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# RESULTS FROM TWO TEST EXCAVATIONS IN THE BAVIAANSKLOOF MOUNTAINS, EASTERN CAPE PROVINCE

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## ABSTRACT

This paper reports the results from two test excavations conducted during the early 1980s in the Baviaanskloof River valley, Eastern Cape Province. Both sites, Rautenbach's Cave (RC) and Nuwekloof Shelter (NK) yielded well-preserved botanical remains, storage pits and other lined hollows dating within the last ca 2000 years BP.

## INTRODUCTION

Rautenbach's Cave and Nuwekloof Shelter were two of several small caves and shelters test excavated during the early 1980s in the Baviaanskloof /Kouga Mountain ranges in the south-eastern Cape region (Fig. 1). As discussed elsewhere, the aim of the project was to investigate the socio-economic strategies and settlement patterns during the Holocene Later Stone Age for this region. The project proposal, results from other sites and the present day environment have been discussed elsewhere (see Binneman 1997, 1998, 1999). The detailed site analysis will be published at a later stage.

## RAUTENBACH'S CAVE

Rautenbach's Cave is situated some 150 m above the entrance to Houtkloof on the original farm Rietrivier (known as Rautplaas in the 1980s) (33.31S; 23.42E) (Figs 2 & 3). The cave was named after the owner of the farm by a certain Dr Jolly from Cape Town who was permitted to excavate the site during the 1960s.

Access to the cave is difficult and a very steep cliff must be negotiated to gain entrance.The cave faces north-east and has an almost triangular opening which was formed by natural weathering along an intrusion contact between Witteberg quartzites and shale (Deacon & Brooker 1976). The cave is 8 m wide, 10 m deep and some 8 m high at the entrance (Fig. 4). A large area of the cave floor was disturbed by the Jolly excavations and other digging between the 1960s and 1982. A few buckets of the dug-out material were sieved and sampled.There are still a few paintings visible on the southern wall.

## EXCAVATION AND DATING

It was estimated from the Jolly excavation that the archaeological deposits at Rautenbach's Cave were between 1-2 m deep. A radiocarbon date of 12 560 ± 100 BP (Pta-251) was obtained for the bottom layers of the deposit (Deacon & Brooker 1976). Unfortunately, due to circumstances outside my control, it was only possible to excavate the top well-preserved plant remains (refered to as bedding in the text) of one square metre next to the side wall. The bottom of the plant remains rested on grey ashy deposits and was dated to 1620 ± 40 BP (Pta-4611).

The plant rich unit was between 15-20 cm thick and consisted of a series of shallow plant filled hollows and patches of burnt bedding. Some of these shallow depressions were partly lined with *Boophane disticha* leaves. Unfortunately parts of the deposit have been disturbed by rodent activities.

Underlying the surface dust and roof rubble, were several circular and semi-circular hollows loosely filled with soil, plant material and charcoal. One hollow was filled with a thick, compacted accumulation of grass and other plant remains. A small area of one of the hollows was still lined with *Boophane disticha* leaves. Patches of burnt bedding, grey ashy soils and rodent disturbances accounted for a large part of the excavated area. (Fig. 5).

The removal of the surface material revealed more shallow hollows filled with well-preserved compacted grass and other plant remains, a red ochre and *Boophane disticha* lined floor and rodent disturbances (Fig 6). After the rodent disturbances were cleaned the red ochre and *Boophane disticha* lined floor extended over a large part of the square (Figs 7 & 8). This feature probably

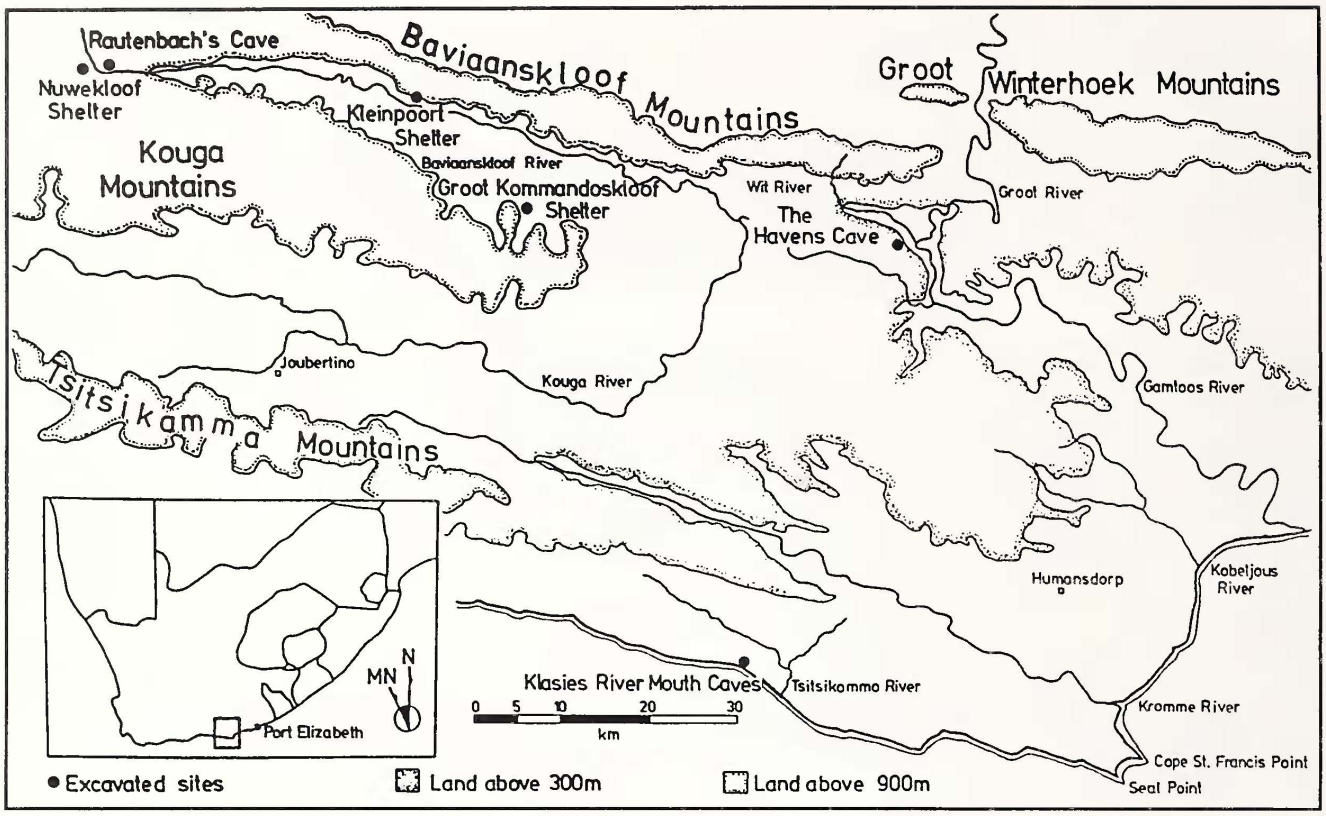


**Fig 1. Map of the south-eastern Cape, the location of Rautenbach's Cave, Nuwekloof Shelter and other sites mentioned in the text.**

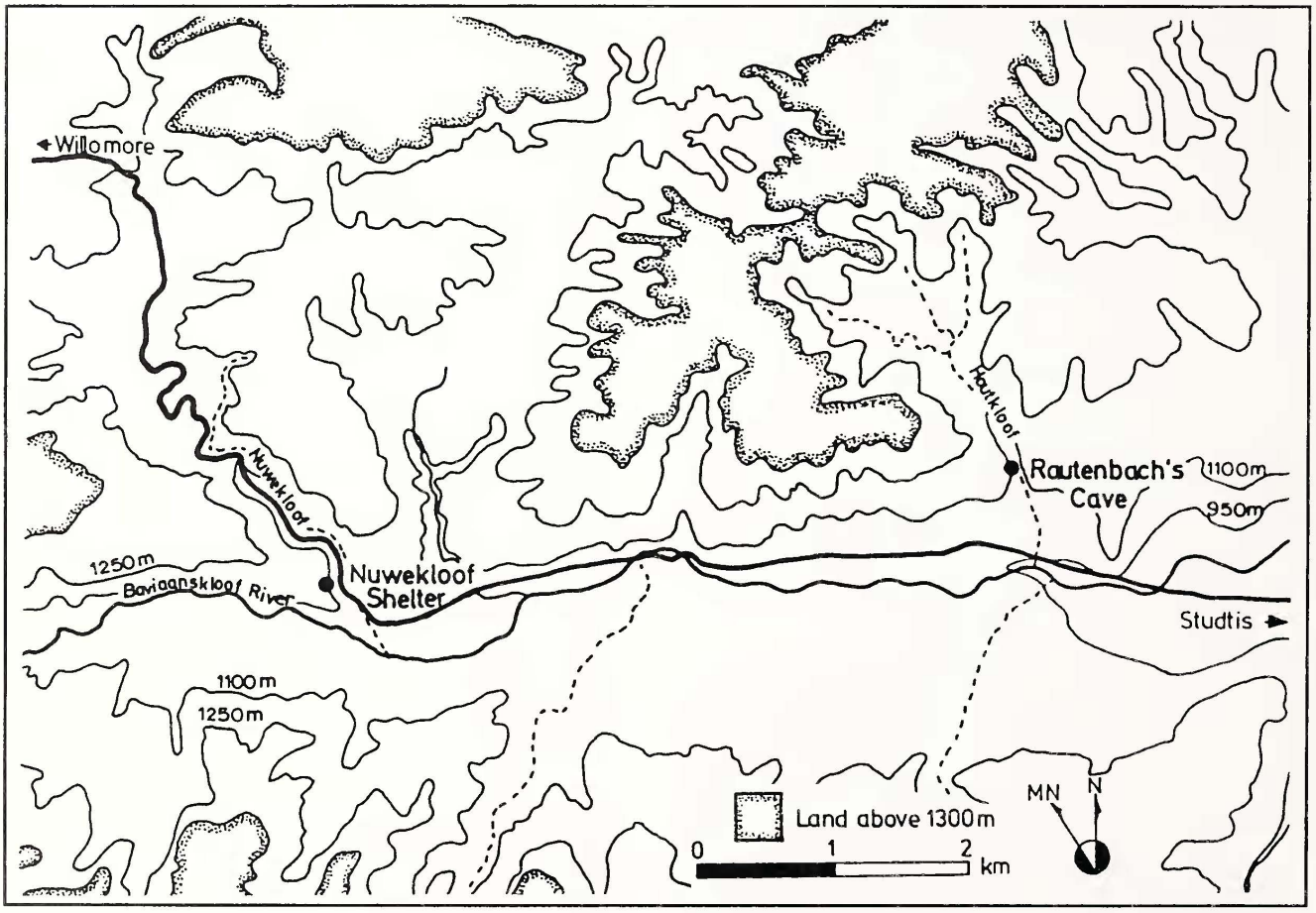


**Fig. 2. Location of Rautenbach's Cave and Nuwekloof Shelter.**

Fig. 3. View of Rautenbach's Cave.

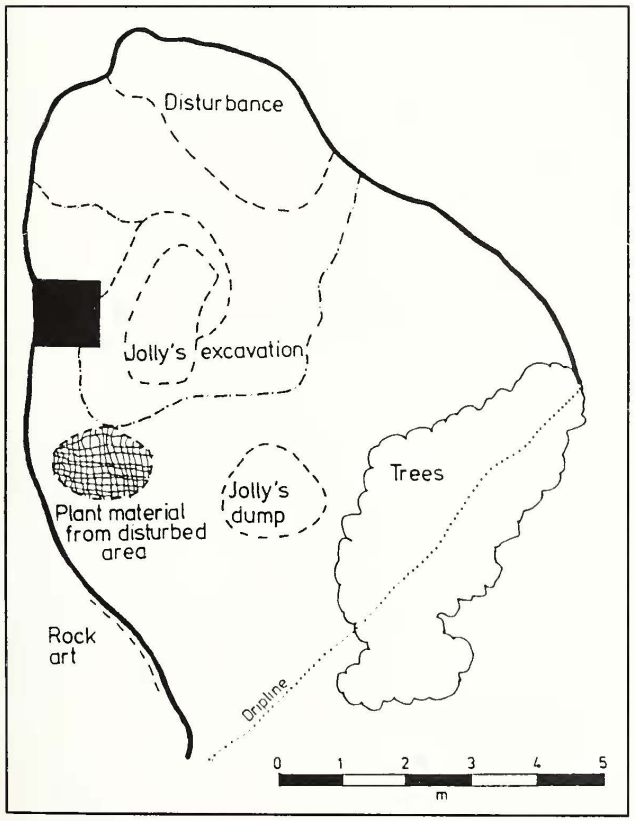


Fig. 4. Plan and location of the excavation at Rautenbach's Cave.

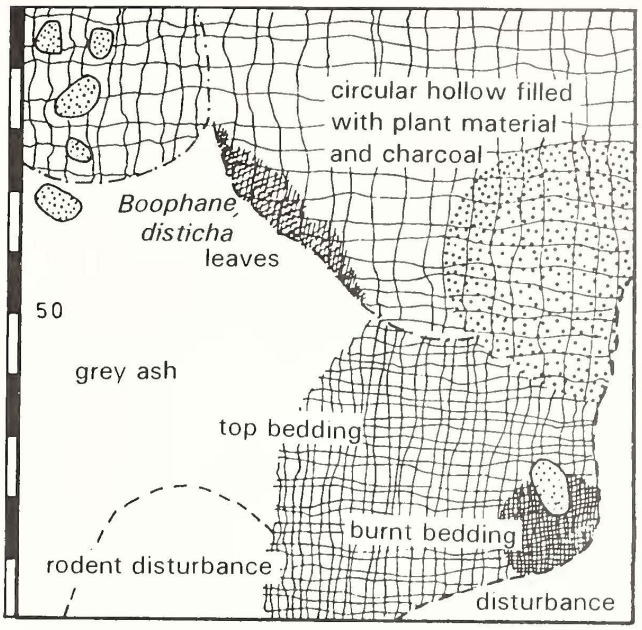


Fig. 5. Plan of the sub-surface bedding hollows, other features and rodent disturbances..

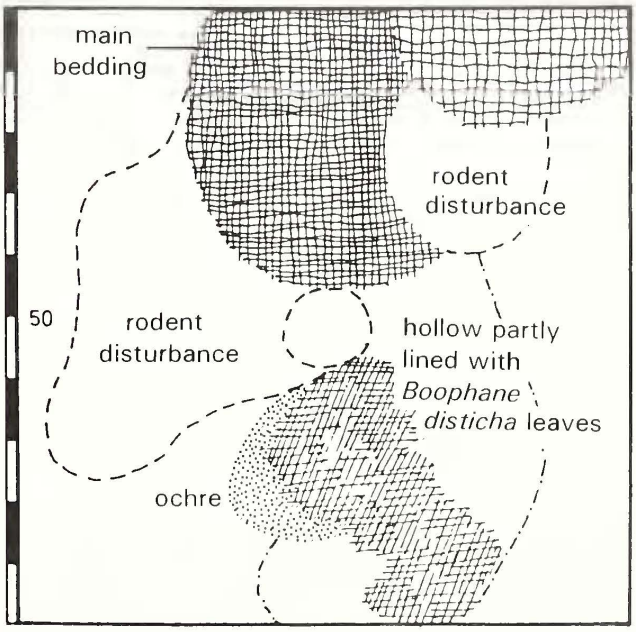


Fig. 6. Plan of the Bedding hollows, ochre and *Boophane disticha* lined floor and rodent disturbances.

represents a burial hollow because two parietal bones of a human skull were found next to the lined floor (Fig. 9). Some marine shell, a *Turbo sarmaticus 'button'*, *Nassarius kraussianus* and OES beads were also found in the feature and may have been part of the initial grave goods (Fig. 10). Strangely enough, the hollow did not yield any other skeletal remains. It is possible that these were probably removed by rodents. The bottom of the feature yielded vast amounts of charcoal, which also raised some unanswered questions. Next to the lined *Boophane disticha* hollow was another shallow hollow filled with the remains of a large mountain tortoise (Fig. 11).

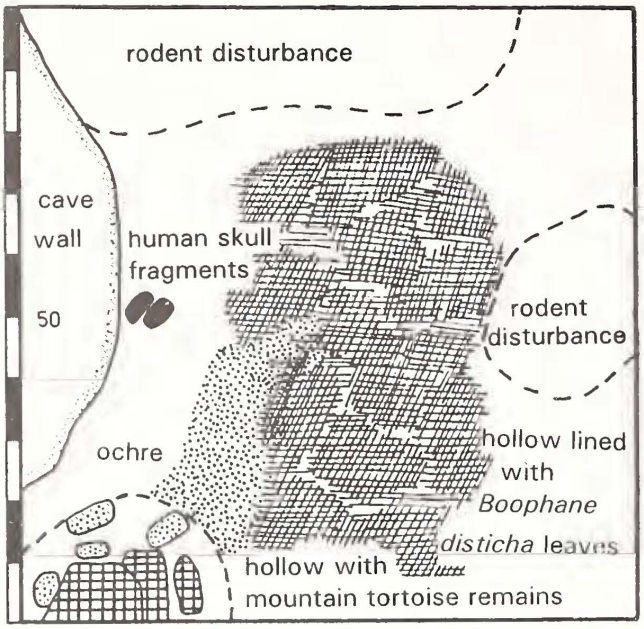


**Fig. 7. Plan of the ochre and *Boophane disticha* lined floor, 'disturbed burial hollow'(?), mountain tortoise hollow and rodent disturbances.**

**Fig. 8. Part of the ochre and *Boophane disticha* floor.**

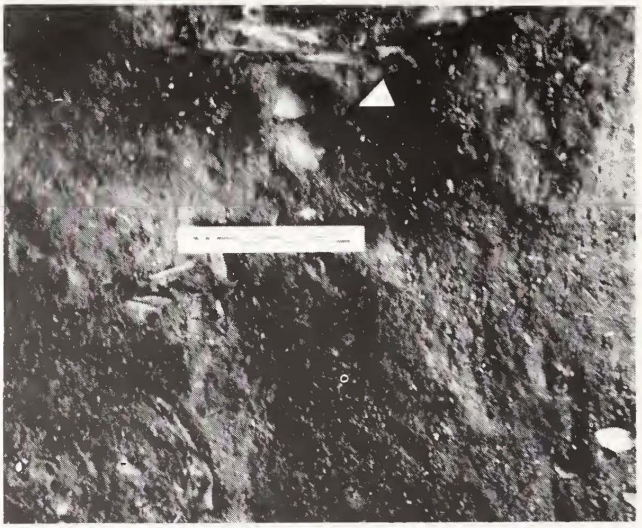

**Fig. 9. Human skull remains next to the cave wall.**

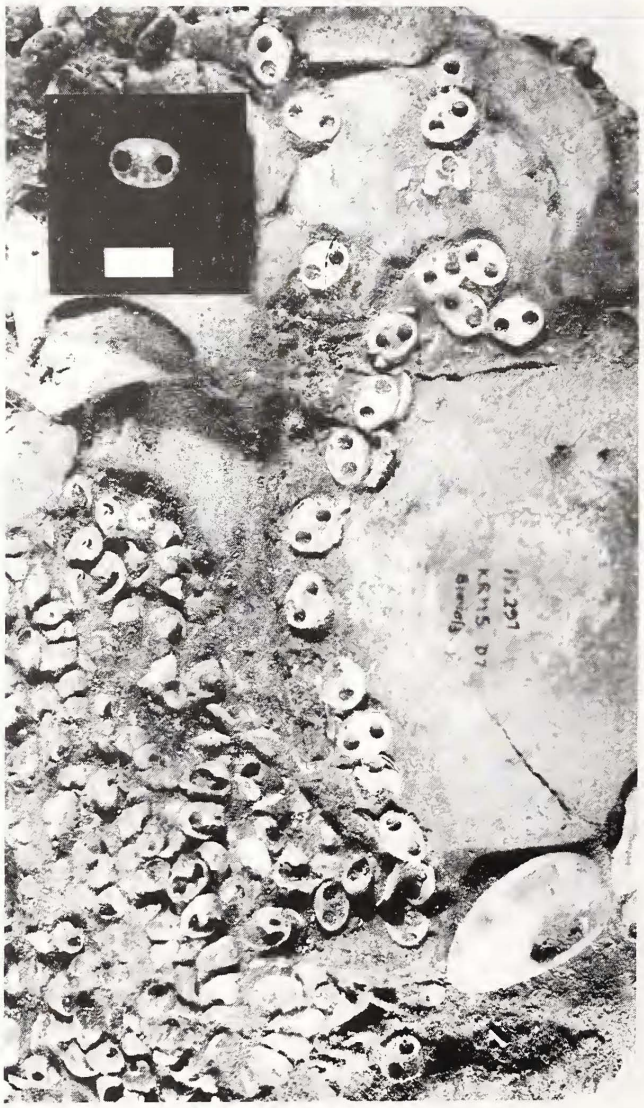

**Fig. 10. Insert: A *Turbo sarmaticus* 'button' from Rautenbach's Cave, found on the *Boophane disticha* lined floor near the human skull fragments. It is similar in size and shape to those found with a juvenile burial at Klasies River Cave 5 (AM HS 297)(main figure).**

## SUBSISTENCE AND DIET

### Botanical remains

In general the plant remains recovered from Rautenbach's Cave were similar to those found at other excavated sites in the region (Table 1). The bulk of the well-preserved botanical remains consisted of grasses, sticks, twigs and bark. Mixed with these remains were knotted plant bunches, 'grass plugs' (Fig. 12), botanical artefacts, lithic and non-lithic artefacts, marine shell and mammal bone remains.

Relatively large quantities of *Cyperus usitatus* corm tunics were recovered from the test excavation. Other underground species such as *Watsonia* sp and *Freezia* sp.

**Table 1. Analysis of bulk samples of botanical remains and other inclusions from Rautenbach's Cave and Nuwekloof Shelter.**

| | RC | NK | | RC | NK |
|---|---|---|---|---|---|
| **WEIGHT** | | | | | |
| Unsieved | 3452,8 | 4662,2 | **SEEDS AND FRUITS** | | |
| 1mm mesh | 1496,6 | 2800,8 | *Schotia* sp.pods | 0,2 | |
| 3mm mesh | 410,1 | 1744,4 | *Pappea capensis* | 0,3 | 0,8 |
| | | | *Olea Capensis* | 0,5 | 0,3 |
| **NON BOTANICAL** | | | *Euclea* sp. | 0,1 | 0,2 |
| Waste stone | 112,6 | 2,8 | *Grewia occidentalis* | | * |
| Stone tools | 5,5 | 0,2 | *Hypodiscus aristatus* | | 0,1 |
| Pottery | 34,4 | 0,9 | *Cissampelos capensis* | * | |
| OES | 0,1 | 0,7 | *Diospyros* sp. | * | |
| Bone | 4,2 | 6,6 | *Rhus* sp. | * | 0,2 |
| Insects | * | 0,1 | Misc. Unidentified | | 0,7 |
| Coprolites | 4,1 | | | | |
| Earth lumps | 65,6 | 75.9 | **EDIBLE AND MEDICINAL** | | |
| | | | *Watsonia* sp. | | |
| **PROCESSED PLANT MATERIAL** | | | corm tunics | * | |
| REEDS | | | corm bases | 0,3 | |
| fragments | | 0,2 | *Freezia/Tritonia* sp. | | |
| | | | corm tunics | 0,3 | 7,1 |
| *CYPERUS TEXTILIS* | | | corm bases | 0,3 | 6,8 |
| matting | 0,8 | | *Cyperus usitatus* | 5,5 | * |
| fragments | 0,5 | 0,2 | *Grassula/Cotyledon* sp. | 0,3 | 3,3 |
| | | | *Boophane disticha* | * | 0,8 |
| **WOODEN ARTEFACTS** | | | | | |
| linkshafts | 1.9 | | **LEAVES** | 1,3 | 15,6 |
| utilized | 0,4 | | | | |
| shavings | 12,6 | 6,5 | **OTHER INCLUSIONS** | | |
| | | | Charcoal | 24,0 | 8,9 |
| **GRASSES** | | | Twigs and bark | 35,9 | 32,5 |
| stems and bases | 154,5 | 64,8 | *Pelargonium* sp. | 0,3 | |
| | | | *Dodonacaea viscosa* | * | |
| **INFLORECENCES** | | | *Lamiaceae/verbenaceae* | 1,0 | 0,3 |
| *Themeda triandra* | * | 0,2 | Fern | * | |
| *cf. Stipa* sp. | * | 0,1 | | | |
| *cf. Eragostis* sp. | | * | **BOTANICAL ARTEFACTS** | | |
| *Cyperus* sp. | * | | Plant bunches | 4,7 | |
| *Helicrysum* sp. | * | * | | | |
| *Restio* sp. | | * | | | |

* Present

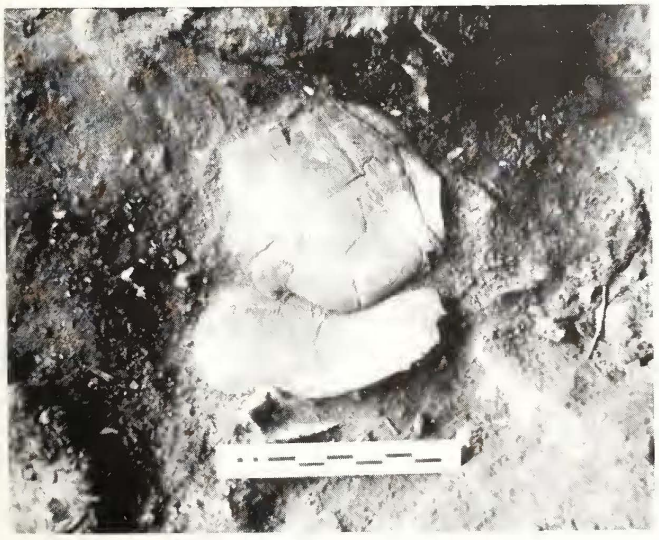

**Fig. 11. A shallow hollow filled with remains of a large mountain tortoise.**

were also present in very small quantities. *Moraea* sp.and *Dioscorea elephantipes (elephant's foot)* whi wech were recorded at others sites in the region was absent from the samples.

The only new inclusion was *Grassula* cf. *ovata* ('plakkie' family). This plant was widely used by European settlers and Bantu-speaking people. The fresh juice can be used to treat epilepsy (Pappe 1868:16). The fleshy parts of the leaves were used by Europeans settlers and Xhosa to soften corns. Xhosa also use the warmed leaf juice as ear and toothache drops. The Zulu and Swazi use a decoction as an enema in syphilis.

### Faunal remains

The mammal remains were dominated by mainly small animals such as dassie, hare, duiker, klipspringer and grysbok (Table 2 ). However, the occasional eland and mountain zebra captured, indicate that the bulk of the meat was obtained by hunting rather than by trapping.

Fig. 12. Knotted plant bunch and grass 'plugs'.

**Table 2 Faunal remains from Rautenbach's Cave and Nuwekloof Shelter.**

| | RC | NK |
|---|---|---|
| MAMMALS | | |
| *Papio ursinus* | 2 | 1 |
| *Small carnivore* | 1 | 1 |
| *Procavia capensis* | 15 | 8 |
| *Equus cf zebra* | 1 | |
| *Raphicerus melanotis* | 1 | 1 |
| *Raphicerus sp.* | 5 | 1 |
| *Taurotragus oryx* | 1 | |
| *Sylvicapra grimmia* | 2 | 2 |
| *Oreotragus oreotragus* | 2 | |
| *Lepus* sp. | | 2 |
| Bovidae - general | | |
| small | 2 | 1 |
| small medium | 3 | 1 |
| large medium | 2 | 3 |
| **TOTAL** | **37** | **21** |
| REPTILES (tortoise) | * | * |
| Other reptiles | * | * |
| MARINE SHELL | | |
| *Perna perna* | 4 | |
| *Bullia digitalis* | | 1 |
| *Turbo sarmaticus* | 1 | |
| *Tricolia capensis* | | |
| *Oxystele* sp. | 2 | |
| **TOTAL** | **7** | **1** |

* Present

Shell remains

No *U. caffer* was found at Rautenbach's Cave, but marine shell such as *Perna perna*, *Oxystele sinensis*, *Oxystele tigrina* and *Turbo sarmaticus* were recovered (Tabel 2). These were probably returned to the site for ornamental use.

## CULTURAL REMAINS

### Lithic artefacts

Only a small number of formal stone tools were recovered from the bedding units (Table 3). These included five scrapers (one with mastic and one ochre stained) and two adzes. The majority of the stone artefacts were untrimmed flakes manufactured of quartz and quartzite.

It is interesting to note that all the formal tools were manufactured of chalcedony, silcrete and hornfels. It may be speculated that quartz, which was the preferred raw material for formal tools at two other sites in the region, was ignored in favour of these raw materials. However, only larger samples will reveal if this was indeed the case.

A relatively large number of red ochre fragments were also recovered from the excavation.

### Non-lithic artefacts

Only a few botanical artefacts were recovered, including three wooden link shafts, *Cyperus textilis* matting and netting, some worked wood, mastic, a female fire drill, some plant bunches and a large quantity of wood shavings (Table 4) (Figs 13 ). A fair number of potsherds (63) were found, including four rim pieces and one decorated piece. A small lump of modeled clay was also recovered Fig.14). Fingerprints are visible under low magnification.

The small excavation yielded a relatively large number of OES beads and fragments. Some marine shell, a *Turbo sarmaticus* 'button' and two *Nassarius kraussianus* beads were also found, together with bone beads, shavings and flakes (Table 5).

**Table 3. Frequencies of stone artefacts from Rautenbach's Cave and Nuwekloof Shelter.**

| | RC | NK |
|---|---|---|
| WASTE | | |
| Chips | | |
| Quartz | 23 | |
| Quartzite | 2 | 3 |
| Chalcedony | 3 | |
| Hornfels | 1 | |
| Chunks | | |
| Quartz | 3 | |
| small cores | | |
| Quartz | 1 | |
| Core reduced pieces | | |
| Quartz | 1 | 1 |
| Chalcedony | 1 | |
| Flakes | | |
| Quartz | 21 | 5 |
| Quartzite | 28 | 18 |
| Silcrete | 6 | |
| Chalcedony | 11 | |
| Hornfels | 5 | |
| **TOTAL** | **106** | **27** |
| UTILISED | | |
| Flakes | | |
| Quartzite | | 1 |
| Silcrete | | 1 |
| Chalcedony | 1 | |
| Hornfels | | 1 |
| **TOTAL** | **1** | **3** |
| FORMAL | | |
| Scrapers | | |
| Silcrete | 1 | |
| Chalcedony | 1# | 1 |
| Hornfels | 2+ | |
| Adzes | | |
| Silcrete | 2 | |
| **TOTAL** | **6** | **1** |
| OTHER INCLUSIONS | | |
| Ochre | 30 | 22 |
| Shale | | 1 |

+ Ochre stained # Mastic

## DISCUSSION

It is difficult to draw comprehensive conclusions from the small excavation and samples, especially since a large part has been disturbed by rodent activities. Nevertheless, the remains provide an insight into the possible socio-economic patterns which were operating at Rautenbach's Cave.

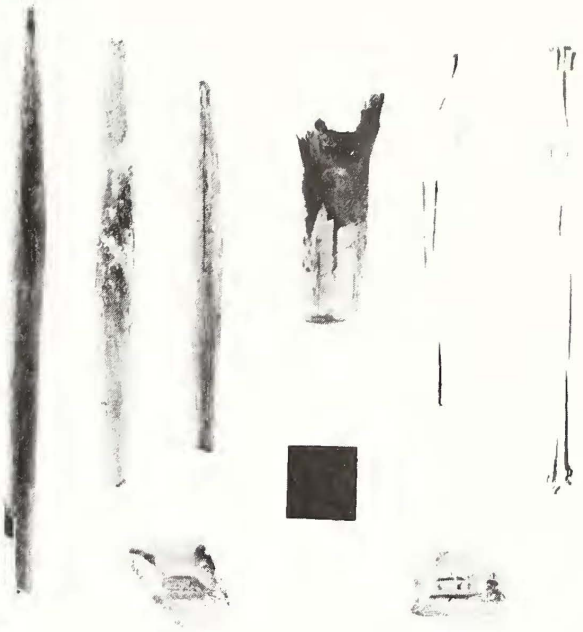

**Fig. 13. Botanical artefacts from Rautenbach's Cave: 1. wooden link shafts; 2. cut wood; 3. matting; 4. fire drills.**

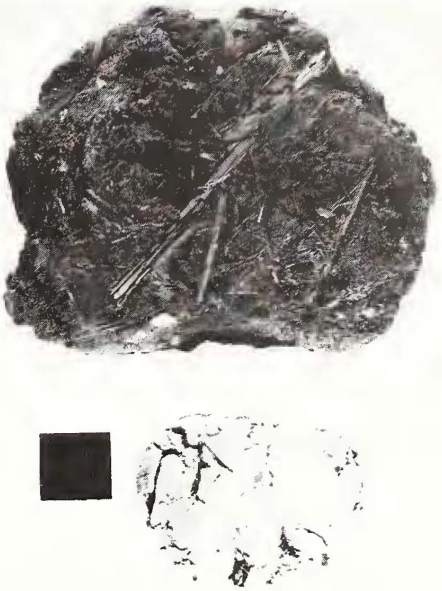

**Fig. 14. A large piece of mastic and a small lump of modeled clay from Rautenbach's Cabve.**

The underground plant food remains recovered, especially the relatively large quantities of *Cyperus usitatus* (and absence of for example *i.e. Watsonia* sp), suggests a similar pattern to that observed at Kleinpoort Shelter (Binneman 1998), *i.e.* short visits by small family groups to exploit this abundant small food package (patch hopping strategy).

However, on the other hand, the occupation features, such as the red ochre and *Boophane disticha* lined hollows, and associated cultural remains suggest that the cave may have been used for specialized activities. The

**Table 4. Frequencies of pottery, leather and botanical artefacts from Rautenbach's Cave and Nuwekloof Shelter.**

| | RC | NK |
|---|---|---|
| POTTERY | | |
| Fragments | 58 | 36 |
| Rim | 4 | |
| R/decoration | | 1 |
| B/decoration | 1 | 1 |
| **TOTAL** | **63** | **38** |
| LEATHER | | |
| Fragments | 1 | 2 |
| WOOD | | |
| Points | | 1 |
| Pegs | | 1 |
| Linkshafts | 3 | |
| Fire drills | | |
| male | | 2 |
| female | 4 | |
| Cut pieces | 2 | 13 |
| Utilized pieces | 1 | |
| Shavings | * | * |
| **TOTAL** | **10** | **17** |
| REED | | |
| Arrowshafts | | |
| Cut/notched | 1 | 2 |
| **TOTAL** | **1** | **2** |
| *CYPERUS* | | |
| Cordage | | 1 |
| Matting | 11 | 12 |
| Netting | 2 | 2 |
| Cut/slit | 2 | 14 |
| **TOTAL** | **15** | **29** |
| SEED BEADS | | |
| *H. aristatus* | | 4 |
| OTHER ARTEFACTS | | |
| Plant bunches | 4 | |
| Bark knots | | 1 |
| **TOTAL** | **4** | **1** |
| OTHER INCLUSIONS | | |
| Mastic | 1 | 1 |
| Clay | 1 | |
| Feathers | | 1 |
| Glass beads | | 1 |
| TOTAL | **2** | **3** |

**Table 5. Frequencies of shell, worked shell and bone artefacts from Rautenbach's Cave and Nuwekloof Shelter.**

| | RC | NK |
|---|---|---|
| OSTRICH EGGSHELL | | |
| Fragments | 33 | 11 |
| Roughouts | 4 | 1 |
| Beads | 18 | 33 |
| **TOTAL** | **55** | **45** |
| WORKED MARINE SHELL | | |
| *Nassarius kraussianus* beads | 2 | |
| *Turbo sarmaticus* 'button' | | |
| **TOTAL** | **2** | |
| MARINE SHELL | 4 | |
| *Perna perna* | | 1 |
| *Bullia digitalis* | 1 | |
| *Turbo sarmaticus* | 2 | |
| *Oxystele* sp. | | |
| **TOTAL** | **7** | **1** |
| BONE | | 1 |
| Tortoise bowls | | 1 |
| Points | | 1 |
| linkshafts | 3 | 2 |
| Beads | 1 | 1 |
| Flakes | 1 | |
| Shavings | | 1 |
| Ochre stained | | 1 |
| Utilised | | |
| **TOTAL** | **5** | **8** |

formal stone tools, ostrich eggshell beads and roughouts may indicate that the site was the focus of important group social and manufacturing activities during the warmer months of the year. The lump of modeled clay was an interesting find and it may suggest that pot-making activities took place at the site, which may also explain the charcoal filled hollow.

It would appear that the one-to-one scenario of small plant food packetages equals small mobile groups, as assumed from the Kleinpoort data, do not fit the Rautenbach's Cave evidence. Therefore it may be possible that there were several strategies at work during the past 2000 years in this part of the Cape mountains .

When the data from Rautenbach's Cave is compared with those from other sites in the region it suggests that larger family groups (at least larger than at Kleinpoort Shelter) stayed for limited periods at Rautenbach's Cave and practiced social activities usually identified with aggregation. Stays at the site were determined by the length of time *Cyperus usitatus* and other food packages along the valley floor could support these groups.

This would suggest that Rautenbach's Cave was used for short periods (a few weeks) during the *Cyperus usitatus* season for aggregation. It is possible that there were several of these 'short period' aggregation sites throughout the region. Whatever the case may be, at least it is evident that populations in this region were not depended on large food packages such as *Watsonia sp.* for aggregation.

## NUWEKLOOF SHELTER

Nuwekloof Shelter (33.31S; 23.39E) is situated some five kilometres west of Rautenbach's Cave in the Nuwekloof Pass on the farm Nieuwe Kloof (Fig. 1 & 2). This large shelter faces north-east and is located in Witteberg quartzites some 20 m above the valley floor (Fig. 15). The shelter is 20 m wide, 10 m deep and the roof some 10 m high at the drip line (Fig. 16 & 17).

A one square metre test excavation was conducted next to a man-made disturbance. The deposit, which contains well-preserved botanical remains, was 0,30 m deep with a storage pit reaching down to 0,60 m (Fig. 18). The floor of the shelter slopes steeply towards the front and most of the occupational deposit and plant material were located on a 'step' along the back wall.

## STRATIGRAPHY AND DATING

The somewhat strange appearance of the different occupation layers was due to a large storage pit found at the bottom of the sequence. A large pit, 0,50 m in diameter and 0,50 m deep was dug into the floor rubble (Fig. 18).

The stony soil from the pit left on the surface after the pit was sealed, caused later built-up of occupation deposits to followed the natural contours of the obstruction.

The pit was lined with a thick layer of grass and the opening was closed with a 'grass plug', indicating that the occupants never returned or opened the pit and utilized the contents (Figs 19, 20 & 21). The pit was filled with thousands of *Pappea capensis* seeds and floor debris (Fig. 22). Although storage pits were also reported from other sites in the region (The Havens Cave and Kleinpoort Shelter), this was the first one found with its contents still intact in. Charcoal from the pit was dated to 1140 $\pm$ 50 BP (Pta-4617).

Overlying the sealed pit was a stony deposit with patches of plant material, but not as compacted as the overlying bedding layers. Most of the deposit consisted of grey ash (BH) and a large fire place with abundant large chunks of charcoal in the one corner of the square (BH/AF). Several fire cracked stones were found inside the fire place (Fig. 23).

BH was overlain by a yellow gritty soil (YSB). The only important find from this layer was a *Chesine angulata* carapace used as a bowl (Fig. 24). The inside of the carapace showed numerous scratches and smooth polished edges.

**Fig. 15. View of Nuwekloof Shelter.**

**Fig. 16. A view of the inside of Nuwekloof Shelter.**

Overlying YSB was a thick, compacted accumulation of plant material (mainly grass), divided into main bedding (MB) and top bedding (TB).

## SUBSISTENCE AND DIET

### Botanical remains

The bulk of the botanical remains at Nuwekloof Shelter comprised of grasses, twigs, sticks, leaves and bark. *Themeda triandra* ("rooigras"/red grass) was the most common grass identify from the inflorescence.In general the remains are similar to the nearby Rautenbach's Cave and other sites in the region.

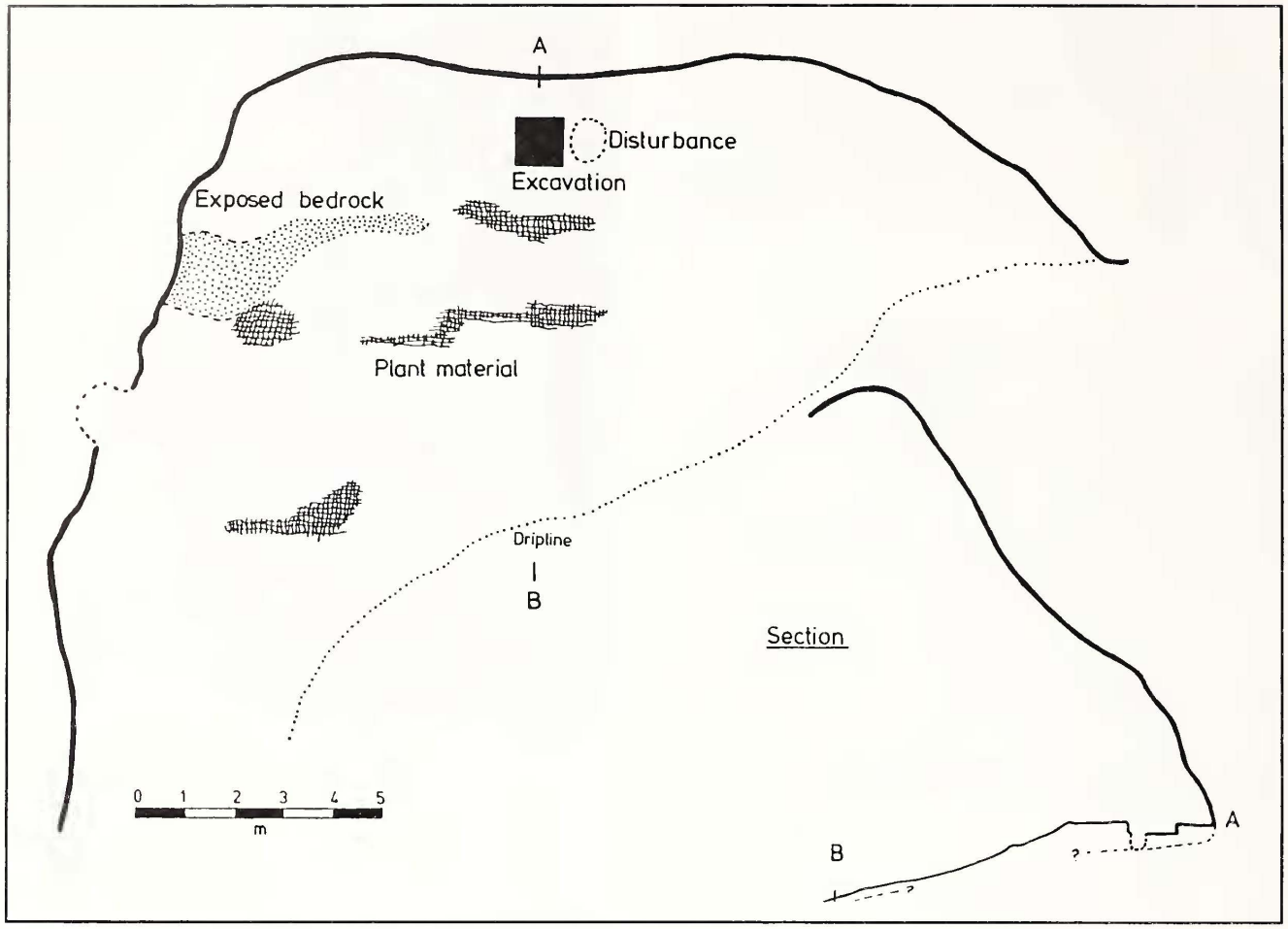


**Fig. 17. Plan and excavation at Nuwekloof Shelter.**

*Freezia* sp. was the most abundant underground plant food remains in all the layers. *Cyperus usitatus* was virtually absent from the samples and only a small quantity was recovered from the top bedding. Other geophytes such as *Watsonia* sp. and *Moraea* sp. were absent from Nuwekloof Shelter.

Seeds remains were similar to those from other sites in the region. *Schotia* sp., however was absent, as well as *Dioscorea elephantipes*. A large amount of *Crassula* cf. *ovata* stems and *Cotyledon* cf. *orbiculata* (pig's ears) flowers were recovered, which may be blown in from a dense stand of these plants at the entrance to the cave and on the hill side. Both have medicinal uses among Bantu-speaking people.

### Faunal remains

The mammal remains recovered from Nuwekloof Shelter were mainly those of small territorial animals such as hare, dassie, grysbok and duiker. This suggests that trapping rather than hunting supplied the bulk of the meat. (Table 2).

Shell remains

No freshwater shell remains were recovered from the excavation and only one fragment of marine shell, *Bullia digitalis* was found.

## CULTURAL REMAINS

### Lithic artefacts

Little can be said about the stone artefact assemblage because only a few quartzite flakes and one scraper were found (Table 3).

### Non-lithic artefacts

A range of botanical remains similar to those described from the other sites were recovered from Nuwekloof Shelter (Tables 3, 4 & 5). These included a few pot sherds (a rim and a lug), a few OES fragments and beads, white glass bead, a shaped feather (probably from an arrow), a few pieces of leather, a tortoise carapace bowl and a small number of bone tools and beads.

## DISCUSSION

As is the case with Rautenbach's Cave, it is also difficult to draw in depth conclusion from the small excavation and samples at Nuwekloof Shelter.

It can be speculated from the small excavation and samples, that Nuwekloof Shelter may have been used in a similar way by small groups as was the case at Kleinpoort Shelter. The difference is that *Freezia* sp. was collected in larger quantities and prefered to *Cyperus*

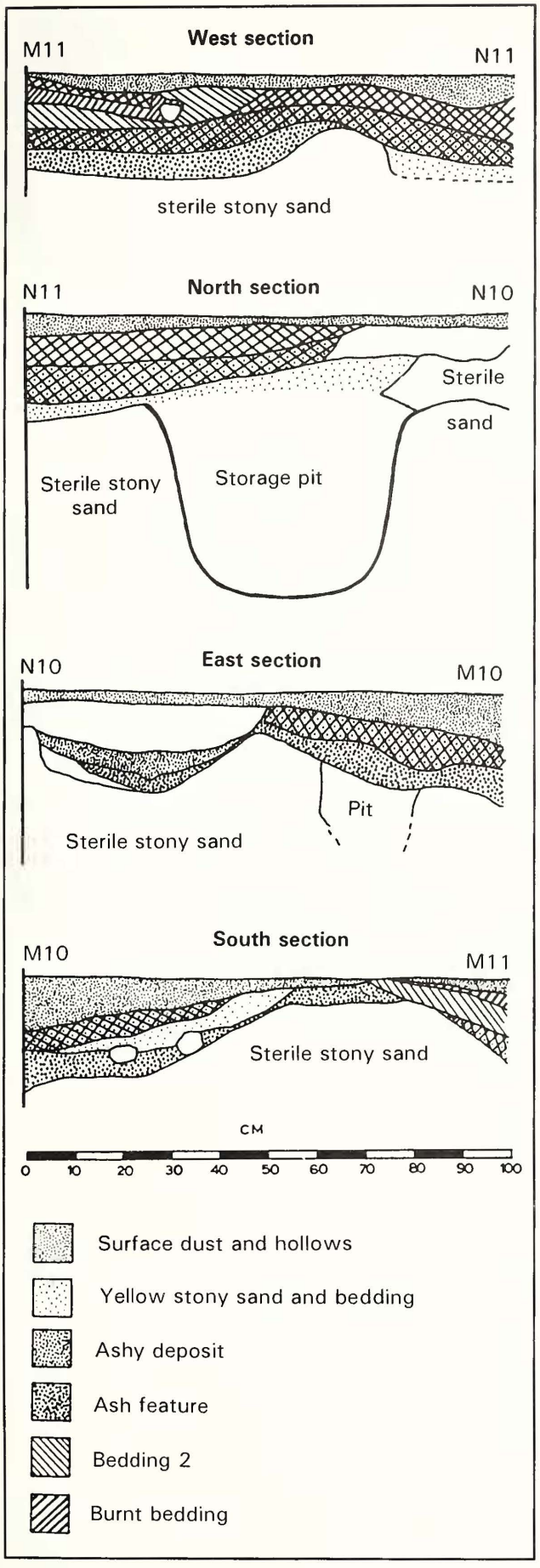


**Fig. 18. Section drawing of the test pit excavation at Nuwekloof Shelter.**

**Fig. 19. The storage pit 'sealed' with a grass plug.**

*usitatus*, which was also the bulk of underground plant food collected at Rautenbach's Cave. This may suggest that Nuwekloof was occupied by larger groups and/or for longer periods of time than Kleinpoort Shelter. Although this may have been the case, there is no other evidence to suggest that Nuwekloof Shelter was used for group social activities, i.e. aggregation. In fact, the few cultural items and the absence of formal tools suggests that not much manufacturing of new equipment took place, but the large number of wood shavings on the other hand indicates that some maintenance of existing equipment was carried out instead. Relatively few small animals were trapped and no large animals were hunted.

The data collected from Nuwekloof Shelter, in general, is similar to that recovered from Kleinpoort Shelter. This would suggest that Nuwekloof Shelter was also occupied for short periods of time by small sized family groups during the warmer months, to coincide with the availability of *Freezia* sp.

The large 'sealed' grass lined pit filled with *Pappea capensis* seeds was an interesting find. However, similar storage pits were also reported from other sites outside the Baviaanskloof region.

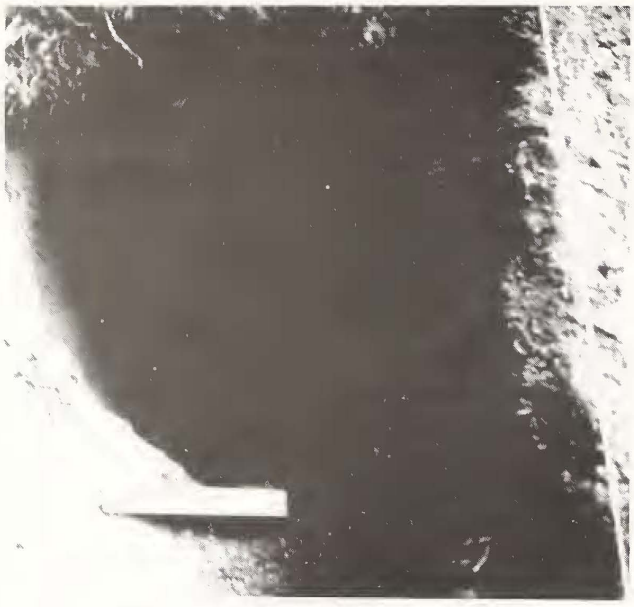

Fig. 20. Storage pit with the contents removed.

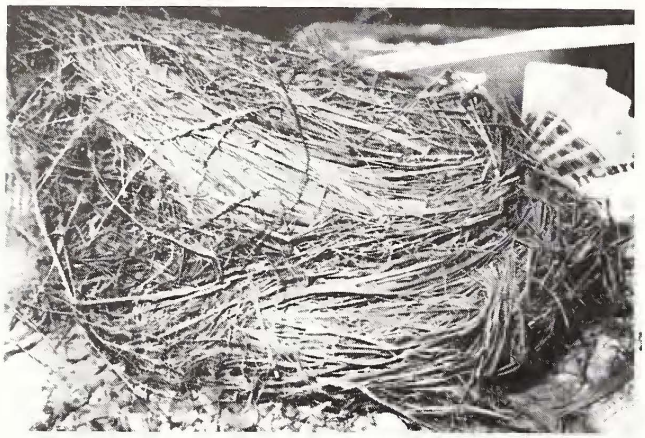

Fig. 21. The grass lining from the storage pit.

Fig. 22. Some of the *Pappea capensis* seeds and other fill removed from the storage pit.

At Boomplaas Cave a cluster of more than 60 pits were found, of which only three retained their contents of *Pappea capensis* seeds. The pits were lined with grass and *Boophane disticha* leaves and a few were marked by painted stones (Deacon, H.J. 1979; Deacon, H.J. & Brooker 1976; Deacon *et al*. 1976; Deacon, J. 1982). The pits had three layers of lining, *B. disticha* followed by grass and a second layer of *B. disticha*. The toxic qualities of *B. disticha* probably helped to protect the contents of the pit against insects (Deacon, J. 1982:103).

The bulk of the seeds found in the pits at Melkhoutboom Cave were *Podocarpus falcatus*, *Calodendrum capense* and *Pappea capensis*. However, Deacon (1976:34) mentioned that the two pits that might have been 'sealed' with covering slabs, contained abundant *P. capensis* seeds.

The pits at Welgeluk and Edgehill Shelters did not yield any seeds or other botanical remains.

The exact age and appearance of storage pits in the Cape Fold Belt is still highly speculative. At Boomplaas Cave their age are estimated at ca 2000 BP (Deacon, H.J. 1979; Deacon, J. 1982). The majority of pits at Melkhoutboom Cave were "in as far as can be established" dug from the sub-surface levels, and a date of younger than 2870 years BP is suggested (Deacon, H.J. 1976:32). The date of 2870 BP comes from the Cut Away Frontal unit which in itself is "an extensive modification to the habitation area of the cave floor" (Deacon, H.J. 1976:26). However, the sub-surface unit did not yield any pottery and the pits therefore probably immediately pre-date the introduction of pastoralists in the region.

The opening of the pit at Edgehill Shelter could not be determined, but an age of ca 2000 BP is suggested. The pit at Welgeluk Shelter dates between 3300 BP and 2519 BP (Hall 1990). The storage pits from the Baviaanskloof region also date from the past ca 2000 years BP and further research is necessary to establish the age of storage in the Cape Mountains.

In general it would appear that *Pappea capensis* was the only or main seed stored throughout the Cape Mountains for later use. This may suggests that the seeds were an important resource (and were in demand) in terms of cosmetic value, exchange, trading or gift relations between individuals or groups.

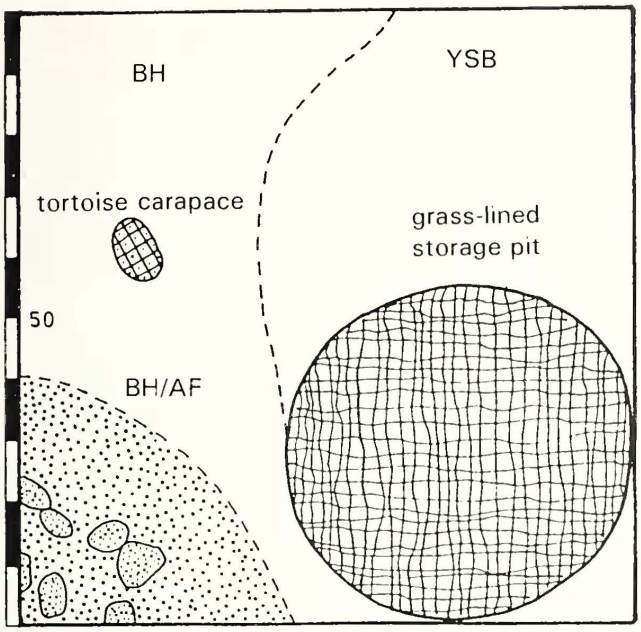


**Fig. 23. Plan of the storage pit and overlying deposits.**

**Fig. 24. Tortoise carapace bowl from Nuwekloof Shelter**

An observation made by Wikar, a Swedish soldier who journeyed along the Orange River between 1775-1779, may support this assumption. He reported that Khoisan people used the oil of *Pappea capensis* seeds instead of fat for rubbing themselves. The seeds produce a sweetly scented oil when ground (Mossop 1935). It is therefore possible that the seeds were stored as a source of vegetable oil, *i.e.*, cosmetic use, rather than a food resource (Deacon, H.J. 1976). Thus, storage of these seeds would have increased their value (in terms of social and economic supply/demand) during times when the trees did not produce a harvest.

Unfortunately space only allows for a few brief comments on the possible meanings of storage (Binneman in prep.). In the Koonap River valley, Hall (1990) observed that the appearance of storage pits coincided with increased mussel and fish exploitation. According to Hall, the intensification of food resource exploitation started approximately 4000 years ago. This was brought about by an increase in population which reduced seasonal movement of people.

The value and meaning of storage pits and their contents cannot only be interpreted from an economical point of view. Hall (1990) also suggested that the pits that were marked with painted stones at Boomplaas Cave, may imply ritual importance for the seeds, or marked individual or group property. Storage pits, like the burials, could have been an active method of information exchange of individual or band rights to a specific site and the resources of the immediate region (Hall & Binneman 1987; Hall 1990; Binneman 1996).

I would like to argue that storage pits were made and individually owned by women, because they were the most likely actors to have collected the *Pappea capensis* seeds during their daily plant food collecting trips. They also dug and prepared and lined the pits and placed the seeds in the pits, and in some cases marked the pits with slabs of stone and even painted stones.

Furthermore, these features were part of a deeper symbolic value system used by people (most probably women) in relation to relations of power to bring about transformations and to mark symbolic social space within the living area. Thus, it is possible that the storage pits and the contents signal woman social space within the living area where they were performing 'womens things' like bead making and food preparing.

The association of painted stones with pits at Boomplaas Cave, suggest that they were deliberately placed there not only to mark the pits, but also as a symbolic communication medium, i.e., symbolising womens area. If this was the case, it can be argued that the stones were painted by women shamans in order to retain symbolic power over the contents and social space. By converting "economical capital" - the desire and possible need for certain resources - into "cultural or symbolic capital" (Bourdieu 1990, 1992) women were able to produce and reinforced symbolic power relations and transformations.

To conclude, although Rautenbach's Cave and Nuwekloof Shelter are only some 5 km apart, different socio-economic patterns are visible. The bulk of underground plant food collected at Rautenbach's Cave was *Cyperus usitatus* and at Nuwekloof Shelter *Freezia* sp. Whether this was due to the availability of the food resources in the vicinity of the sites, time of year the sites were occupied or social preferences is difficult to establish. It is possible that larger samples may provide some insights into these specific patterns.

Nevertheless, from data collected at Kleinpoort Shelter it was assumed that small food packages like *Cyperus usitatus* represented small groups and short occupation periods of sites. Larger plant food packages, such as *Watsonia* sp. may suggest that a site was occupied by larger groups and/or for longer periods of time. However, these assumptions proved not to be supported by the data collected at Rautenbach's Cave, while that of Nuwekloof Shelter seems to support the Kleinpoort Shelter scenario.

However, it is also possible that the size of the plant food had nothing to do with group size and length of time stayed at a site, but rather when certain foods resources were available at different places.

## ACKNOWLEDGMENTS

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