egg shell beads to the exclusion of glass and metal support an older date for this site which may well place it beyond the memory of a modern population.

The earliest metal in the vicinity of this site is scrap metal found on coastal shell middens. According to the oldest dateable artefact of this sort, a Dutch East India Company coin, this dates back to 1746. On these grounds a plea can be made that the Sout Rivier site predates at least the early part of the 18th century and so far there is no evidence contradicting a date of a few thousand years or even a few hundred thousand years. The earliest sites in the calendar of human activities are butcher sites where unspecialised tools were made on the spot and abandoned once they had served their immediate purpose. Heavy duty tools would be awkward to carry around and stone age hunters had enough know-how to fashion simple tools rapidly when the need arose.

The most obvious problem to be solved at Sout Rivier concerns the work procedure to be applied to a site situated on the slope of a moving dune. Interesting suggestions have been made, all of which require considerable man-power and equipment. If this site turned out to be somewhat like an iceberg this would be well invested. The question is: Who will invest the money? — Like other young countries we experience a paucity of research funds and personnel. On the other hand rapid change marks modern development and it may be soon that more people realize the necessity of understanding the processes that have been and are shaping our environments.

It is equally important to study the rules that govern the behaviour of our species.

### ACKNOWLEDGEMENT

Thanks are due to the Council for Scientific and Industrial Research and the South West African Department of Nature Conservation for enabling the investigation of the history of local conditions where prehistoric human activity has left its marks, to take place.

S.W.A.-Jaarboek 1976