A 300 YEAR-OLD LIVING FLOOR IN STRATHALAN CAVE A, MACLEAR DISTRICT, EASTERN CAPE

H. OPPERMAN

Department of Anthropology and Archaeology, University of Fort Hare, Private Bag X1314, Alice 5700

*Accepted for publication September 1999

ABSTRACT

The most recent living floor in the deposit of Strathalan Cave A consists of well preserved plant remains, including numerous bundles of underground plant food. Together with faunal remains, wooden and stone artefacts and pottery sherds an unusually complete picture of hunter-gatherer activities at the site, 300 years ago, is provided.

INTRODUCTION

The Strathalan site (30.59.22S; 28.23.19E) is located in the foothills of the Drakensberg range approximately 10 km northeast of Maclear in the Eastern Cape (Fig. 1). Cave A is one of three adjacent caves occurring in the sandstone wall of a large shelter. The site is significant because a sequence of well preserved living floors has been formed by many generations of Middle and Later Stone Age occupants carrying considerable quantities of plant and other cultural materials into two of the caves (Opperman 1992, 1996a & b; Opperman & Heydenrych 1992). Although the presence of botanical remains has been reported from Eastern Cape Later Stone Age sites (Deacon 1976; Binneman 1997) spatial distribution maps of cultural materials have not been drawn. In Cave A the material record of the last Stone Age occupants is thinly covered by soil, and this together with very dry conditions in the cave created ideal circumstances for studying cave space utilization and the distribution of cultural remains. During several fieldwork periods from 1994 to 1997 the layer of topsoil was removed and the cultural materials were left in position except for small samples of bone and plant materials which were taken for identification as well as dating purposes. This report describes the floor as it was seen after the excavation.

THE DEPOSIT AND THE EXCAVATION

Cave A is 10 m wide at the entrance and 20 m deep. The deposit forms a mound towards the front of the cave. Approximately half of the midden at the entrance was



Fig. 1. Location of Strathalan and neighbouring sites.

removed as fertilizer in the 1930s. The remaining portion is still considerable and extends undisturbed towards the rear of the cave. The caves roof is very low, mostly 1 in or less, above the top of the deposit, limiting access to the back of the cave on the northern side (Fig. 2).

topsoil were removed to reveal the living floor (Fig. 3). At the top of the midden mound dried plant materials were so close to the surface that they were visible in places. Down the mound slope, towards the rear, the soil cover was somewhat deeper (50 mm) and contained considerable quantities of goat or sheep dung. In some instances, cultural materials were mixed with the dung.

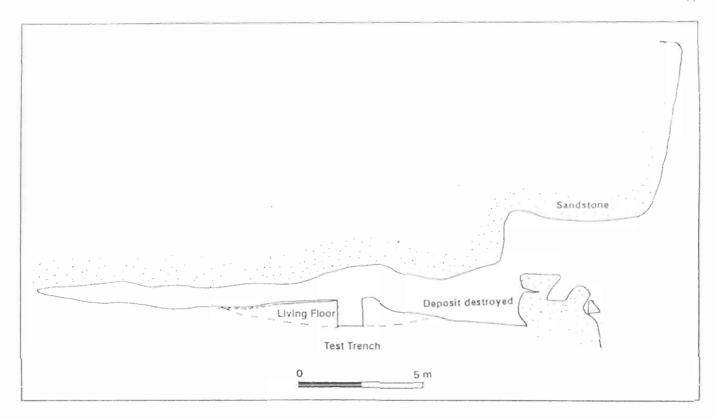


Fig. 2. Strathalan Cave A: section.

Recording was done by taking photographs of the visible materials drawing a map of the floor (Fig. 4). I believe that what is visible represents a single episode of occupation after which the band failed to return to the camp for some reason. It is expected that more remains will be revealed once the material is removed and the soil sifted. The floor is separated by sterile sand from a layer with earlier, equally well preserved occupation material dated to 2470 ± 900 BP (Pta-4634).

THE LIVING FLOOR AND ITS MATERIAL

The spread of cultural materials uncovered slants across the cave floor with fewer materials on the northern side (Fig. 4). Trampling can have a significant influence on the distribution of surface materials (Theunissen *et al.* 1998) and seeing that people and animals could only enter the rear of the cave along the northern side, loose materials would have been scuffed or dispersed out of the way.

Preservation of botanical and faunal remains is excellent and the distribution of these together with stone and wooden artefacts, pottery sherds as well as leather fragments offer an insight into activity patterning.

Plant food remains are predominantly *Watsonia* sp. and occur over most of the excavated area. Different methods were used by the gatherers (presumably women) to the stems into small bundles for easier transportation. A popular technique was that of tying a number of stems into a single knot (Fig. 4:5, 8, 11, 20, 29, 44, 64, 66, 90). Another method was to twist a single stem around a bundle of stems (Fig. 4:19, 23, 28, 37, 43, 48, 65, 91). It is a possibility that each woman had her own preferred method. The techniques, however, do not appear to be

localized except in the vicinity of a digging stick that was found in association with four bundles tied in the same way (Fig. 4:46). Plant food, with similarly tied stems, was found at Melkhoutboom (Deacon 1976). Watsonia sp. grows in the vicinity of the cave but dense stands can also be found within two hours walking distance. The flowering period for Watsonia sp. in the region is October to March, which would account for their edibility and also suggest when the cave was inhabited.

Of specific interest is the presence of sorghum heads indicating contact with agriculturalists (Fig. 4:42). Eight heads are localized in square X4 and one (Fig. 5) lies in square X2 (Fig. 4:76). One of the sorghum heads was dated to 300 ± 40 BP (Pta-7144). The stalks are all neatly cut but the sorghum is unused and it is possible that the occupants were not familiar with its preparation. Today farmers in the area plant sorghum in November and reap it in March to April. The particular band which was responsible for the living floor therefore possibly visited the cave in the late summer. The presence of calabash fragments, one of which has been repaired with sinew, is further evidence of contact with Iron Age farmers (Fig. 4:31, 78). It may be of significance that occupation of the cave was terminated at about the same time that agriculturalists appeared in the area. There is no record that hunter-gatherers used the cave thereafter.

Fourteen artefacts of wooden materials were spread over the excavated area. A complete wooden digging stick (430 mm long and maximum thickness 20 mm) (Fig.6) lies in a patch of underground plant food remains. The stick is pointed at both ends with one point somewhat flattened as if a hard object was struck during its use. The length is comparable to the lengths of three digging sticks found in

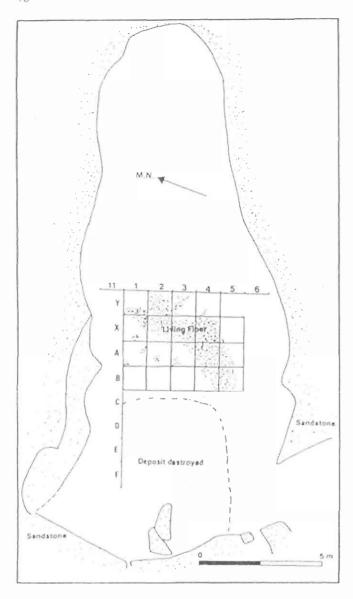


Fig. 3. Strathalan Cave A: map showing the location of the living floor.

layer 2 of the test trench dated to some 2500 years ago (Opperman 1996b). Finds of digging sticks have been recorded at Collingham Shelter (Mazel 1992) and Augussie Shelter (Binneman 1994).

Wooden pegs are short pointed implements of which four of which have been found (Fig.4:2, 12, 58, 73). Their lengths are 90, 150, 130 and 160 mm and maximum diameters are 15, 20, 13 and 15 mm respectively. The ends show evidence of crushing by blows. Similar wooden pegs were reported at Melkhoutboom (Deacon 1976). Figure 4:74 shows a sharp pointed fragment possibly of a spear (length 230 mm and maximum diameter 20 min).

Slender artefacts somewhat similar in appearance to knitting needles formed part of the wooden toolkit (Fig.4: 50, 75, 83). Two of these are sharpened at both ends and are 200 and 170 mm long with maximum thickness being approximately 5 mm. The third one is 180 mm long and also has a maximum thickness of 5 mm. Figure 4:50a shows a wooden artefact 40 mm long which is similar in appearance to bone arrow points.

Somewhat enigmatic is a piece of reed (130 mm long),

cut at both ends, with a hole drilled through one end through which a bone splinter was passed (Fig. 4:48).

Other artefacts made from organic materials are a piece of string from twisted plant fibres (200 mm long) (Fig. 4:35) and rings of twisted grass (Fig. 4:67). A small leather fragment was recovered in association with a calabash fragment (Fig. 4:32). An ostrich eggshell bead was observed in square B5 but it is not shown on the distribution map.

Nine fragments of undecorated pottery occur, spread across the living floor (Fig. 4:1, 52, 56, 59, 69, 70, 77, 81, 101). Only twelve stone artefacts, including flakes and one core, were observed. It is possible that more are hidden amongst and underneath the plant materials.

Bone fragments are mostly concentrated in squares X4, Y4, X3 and Y3 where the cave roof is very low. A small sample of these was analysed by J. Brink and included *Procavia capensis* (dassie) (4), *Taurotragus oryx* (eland) (2), *Redunca fulvorufula* (mountain reedbuck) (3). *Alcelapus/connochaetes* (hartebeest/ wildebeest) (2), *Pelea capreolus* (grey rhebuck) (3), *Ourebia orebi* (oribi) (3), *Felis caracal* (caracal) (1) and *Lepus* sp (cape hare) (1). The hunters took game on the mountain range as well as on the plains at the foothills. The bulk of the meat came from the larger antelopes as was the case at other Holocene sites that have been investigated in the North-Eastern Cape.

DISCUSSION AND CONCLUSION

The excavated section of the youngest living floor in Strathalan Cave A gives a tantalizing picture of what the cave floor looked like 300 years ago when a huntergatherer band camped there during late summer. Abundant quantities of underground plant food and game were carried into the cave showing that sufficient resources were available for subsistence. Some patterning of the material can be observed, although the hearth area has been destroyed, which is usually a focus for family activities at a camp. Apart from excavating the material further towards the back of the cave, the greater pattern, of which the visible living floor is part, remains obscure. It is further possible that the observed distribution of remains is in part influenced by the low height of the cave roof having channelled movement to one side. The living floor of matted dried plant materials with artefacts in between, nevertheless supplies information which is rarely found at Stone Age sites in the Eastern Cape.

Two different techniques were used for binding bundles of underground plant food which were carried to the cave. This could indicate the presence of at least two women in the band. The digging stick found may then have belonged to one of them. The role of plant food in the diet of hunter-gatherers is important (Deacon 1993) but the contribution of some 17 bundles and a lesser quantity of loose patches of plant food seems to be considerably less than the mear input of eleven antelope including two cland.

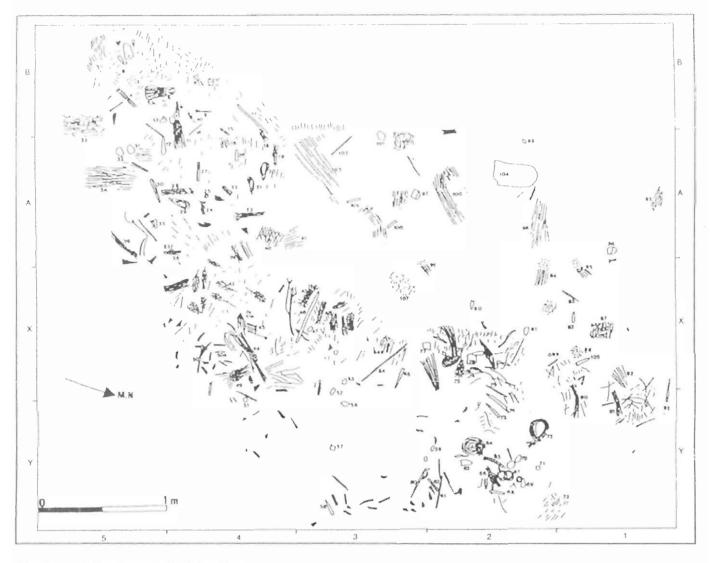


Fig. 4. Strathalan Cave A: the living floor.

The presence of sorghum and calabash fragments in the living floor is the first evidence that Nguni farmers were present in the Maclear district before the nineteenth century. It is not known were they were located but the owner of the farm testified that grain pits were ploughed over in the valley below the cave at the beginning of this century (A. Macdonald pers. comm.). The proximity of a farming community could explain why the cave was not revisited by the San bands that were present in East Griqualand until the middle of the eighteenth century (Wright 1971).

The environmental setting of Strathalan is such that hunters located there could have hunted grassland game on the plains as well as mountain game species. A hunting pattern in which larger antelopes contributed the bulk of the meat is in accordance with the pattern observed at other North-Eastern Cape sites (Opperman 1987). In the light of this observation, the viewpoint based on data from a test excavation, that trathalans was used as a plant food processing camp, with smaller antelope occasionally hunted, is not valid for the situation 300 years ago (Opperman 1996b).

The artefacts, including wooden ones, give a more comprehensive record of a San toolkit at that time than has been found at other sites in the region. The scarcity of stone artefacts observed, especially scrapers, is surprising. Quantification of stone artefacts, however, will only be possible after the floor has been removed and the soil sifted.

Comparing this Later Stone Age living floor with the Middle Stone Age living floors (dated to between 29 000 to 22 000 years ago) in adjacent Cave B (Opperman 1996a, Opperman & Heydenrych 1990) striking differences are noted. The Middle Stone Age people, living under glacial conditions, had much poorer food resources at their disposal and the floors were composed of grass patches, hearths, bone fragments, stone artefacts, leaves, twigs and very low quantities of underground plant food. The technology for stone artefact manufacturing was different and little use was made of wooden materials for the manufacturing of tools.

Although this 300 year old living floor apparently does not represent an intensive occupation over a long period of time, it does give a much more comprehensive picture of the past than the burned out and compressed occupation layers which archaeologists usually excavate. It has the potential, together with information from older living floors in the deposit, to supply data for explanations which



Fig. 5. Strathalan Cave A: a sorghum head in association with a calabash fragment, a bundle of plant food stems tied into a single knot and bone fragments.

can lead to a better understanding of the way in which Stone Age people lived in the region.

ACKNOWLEDGEMENTS

I thank the University of Fort Hare for financial support, Dr J.C. Vogel for supplying radiocarbon dates and J. Brink for the analysis of the faunal remains. I am grateful to Mr & Mrs A. Macdonald and Mr & Mrs G. Macdonald for their hospitality and allowing me access to the site.

REFERENCES

- Binneman, J. 1994. Note on a digging stick from Augussie Shelter. Southern African Field Archaeology 3:112-113.
- Binneman, J. 1997. Results from a test excavation at the Havens Cave. Cambria valley, South-Eastern Cape. Southern African Field Archaeology 6:93-105.
- Deacon, H. J. 1976. Where Hunters Gathered: a study of Holocene Stone Age people in the Eastern Cape. Claremont: South African Archaeological Society Monograph 1.
- Deacon, H. J. 1993. Planting an idea: an archaeology of Stone Age gatherers in South Africa. South African Archaeological Bulletin 48: 86-93.
- Mazel, A. 1992. Collingham Shelter: excavations of late Holocene deposits, Natal, South Africa. Natal Musuem Journal of Humanhites 4: 1-52.



Fig. 6. Strathalan Cave A: a complete digging stick in association with plant food remains.

- Opperman, H. 1987. The Later Stone Age of the Drakensberg Range and its Foothills. Oxford: British Archaeological Reports International Series 339.
- Opperman, H. 1992. A report on the results of a test pit on Strathalan Cave B, Maclear district, North-Eastern Cape. Southern African Field Archaeology 1:98-102.
- Opperman, H. 1996a. Strathalan Cave B, North-Eastern Cape Province, South Africa: evidence for human behaviour 29 000-26 000 years ago. Quaternary International, 33:45-53.
- Opperman, H. 1996b. Excavation of a Later Stone Age deposit in Strathalan Cave A, Maclear district, North Eastern Cape, South Africa. In Pwiti, G. & Soper, R. (eds). Aspects of African Archeaology. Papers from the 10th Congress of the PanAfrican Association for Prehistory and Related Studies. pp. 335-342. Harare: University of Zimbabwe.
- Opperman, H.& Heydenrych, B. 1990. A 22 000 year-old Middle Stone Age camp site with plant food remains from the North-Eastern Cape. South African Archaeological Bulletin. 45:93-99.
- Theunissen, R., Balme, J. & Beck, W. 1998. Headroom and human trampling: cave ceiling-height determines , the spatial patterning of stone artefacts at Petzkes Cave, northern New South Wales. Antiquity 72:80-89. Wright, J.B. 1971. Bushman raiders of the Drakensherg 1840-1870. Pietermaritzburg: University or Natal.