

Die Toon: a Late Holocene site in the Richtersveld National Park, northern Cape

LITA WEBLEY, FIONA ARCHER and J. BRINK

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A small excavation in the arid eastern portion of the Richtersveld National Park has produced evidence of hunter-gatherer occupation during the period ca. 3800 to 3100 years ago. These are the earliest Holocene deposits to have been excavated in Namaqualand. The occupation layers are very ephemeral but include microlithic stone tools and evidence for the hunting of small game. The possible presence of blesbok indicates more grassveld in the vicinity of the site than at present.

Key words: archaeology, Late Stone Age, Richtersveld National Park, hunter-gatherers, blesbok.

Lita Webley, Albany Museum, Somerset Street, Grahamstown, 6140 Republic of South Africa; Fiona Archer, Participatory Research, 8 Highstead Flats, 1 Highstead Road, Rondebosch, 7700 Republic of South Africa; James Brink, National Museum, P.O. Box 266, Bloemfontein, 9300 Republic of South Africa.

Introduction

Die Toon is situated to the northeast of a range of mountains in the Richtersveld known as the Tatasberg (Fig. 1). The Richtersveld, which is situated in the bend of the Orange River, in the northern Cape Province, is a "designated" rural area set aside for the indigenous inhabitants of the region. The Richtersveld is characterised by a mountainous topography to the east while the western portion, or Sandveld, is composed of sandy hills. The area experiences a desert climate with dry summers and a winter rainfall which may vary between 15 mm and 300 mm per annum. Temperatures of up to 46°C are not uncommon in summer. Droughts are a frequent phenomenon and can result in large stock losses. Dry-land cultivation is not possible and the inhabitants practise small-stock farming while those living on the banks of the Orange River may keep small vegetable gardens.

The vegetation of the region has been divided into two groups by Van Jaarsveld (1981), namely the mesophytic plants comprising a variety of tree types such as *Euclea pseudebenus* E. Mey. ex A. DC., *Rhus pendulina*

Jacq., *Ziziphus mucronata* Willd., *Acacia karroo* Hayne, *Tamarix usneoides* E. Mey. ex Bunge and reeds such as *Phragmites australis* (Cav.) Steud. which form a broad belt along the Orange River and also occur around natural springs and fountains. The xerophytic vegetation, which can withstand long periods of drought, consist of the "Strandveld" along the coastal zone (predominantly Mesembryanthemaceae) and "Succulent Karoo" to the east of the Sandveld (predominantly *Euphorbia gummifera* Boiss.). Dwarf succulents such as *Lithops* sp. are common in the north. The Orange River forms the most important drainage source of the region and is the most significant source of fresh water during periods of drought.

Very little is known of the history of the region as the arid and mountainous terrain has tended to deter all but the most intrepid of visitors. Wikar (Mossop 1935) and Gordon (Raper & Boucher 1988), who both travelled to the northern Cape in 1779, did not visit the Richtersveld. Alexander (1838) visited the settlement of Arris Drift on the Orange River in 1836-37 and noted that it consisted of "A Namaqua village of about twenty huts". More detailed descriptions of the inhabitants are to

be found in Hoernlé (Carstens *et al.* 1987) who undertook ethnographic research in 1912-13 and Cornell (1985) who prospected in the Richtersveld between 1910 and 1920. It is clear from their observations that the eastern (or mountainous parts) of the Richtersveld was only infrequently and sparsely occupied. Hoernlé (Carstens *et al.* 1987) noted that it was "splendid grazing country but there is no water here. The people only stay until they have used up the rain pools", while Cornell (1985) found that there were many small pools and fountains in the eastern portion but seldom encountered any Nama herders in these remote areas. He noted that the valleys are hemmed in with mountains preventing the Nama from visiting those well-watered areas with good grass.

The site

Die Toon (28°18'40''S, 17°17'00''E) is situated in the mountainous eastern portion. There are no natural springs near to the site and standing water is only likely to accumulate in granite basins nearby after especially good rains. The Orange River is at a distance of 15 km from the site in both an easterly and northerly direction (Fig.1). Die Toon refers to a little 'kopje' topped by an enormous boulder which resembles a toe. There are a number of large boulders lying at the base of the 'kopje', one of which offers a slight overhang and appears to function as a shelter for visitors who overnight here. Large hearths to the front of the shelter were constructed by tourists rather than by the indigenous inhabitants of the region. However, the shallow deposit to the back of the shelter appeared to contain archaeological material and was tested during June 1992.

The aim of the excavations at Die Toon was to determine the extent to which this particularly arid portion of the rural area had been occupied in the past. This portion of the rural area falls within the newly proclaimed Richtersveld National Park. The park is unique in that the local inhabitants of the rural area are permitted to graze their flocks of

sheep and goats within it. Excavations were undertaken in order to determine whether there was any evidence for early sheep/goat farming in that portion of the Richtersveld set aside for the park. We wished to establish a time depth for the use of the area by pastoralists groups.

Stratigraphy

A total of five square metres were excavated next to the boulders (Fig. 2) down to the basal sterile gravels which was reached at about 15-20 cm beneath the surface. The excavation was undertaken stratigraphically, although, apart from the presence of hearths and white ash lenses, soil colour and texture did not change dramatically. Units 1, 2 and 3 were recognised beneath the surface layer (Fig. 3). A number of other subunits were identified as being contemporary with these units. So PDA and ThF are coeval with Unit 2, while units MGA, GPDA and GS are situated beneath Unit 3 and are grouped together in the basal gravels (VGS).

Pink Dung Ash (PDA), refers to a distinct smell of dung observed during the excavation of this unit. The PDA unit in square B6 also contained a very substantial hearth, some 50 cm x 20 cm in extent and 5-7 cm thick. The hearth contained a number of very large pieces of charcoal (332 g in total), some at least three centimetre long and one centimetre in diameter, which suggests that the fire was significantly larger than the fires generally made by the local community today (F. Archer *pers. comm.*). A charcoal sample from this hearth was dated to 3840 ± 60 BP (Pta-5960).

A unit of termite activity (ThF) is located closest to the wall of the shelter in square Z6. No termite activity, burrows or roots were encountered in any of the other units which could have indicated possible disturbance of the occupation layers. Unit 3 appears to consist of a large hollow excavated in the basal gravels (Fig. 3) of squares A5 and A6. It contained fish remains and ostrich eggshell beads which seemed to relate to a single period of occupation. Scattered charcoal pieces were recovered in this hollow. The radiocarbon date of 3110 ± 60 BP (Pta-5963) shows that this unit was in fact dug into older deposits and is some 700 years younger than Unit 2.

The occupation units were in all cases very ephemeral, indicating that the site was only infrequently visited in the past. The five square metres excavated was in the area of deepest occupation and it is believed that very little archaeological deposit remains.

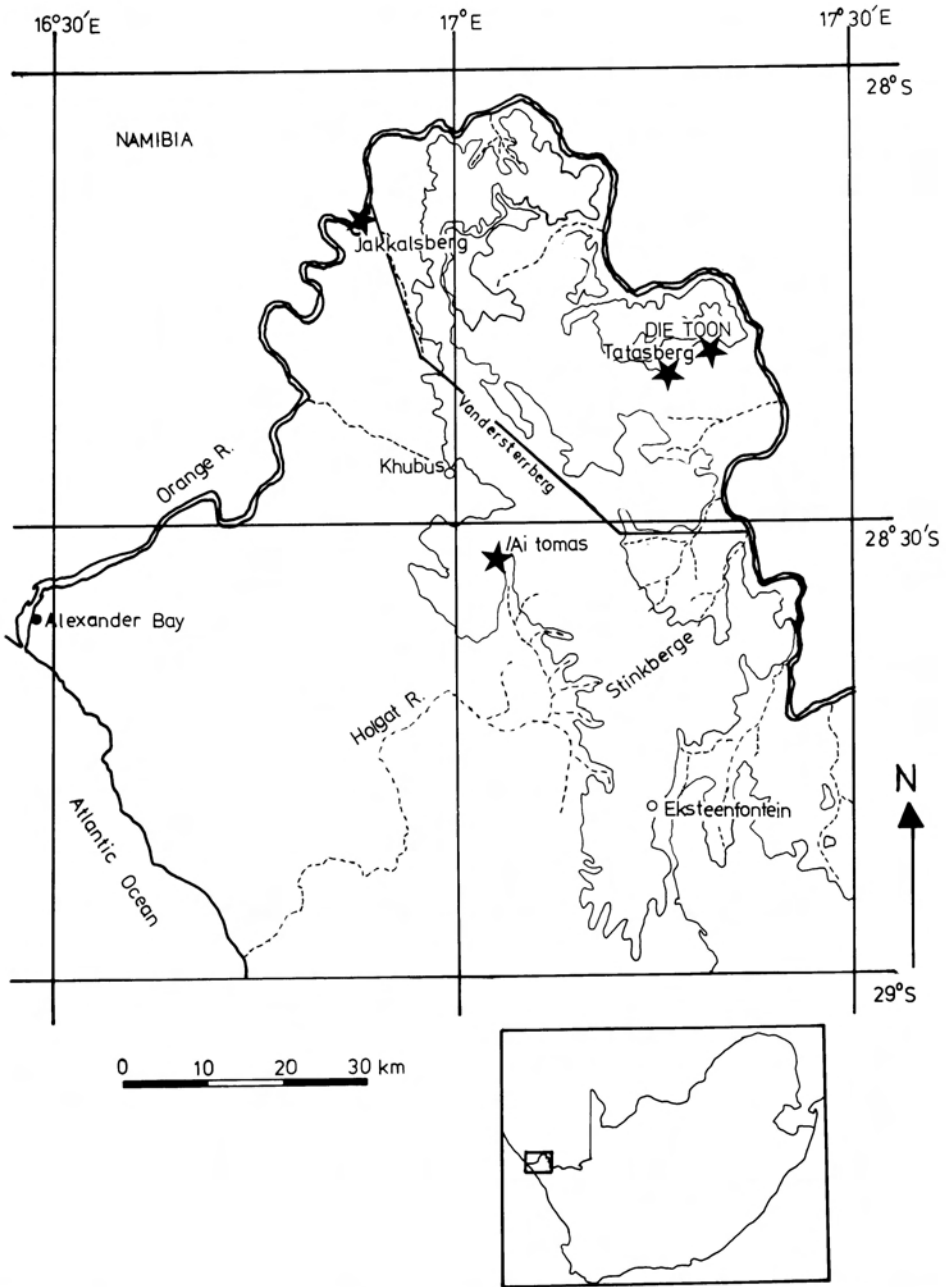


Fig. 1. The Richtersveld showing the borders of the National Park as well as the location of Die Toon. The sites of Tatasberg, Jakkalsberg and /Ai tomas have also been excavated.

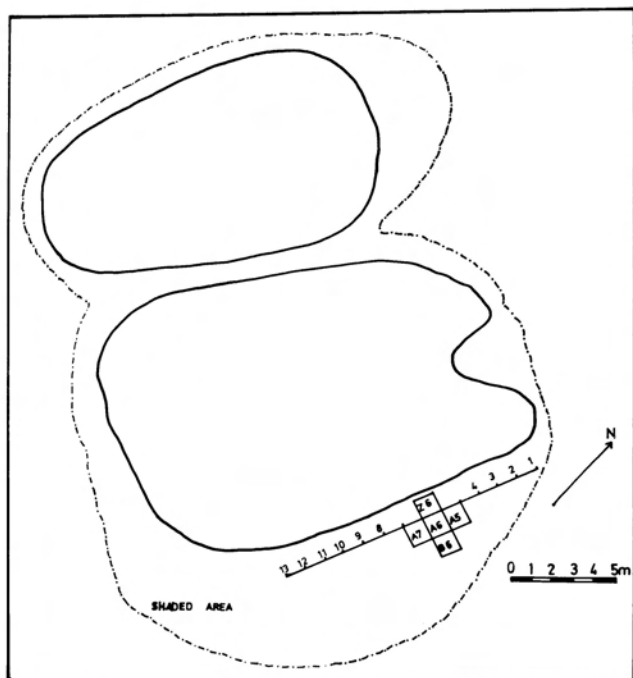


Fig. 2. The excavated area at Die Toon situated next to two large boulders.

Dating

Two radiocarbon dates were obtained from the site. The dates are inverted but as we have already mentioned above, this may be explained by the fact that Unit 3 was excavated into (and below) the older Unit 2. The large hearth in Unit 2 was dated to 3840 ± 60 BP (Pta-5960) with a calibrated range of between 2343 and 2148 BC with a most probable age of 2274 BC. Scattered pieces of charcoal from the hollow which is Unit 3, dated to 3110 ± 60 BP (Pta-5963). The calibrated range of this date is 1419 to 1280 BC with a most probable age of 1387 BC (J. Vogel *pers. comm.*).

Cultural remains

Lithic artefacts

The stone artefact assemblage is largely informal, the greatest number of formal tools occurring in Unit 1 where they amount to 1,7% of the total assemblage. Formal artefacts consist of backed pieces but they are generally not standardised enough to be called backed bladelets (Table 1). No scrapers or adzes are present and there are only two

segments and two miscellaneous retouch pieces (MRPs). The densest accumulation of lithic artefacts also occurs in Unit 1 with 17,9 artefacts per bucket, with 12,5 in Unit 2, and 8,4 in Unit 3.

The majority of the artefacts (80%) were made of quartz (Table 2). Indurated shale (hornfels) is second in importance and reaches 14% in Unit 1. Smaller percentages of silcrete, chalcedony and quartzite are also present. The site contains large numbers of quartz crystals, some flaked, others not. The source of the crystals is only some 1 km from the site, around the slopes of Die Toon. It appears that these crystals were collected as a source of raw material for the manufacture of

artefacts but this of course does not rule out the possibility that they may also have been curated for ritual purposes (Wadley 1986). Small fragments of specularite were found in all units, but were most common in Unit 1. The specularite is not as soft and fine as that from /Ai tomas (Webley 1992). It is more angular and harder suggesting a different and probably local source. No ochre or grindstone fragments were recovered.

Pottery

Only two potsherds were found on the site, and both were recovered from the surface unit. One sherd is fine-grained with an ochre burnish but it has lost its inner edge so that the thickness cannot be measured. The other sherd measures 4,6 mm and is of a fine temper and grey-brown in colour. The potsherds were probably introduced by fleeting pastoralist visits to the site which did not result in occupation layers.

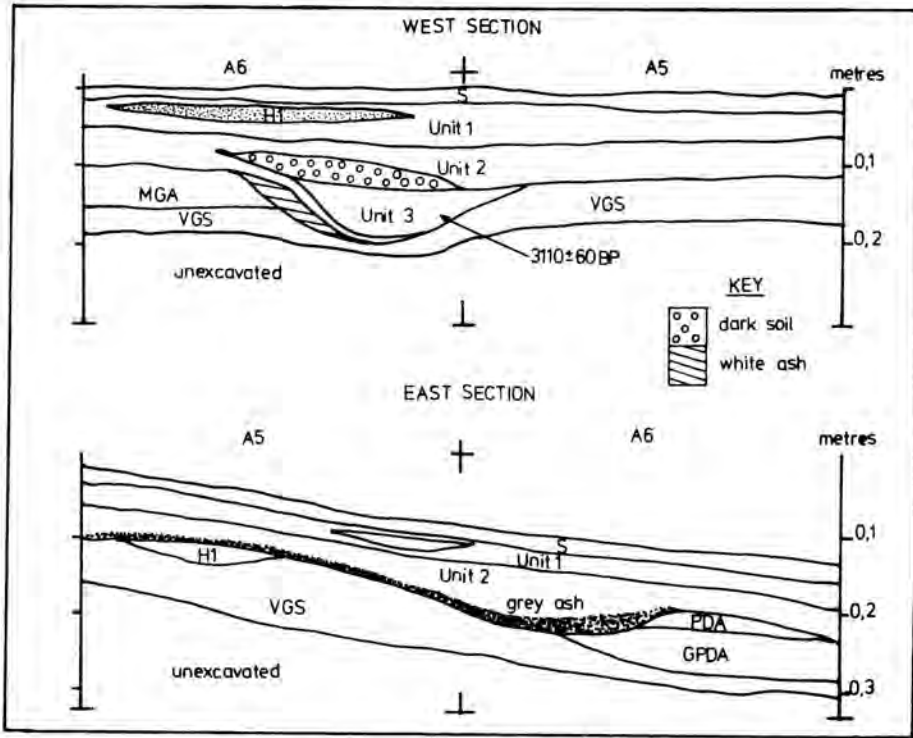


Fig. 3. Die Toon: section drawings of squares A5 and A6 with the position of the 3110 ± 60 BP date indicated. The date of 3840 ± 60 BP was obtained from square B6.

Decorated ostrich eggshell and beads

A few grammes of ostrich eggshell were recovered from each unit (Table 3), with the largest number from Unit 2. One fragment of decorated ostrich eggshell was found in this unit. A total of 32 beads were found with the largest number from Unit 3. This particular sample was associated with fish vertebrae and was recovered from a small hollow, situated in the basal gravels of square A5. The diameter of each bead was measured and the mean for each unit is given in Table 3. Although there would appear to be a gradual increase in bead size from Unit 3 to Unit 1, this is belied by two larger beads in the basal

units. This confirms that the deposit may have been somewhat mixed as a result of the excavation of the 'hollow'.

The largest bead occurs in Unit 1 where a rather uneven (unfinished?) bead with a diameter of 5,5 mm was measured. There are three unfinished beads in Unit 2 but none in the other units; this may point to a more prolonged occupation of the site during this period but the sample is very small, consequently a diagrammatic representation of bead sizes has not been included in this paper. On the basis of comparative work from the western Cape it is suggested that these bead diameters match those of hunter-gatherer groups

from the pre-2000 BP period (Smith *et al.* 1991).

Marine Shell

At least five small fragments of marine shell were recovered from Units 1 and 2. One mussel shell (*Choromytilus meridionalis*) and two fragments of limpet (*Patella* sp.) could be recognised. Die Toon is at least 90 km from the coast, yet resembles other Richtersveld sites such as /Ai tomas and Jakkalsberg, all of which contain marine shell fragments. This suggests that the occupants of the site may have visited the coast on occasions; alternatively, they may have traded for these items with other groups who did visit the coast.

Faunal remains

The faunal remains are very fragmented and only a few diagnostic pieces could be identified. The analysis was undertaken by James Brink. No identifiable faunal remains were recovered from square B6 which yielded the date of 3800 BP. The fragment from Unit 2 (Table 4) tentatively identified as blesbok consists of a fractured proximal second phalanx. This tentative identification of blesbok, well outside its present range, suggests a greater grass cover in the vicinity of the site than that presently available. The two klipspringer individuals in square A5 Unit 3 (the hollow dated to 3100 BP) are those of an adult and a newborn. Several adult and foetal klipspringers were recovered from pits at

Table 1
Stone artefact categories recovered from Die Toon

	Sur	Unit 1	Unit 2	Unit 3	VGS
<i>Informal artefacts & waste</i>					
Chips	59	207	133	31	14
Chunks	9	39	26	9	4
Flakes	33	139	65	28	10
Cores	13	45	15	5	4
Bladelets	-	2	-	-	-
P. esquillees	-	-	1	1	-
Q. crystals	3	7	4	-	-
Flaked crystals	-	4	3	-	-
Crystal flakes	4	14	11	-	-
Total informal artefacts & waste	120	457	258	74	32
Utilised artefacts	1	2	3	1	-
<i>Formal artefacts</i>					
Segments	-	1	1	-	-
Backed pieces	-	5	1	1	1
MRP	1	2	-	-	-
Total Formal	1	8	2	1	1
Grand Total	122	467	263	76	33
Buckets of deposit	9	26	21	9	15
Artefacts per bucket	13.5	17.9	12.5	8.4	2.2

/Ai tomas (Webley 1992), to the south of Khubus, which suggested a deliberate burial policy. It would seem that a similar practice was in operation at Die Toon more than a thousand years earlier. The presence of zebra and springbok at Die Toon are not surprising as they are still found in the region today. The fish remains, which have not yet been identified, is evidence that the inhabitants of the site included the resources of the Orange River (at a distance of 15 km) in their round of dietary exploitation.

Conclusions

Although a systematic survey for archaeological sites has yet to be undertaken in the Richtersveld, a number have been identified and mapped during the last few years. Recent excavations at /Ai tomas and Jakkalsberg (Fig. 1) have produced seven radiocarbon dates post-dating 2000 BP (Webley 1992, 1993). This supports findings from other parts of Namaqualand, namely that there is

very little archaeological evidence for pre-2000 BP occupation of the region. Die Toon, despite its location in the arid eastern half of the Richtersveld, is, therefore, the first living site in Namaqualand to yield Holocene archaeological deposits pre-dating 2000 BP (Webley 1992). Only burial sites were previously excavated. Jerardino *et al.* (1992) reported on a human burial from the Groenriviermond area with a date of 2720 ± 60 BP (Pta-5617) while also referring to another burial from the Kleinzee area with a date of 3750 ± 60 BP (Pta-2267). The archaeological evidence from southern Namibia, which is ecologically very similar to the Richtersveld, confirms that this region was also sparsely occupied between 5100 BP and 2300 BP (Vogel & Visser 1981). The excavated sites of Apollo 11 (Wendt 1976) and Rosh Pinah (Sievers 1984), for example, do not contain occupation horizons contemporary with those of Die Toon. Archaeological work in both southern Namibia and Namaqualand suggest an increase in popula-

Table 2
Stone artefact raw material from Die Toon

	Sur	%	Unit 1	%	Unit 2	%	Unit 3	%	Vgs	%
<i>Waste</i>										
Quartz	104	86,0	351	76,8	206	79,8	61	82,0	30	93,8
Silcrete	1	0,8	9	1,9	2	0,7	8	10,8	-	-
Chal.	1	0,8	9	1,9	5	1,9	3	4,0	-	-
Qzte.	5	4,0	16	3,5	13	5,0	2	2,7	-	-
Shale	6	5,0	64	14,0	28	10,	8	22,	7	26,3
Crystals	3	2,5	7	1,5	4	1,5	-	-	-	-
Granite	-	-	1	0,2	-	-	-	-	-	-
Total Waste	120		457		258		74		32	
<i>Utilised</i>										
Quartz	1	100	1	50	3	100	1	100	-	-
Shale	-	-	1	50	-	-	-	-	-	-
Total Utilised	1		2		3		1		-	
<i>Formal</i>										
Quartz	1	100	6	75	1	50	1	100	1	100
Other	-	-	2	25	1	50	-	-	-	-
Total Formal	1		8		2		1		1	
Grand Total	122		467		263		76		33	
specul.	3	18,7	6	37,5	3	18,7	4	25	-	

Table 3
The mass (g) of ostrich eggshell pieces (OES) and the frequency of OES beads at Die Toon

Units	Grammes OES	Decorated OES	No. Beads	Broken beads	Unfinished beads	Mean bead diameter
Surface	3,5 g	–	–	–	–	–
Unit 1	12,0 g	–	8	1	–	4,2 mm
Unit 2	14,0 g	1	9	–	3	4,0 mm
Unit 3	6,0 g	–	13	–	–	3,9 mm
Basal units	2,0 g	–	2	–	–	4,2 mm

tion density after 2000 BP which may be linked to the arrival of pastoralist groups in these areas.

The archaeological deposits at Die Toon are very ephemeral and indicate only brief visits to the site, possibly only in years of particularly good rainfall, as the shallow deposit spans a period of 700 years. Artefactual remains are sparse and it is difficult to infer much of the lifestyle of these inhabitants. They were clearly hunter-gatherers who were hunting while at the site (no plant food remains were recovered despite the dry conditions prevailing at the site); and visiting the Orange River to catch fish.

The possible presence of blesbok is interesting as it was not present in the considerably larger faunal sample from /Ai tomas with lower units dated to 1980 BP (Webley 1992). It may well be that sheep, introduced ca. 2000 BP, usurped the niche previously occupied by the blesbok and led to the displacement of the latter from the area. Equally, the blesbok points to greater grass cover in the vicinity of the site. An extended grasslands may well be related to increased precipitation and in this regard it is well to note the very large hearth in Unit 2 containing pieces of charcoal which probably originated from more substantial woody vegetation than is presently found near the site. Larger fires may also have been

Table 4
Faunal remains according to minimum numbers of individuals (MNI) and number of identified specimens (NISP). An x indicates limited presence

	Unit 1	Unit 2	Unit 3	MGA
<i>Procavia capensis</i>	1/3	–	1/3	–
cf. <i>Pronolagus rupestris</i>	–	1/3	–	–
Viverridae indet.	–	1/1	–	–
Canidae indet.	1/1	–	–	–
<i>Equus</i> sp. cf. <i>E. burchelli</i>	1/6	1/1	–	–
cf. <i>Damaliscus dorcas</i>	–	1/1	–	–
<i>Oreotragus oreotragus</i>	1/1	1/2	2/3	–
<i>Antidorcas marsupialis</i>	1/2	–	–	–
Bovidae indet.:				
Small	1/5	1/1	1/1	1/1
Small-medium	–	–	1/1	–
Large-medium	1/1	–	1/1	–
Small rodent	x	x	x	–
Reptile	–	x	x	–
Fish	–	x	x	–
Bird	–	–	x	–

necessary during cooler and wetter conditions. These suggestions are speculative and need to be tested by charcoal analysis. The disappearance of the blesbok may well be linked to deteriorating vegetation/climatic conditions.

Acknowledgments

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