

'A chief is like an ash-heap on which is gathered all the refuse': the faunal remains from the central court midden at Kaditshwene

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Systematic excavations have uncovered a faunal assemblage from the central court (*kgotla*) midden at Kaditshwene, a large stone-walled complex in the Marico. Kaditshwene served as the capital of the Bahurutshe booMenwe, the dominant Tswana chiefdom in the region, from about 1790 to 1823. It can be inferred from oral and contemporary written accounts that the excavated midden was formed during the regency of Diutlwileng, who succeeded his brother Sebogodi sometime after mid-1813. The midden mound accumulated mainly as a result of activities that involved the town's senior men, who regularly attended court cases, political meetings, as well as various religious ceremonies and rituals, in the *kgotla*. It was also here where senior men had their main daily meal served and where they pursued crafts such as hide-working. Bones originating from all these activities were discarded on the adjacent *kgotla* midden. The total faunal assemblage, which consists of nearly 24 000 specimens from at least 45 taxa, sheds valuable light on the lifeways of Hurutshe notables. The archaeofaunal analysis shows that a core section of Kaditshwene's inhabitants relied on cattle, sheep and goats for most of their animal protein. Mostly younger animals were slaughtered, indicating that high-status males had access to the choicest meat cuts. Cattle remains outnumber those of the sheep/goat group at a ratio of 2.6:1. Observations by John Campbell, who visited the capital in May 1820, confirm that the ruling elite of Kaditshwene possessed large herds of cattle. Only a few bones of domestic dog and chicken were retrieved. A wide range of wild animal species is also represented in the faunal assemblage, including a variety of ungulates and carnivores. Many of the latter were prized for their skins, some of which were the preserve of royalty. The recovery of several ivory fragments and a broken ivory bangle corroborates entries in Campbell's journal that elephant tusks were a highly valued commodity. A substantial number of ostrich eggshell fragments and beads were also unearthed. Shells of the freshwater mussel and the giant land-snail display polished edges, suggesting that they were probably used to smooth clay during the manufacture of pots and the construction of house walls. Body parts of the lappet-faced vulture and the secretary bird were most certainly used for magical purposes by diviners. Though few imports were retrieved, the presence of a marine cockle shell (*Veneridae*) suggests that the Hurutshe were involved in some long-distance exchange network that reached the eastern coast of southern Africa.

Keywords: Animal Remains, Cattle, Hurutshe, Kaditshwene, *Kgosing*, *Kgotla*, Marico, Midden, Rainmaking, Skins, Trade.

INTRODUCTION

This article examines the faunal remains recovered from the main court midden at Kaditshwene, the early nineteenth-century stone-walled capital of the Bahurutshe booMenwe. This branch of the Hurutshe was the dominant Tswana chiefdom in the Marico in the late eighteenth and early nineteenth centuries. During this period various smaller chiefdoms, such as the Bahurutshe booMokgatla, the Bahurutshe booManyane, the Bahurutshe booMokhibidu, the Balete, the Baphiring, the Batlokwa booMolefe and the Bakgatla ba ga Mmanaana, acknowledged Kaditshwene as the regional centre of power. The core of this large stone-ruin complex, which covers an area of more

than three square kilometres, straddles a prominent hill on the boundary between the present farms Kleinfontein (or Olifantspruit) 62 JP and Bloemfontein 63 JP, about 25 km northeast of Zeerust in the North West Province (Boeyens, 2000). The surrounding area is today generally known as Enselsberg (Tswenyane) (Fig. 1).

The aims of this study are twofold: first, to give an account of the zooarchaeological analysis of the excavated faunal collection and, secondly, to interpret the results in terms of the site's historical context and the sociocultural activities that could have led to the accumulation of the midden. In a study of Ntsweng, the capital of the Bakwena ba ga Sechele in eastern Botswana from 1863 to the 1930s, Reid (2004: 303) argues for a more 'culturally

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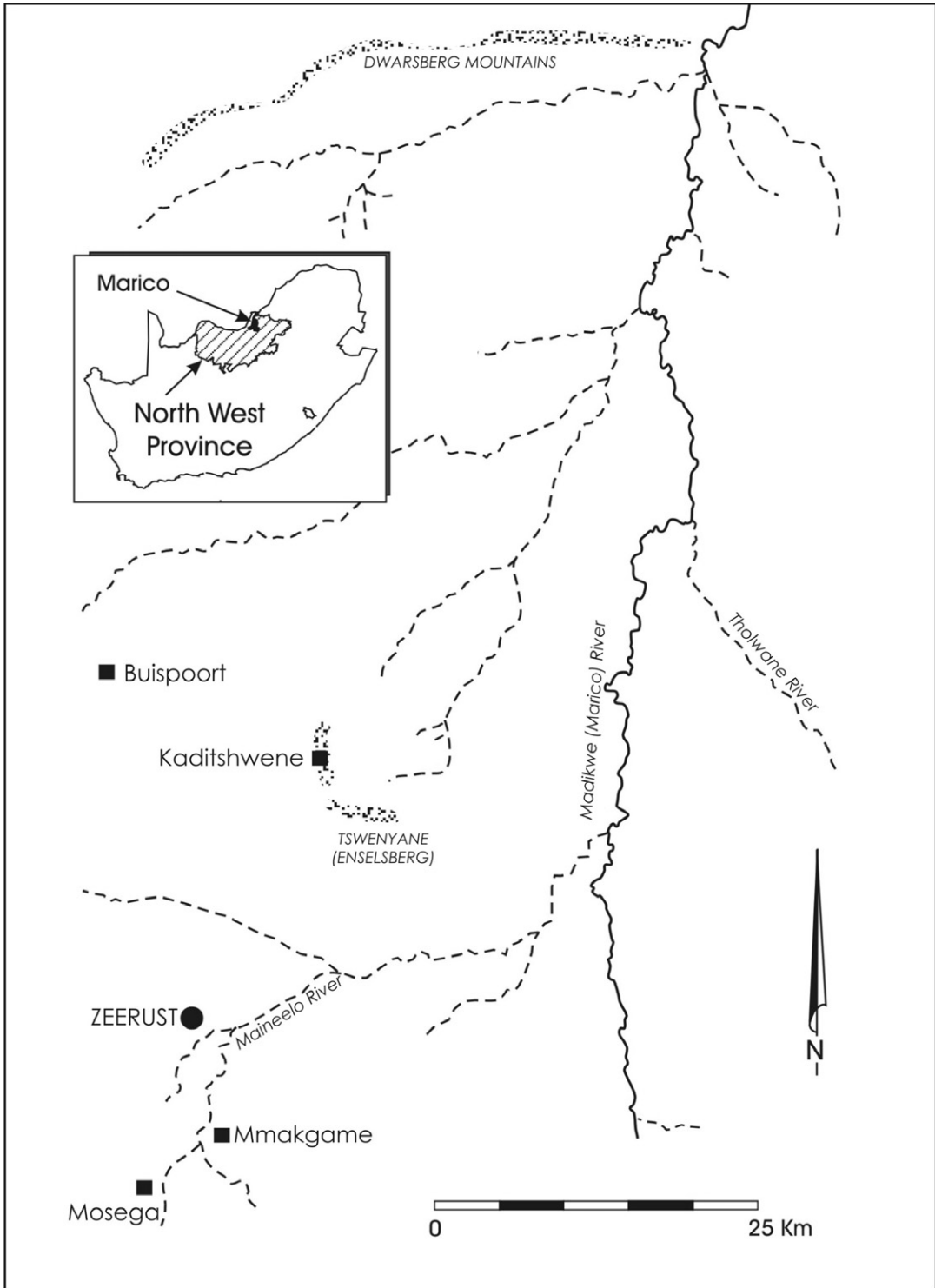


Fig. 1
Kaditshwene and the research area in the Marico.

attuned approach' to the study of faunal remains recovered from indigenous farming societies dating to the precolonial or early historical period. This implies that due attention should be paid to cultural factors that might have influenced the differential exploitation of animal resources, such as is sometimes reflected in mortality profiles, patterns of meat distribution and consumption, as well as the spatial distribution of species and body parts. In the case of the Kaditshwene court midden assemblage, such an approach is facilitated by a number of factors. As will be shown, the available dating evidence suggests that the midden accumulated over a relatively short period, spanning approximately 10 years. In addition, it is possible to identify the stratum or section of society, as well as the cultural practices and activities, which contributed to the discard and accumulation of the bone refuse. The contents of the midden assemblage can be attributed primarily to men, in particular those belonging to the ruling elite. Most important, though, is the availability of a rich body of ethnographic data and contemporary documentary evidence on the lifeways of the Tswana and, in particular, the Hurutshe at Kaditshwene, which can inform a cultural interpretation of the faunal assemblage.

HISTORICAL CONTEXT

The two critical questions to be addressed are exactly *when* the site of Kaditshwene was occupied and *how long* it took for the excavated midden to accumulate. According to oral tradition, the Hurutshe, or at least part of them, had been residing in the Enselsberg (Tswenyane) region since at least the mid-fifteenth century AD (Breutz, 1953: 141). However, the stone-walled town that became known as Kaditshwene was only established towards the end of the eighteenth century (Boeyens, 2003: 69). Prior to Kaditshwene, the capital of the Bahurutshe booMenwe was located at Mmakgame, about 10 km to the south of Zeerust. At Mmakgame, on the present-day farm Vergenoegd 279 JP, they were ruled by Moilwa I. The exact date of Moilwa I's death is uncertain – it has been variously given as 1795 (Legassick, 1970: 702), or 1805–1810 (Breutz, 1953: 95). Based on information obtained in 1820 by John Campbell, a director of the London Missionary Society, a date around 1790 seems more plausible. According to 'Maketzee', a Rolong trader who travelled with the missionary-explorer to Kaditshwene, Moilwa I had been killed in a skirmish with the Ngwaketse under Moleta. The latter died in about 1790 after he had apparently been poisoned by his son Makaba (Campbell, 1822[1]: 314).

It was under Moilwa I's successor, Sebogodi I, that the Bahurutshe booMenwe relocated their

capital from Mmakgame to Kaditshwene Hilltop (Lichtenstein, 1815: 408; Smith, 1836: 79). Sebogodi still reigned in July 1813, as John Campbell (1815: 216–217) noted in the journal of his first journey into the South African interior: 'A nation east from the Wanketzens [Ngwaketse] are called the Marootzees [Hurutshe], whose chief's name is Seebechoone [Sebogodi], ... Their city is larger than Lattakoo [Dithakong], and their cattle kraal, (or inclosure for securing cattle in the night time,) is so large that they frequently graze in it. It is said to be cold, perhaps on account of standing in an elevated situation.'

Hurutshe oral traditions relate that Sebogodi I died in about 1815 in a battle with the Bakgatla ba ga Mmanaana, a Tswana chiefdom occupying the Motswedi/Buispoort area in northwest Marico (Breutz, 1953: 34). When John Campbell (1822[I & II]) and Wesleyan-Methodist missionary Stephen Kay (1834) visited Kaditshwene in May 1820 and August 1821 respectively, the Hurutshe were governed by a regent, Diutwileng, a brother of Sebogodi. The Hurutshe were compelled to evacuate Kaditshwene during the upheavals of *difaqane* after attacks by various fugitive South Sotho groups, such as the Hlakwaana, the Phuting and the Kololo (Legassick, 1970: 328–331). On 12 April 1823 Robert Moffat, missionary among the Tlhaping at Kuruman, recorded that '[i]f the public accounts of the Bootchuanas can be depended on, Kurecheene [Kaditshwene] is no more than a heap of rubbish, and very probably the camp of a ferocious enemy who are said to carry devastation and horror in their train' (Schapera, 1951: 73). Diutwileng died in a battle fought against the Kololo of Sebetwane at Kolontwaneng, the capital of one of the Hurutshe's allies, the Batlokwa booMolefe (Campbell, 1822[II]: 314; Wookey, 1945: 38). Subsequent raids by Mziilikazi's Ndebele induced the Hurutshe to finally abandon the Kaditshwene area and to settle down in southern Marico in the Mosega Basin, not far away from their former capital Mmakgame (Moffat, 1842: 516).

It is clear from the above account that the capital settlement on Kaditshwene Hilltop was occupied for little more than one generation, from about AD 1790 to 1823. A study of the layout of the central ward in the chief's district allows us to narrow down even further the period during which the excavated midden accumulated. As shown in the accompanying map (Fig. 2), which covers only a portion of the *kgosing* (central division or district) of Kaditshwene, there are two large cattle kraals and two large court areas in the centre of the chief's ward. Next to each court there is a large midden. The midden of the first central or main court is probably as large as the excavated midden, which is associated with the

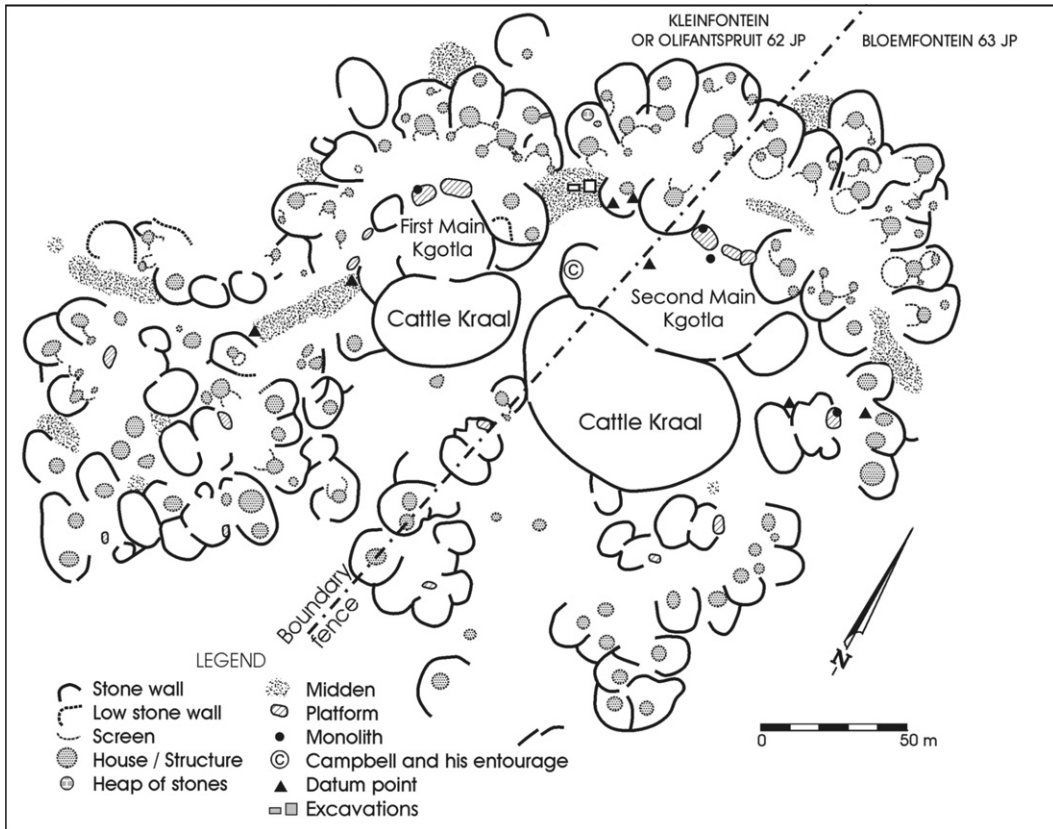


Fig. 2

Site plan of the central ward in the *kgosing* (chief's division) of Kaditshwene.

second central or main court. As will be explained in the following section, among the Tswana such large middens only accumulated near the great council-place (*kgotla*) of the chief (*kgosi*) in the capital. This suggests that at least two chiefs ruled at Kaditshwene during its occupation, a chronology which ties in well with the historical evidence on the reigns of Sebogodi and Diutlwileng. In Tswana society, the central court was usually shifted after the installation of a new ruler, primarily to accommodate the changing social relations and political alliances that arose from a transfer of power (Boeyens, 2003: 69). In the case of Kaditshwene, therefore, this must have occurred after the death of Sebogodi, not long after mid-1813, when he was succeeded by his brother Diutlwileng. Diutlwileng was not the designated successor but acted as regent. However, as several examples from Tswana history attest to, regents often strove to entrench their position, and if they governed well and became popular, they were allowed to stay on until they passed away (Language, 1943: 95). The establishment of a new central court and an even larger central cattle kraal would have

bolstered Diutlwileng's reputation and claim to the throne. Indeed, Diutlwileng boasted to Campbell (1822[1]: 251) that his influence extended beyond Kaditshwene and his own branch of the Hurutshe: 'He said he was acknowledged as superior by all the tribes immediately around; but there were others beyond them who were very mischievous, such as the Boquains [Bakwena]...'

The sequence of the two courts and their associated middens can be established with reference to John Campbell's travel account and his watercolour sketches of Kaditshwene. The excavated midden is located adjacent to the second central court (*kgotla*) where Campbell (1822[1]: 258) and his entourage stayed during their May 1820 visit. One of his watercolour sketches of the capital (Fig. 3) clearly depicts their wagons and tents in the southwestern corner of the *kgotla*, which is described by Campbell (1822[1]: 223) as an 'extensive inclosure ... surrounded by a stone wall, except at the gate by which [they] entered' where 'some strong posts, ten or twelve feet high, were driven into the ground'. The sketch also illustrates a monolith on the inside of the

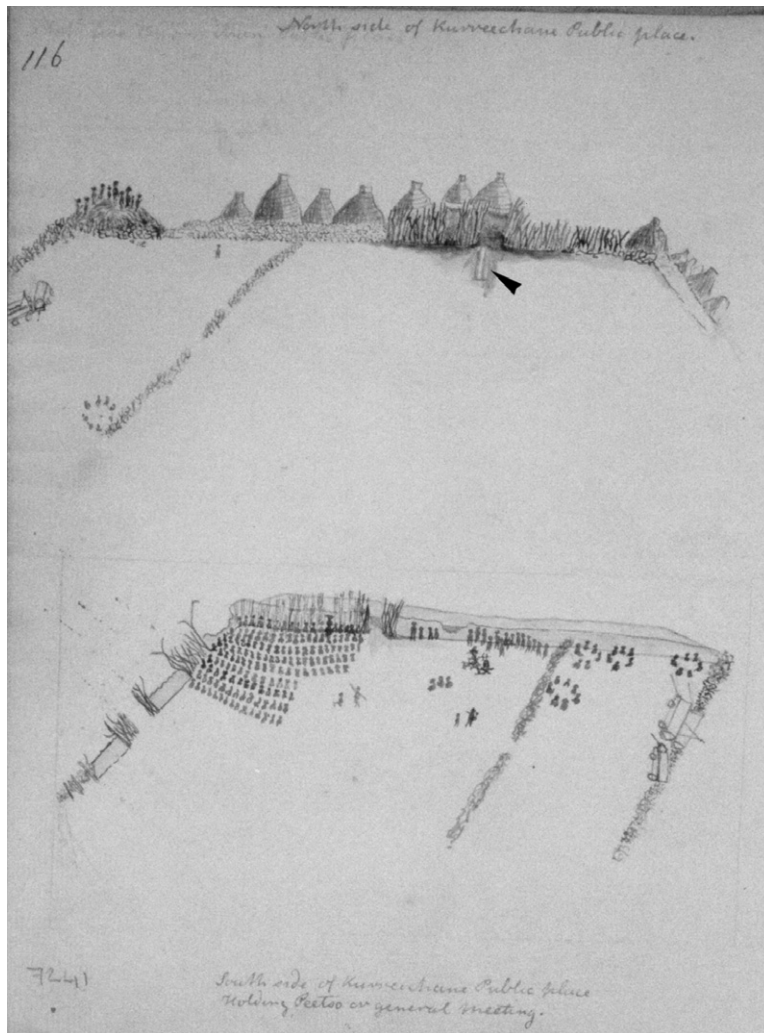


Fig. 3

John Campbell's sketch of the all-male assembly of leaders in the second central court (*kgotla*) of Kaditshwene on 10 May 1820. The mound, on which onlookers are standing just outside the *kgotla*, represents the excavated midden.

second central court near its northern entrance. This upright stone, which is still standing today, probably served as a symbol of political power and leadership.

It is evident that the second central court functioned towards the end of Kaditshwene's occupation. The excavated midden, which is associated with this court, must therefore have accumulated over a very short period, between approximately 1813 and 1823. From oral and written sources it can be surmised that Diutlwileng's reign was characterized by increasing tension, competition and conflict with neighbouring Tswana chiefdoms. This period saw the rise of the Ngwaketse in present-day Botswana under Makaba, with whom the Hurutshe clashed

on more than one occasion (Gulbrandsen, 1987). In general, it would seem that the Hurutshe's dominance of the region increasingly came under pressure. For example, in 1819 the Hurutshe had to enlist the support of a visiting Cape frontiersman, Coenraad de Buys, to subdue the Lete, a subordinate chiefdom located near a tributary of the Madikwe (Marico) River (Boeyens, 1998).

Such conflicts were probably also fuelled by adverse climatic conditions just prior to the cataclysmic events of the *difaqane*. Radiocarbon and tree-ring dating of a yellowwood tree (*Podocarpus falcatus*) from the midlands of KwaZulu-Natal points to 'five years of severe drought' between approximately 1817 and 1823, which followed on 'two

decades of very high rainfall' (Vogel *et al.*, 2001: 164, 166). When Campbell (1822[1]: 262–263) travelled through the territory of the western Tswana in 1820, he was informed and became aware of a widespread drought in the region. By August 1821, during Stephen Kay's visit (1834: 191) to Kaditshwene, a general drought prevailed in the western interior. Kay (1834: 198) found the Hurutshe at Kaditshwene in a dejected state: 'A gloomy spiritlessness sat on every countenance, and the manner of all bespoke the absence of peace. Great poverty was apparent in the aspect both of old and young; and their reduced state induced them eagerly to eye every thing [*sic*] that was at all edible.' This heightened tension in the South African interior, aggravated by a steadily encroaching colonial frontier, would have led to increasing political action and meetings at the second central court during the final decade of Kaditshwene's existence.

The short period of occupation of Kaditshwene (approximately 30 years), and the even shorter period during which the second central court midden accumulated (approximately 10 years), greatly facilitate a cultural interpretation since the faunal assemblage represents a well-dated slice of behavioural residue. Our interpretation is further enhanced by the fact that the capital was visited and described during its brief occupation by the two abovementioned literate observers, John Campbell and Stephen Kay. The most comprehensive account of Kaditshwene is that of Campbell, whose journal contains invaluable information on the Hurutshe and other Tswana speakers' use of animal resources. Campbell and his entourage stayed in the main public assembly area (the second central court or *kgotla*) in Kaditshwene from 4 to 13 May 1820, thus in full view of the activities that took place within the heart of the capital. His observations at Kaditshwene span more than 50 pages in his two-volume journal, *Travels into the Interior of South Africa*, which was published in 1822. He was an acute observer with 'an eye for telling detail', as well-known anthropologists John and Jean Comaroff (1992: 129) have noted. The wealth of cultural description in his travelogue constitutes an example of the 'implicit ethnography' that is often contained in accounts of first encounters between indigenous and colonial societies (Whitehead, 1995: 57). Consequently, frequent reference will be made to Campbell's first-hand account in our discussion of the archaeofaunal assemblage and analysis. Because Kaditshwene can be confidently linked to the historically known Tswana, there are also sufficient grounds to make use of more recent ethnographic data on this linguistic cluster when interpreting the zooarchaeological data.

THE SPATIAL AND CULTURAL CONTEXT: THE *KGOTLA*, THE *KGOSI* AND THE MIDDEN

Before inferences can be made regarding the use of animal resources at Kaditshwene, in particular about dietary or non-dietary contributions, it is essential first to establish the nature of the activities that led to the accumulation of the faunal assemblage. Linking bones with human behaviour has always been a complicated issue in zooarchaeological investigations. As noted by De Wet Bronner (1995: 118) in her study of Iron Age faunal assemblages from the Soutpansberg, to successfully interpret refuse patterns, 'we need to establish clearly whether middens are general purpose dumps or related to nearby activities'.

As indicated, the spatial and cultural context of the faunal remains from the Kaditshwene midden can be confidently linked to activities associated with the second main court (*kgotla*) in the central division (*kgosing*). Early historical Tswana capitals consisted of a large number of wards (*dikgoro*) that were often grouped into three 'zonal divisions', namely a central division, an upper or right-hand division, and a lower or left-hand division (Schapera, 1943: 70–71, 1953: 47). The core of the central division, also known as the *kgosing* ('the chief's place'), contained the chief's ward, which was located next to or around the central *kgotla* and was composed of the dwelling units (*malapa*) of his and other family groups. The remainder of the *kgosing* was composed of the wards of the chief's retainers, who were usually placed close to the chief's ward, as well as the wards of nobles (*dikgosana*) who assisted with the administration of the chiefdom (Tlou, 1974: 73).

The excavated midden in the chief's ward of the *kgosing* of Kaditshwene is located just outside the northwestern edge of the second main court. The entire midden covers an area of about 30 square metres. To the south of the large open space demarcating the court lies an exceptionally large cattle kraal (about 75 m × 45 m), enclosed by stone walls (Fig. 2). Campbell (1822[1]: 232–233) recorded that he was awakened one night by the bellowing of cattle in the enclosure adjoining the *kgotla*. Campbell's watercolour sketch of the *pitso*, or gathering of 300–400 'captains', which was held on 10 May 1820 in the *kgotla* to discuss his request to establish a mission station among the Hurutshe, also depicts people standing on a mound immediately to the northwest of the public assembly area, designated as the second central court. This mound, in fact, represents the central midden where the archaeological excavations have been carried out and from which the faunal collection derives (Fig. 4). The meeting described by Campbell constituted a *pitso ya dikgosana* ('gathering of royals/leaders'), which



Fig. 4

The large midden, close to the second central court (*kgotla*), from which the faunal remains are derived.

was attended by ward heads, sub-chiefs, chiefs of neighbouring towns and such trusted advisors as appointed by the ruling elite. It must be distinguished from a *pitso ya morafe* ('gathering of the nation'), an occasional meeting held in the *kgotla* in which all initiated males could participate (Coertze, 1990: 71). The large number of leaders present at the meeting attests to the political influence of Kaditshwene, whose population was estimated by Campbell (1822[1]: 277) at about 16 000.

Although more difficult to detect, domestic middens have been located behind the stone walls of some of the *malapa* enclosures in the residential unit occupied by the chief's family group (Fig. 2). Ashy patches are also found in front of the *malapa* of the chief's family unit, which suggests that these areas may also have been used to dispose of domestic refuse. It is axiomatic that investigation of these smaller domestic middens should provide a better indication of the diet and nutrition of the occupants of each dwelling unit or household. Based on Tswana ethnography, it is unlikely that such domestic refuse would have found its way to the central *kgotla* midden. As explained by a knowledgeable Tswana informant, J. Masiangoako (1939: 6–7), to state ethnologist N. J. van Warmelo: 'The refuse [from a household] is emptied outside the yard. Each

house had a place where the refuse is emptied. The refuse of the *kgotla* is emptied outside the *kgotla* in front of and next to the gateway at its side.'

It has been argued that, among the Sotho-Tswana, the replacement of the cattle kraal by the *kgotla* as the public assembly area of the chiefdom marked the development of greater political complexity and the emergence of large-scale decision-making units (Kuper, 1982: 150–151). The significance of the *kgotla* in the everyday life and socio-political organization of Tswana chiefdoms is perhaps best outlined by missionary Charles Willoughby (1905: 301–302): 'It is in this place that the public business of the tribe is transacted; here all the ordinary public assemblies are held, ... here at daybreak, the chief administers justice; here are held the rain-making rites, the ploughing rites, the new year purification rites, the rites in connection with the purification of warriors, and even some of the final rites connected with the initiation ceremonies for boys and girls. Here all the messengers from the outlying districts will await the pleasure of the chief, and to this place every visitor at once proceeds.'

According to Gulbrandsen (1987: 231), the '*kgosi* and his court, the *kgotla*,' were 'the focal point of the state, politically, economically, ritually and spatially.' The chief's role in the court had to be public and he

'should spend most of his time there', not only to 'discuss routine issues and recurrent problems with the advisors who join him there, but also to be 'available to all tribesmen who want to address the *kgosi*' (Gulbrandsen, 1987: 219).

Lestrade (1928: 429), in one of the earliest anthropological studies of the political organization of the Tswana, noted, with special reference to the Hurutshe, that it was 'andocratic, democratic and gerontocratic, with aristocratic tendencies'. This means that only adult males could attend court proceedings, with the most senior among their ranks attending and participating in the highest-ranking court, the chief's *kgotla*. The degree of freedom of expression enjoyed by such senior men attending a *pitso* was noted by Campbell among both the Tlhaping and the Hurutshe. With regard to the former he observed at New Dithakong: 'Such is the freedom of speech at those public meetings, that some of the captains have said of the King, that he stupifies [sic] his mind by smoking tobacco, and is not fit to rule over them' (Campbell, 1822[II]: 157). District and ward leaders had a vested interest in the affairs of the polity and were keen to participate in court proceedings and in the political decision-making process (Gulbrandsen, 1987: 237).

Not only the *kgosi*, but also most of the senior men of the chiefdom spent most of the time in the *kgotla*, as Campbell (1822[I]: 90) noted among the Tlhaping: 'We visited three of the public enclosures where the men generally spend the day together at work, or in conversation. Each enclosure has what may be called a summer-house, which is generally in the eastern corner.' The *kgotla* was also the place where the men gathered during the day to dress skins and make karosses, an activity in which even Diutlwileng, the Hurutshe regent at Kaditshwene, participated. In fact, Campbell (1822[I]: 230, 235) noted that '[t]he chief employments of the men are dressing skins and making cloaks in the public places'. This activity was also witnessed by Campbell (1822[II]: 72) at Dithakong: 'In the public place, opposite the chief's house, we found eight or ten people busy at work upon various kinds of skins for cloaks; some cleaning and making them thin by scraping them with a small iron adze, the edge of which they frequently sharpened or touched up with a *steel* [sic], smaller than those used in England at table for sharpening knives; others were softening skins with water, and one man was grinding tobacco.'

Fifteen years later, this custom was also recorded by Andrew Smith among the Tlhaping at Kuruman (Lye, 1975: 167): 'It was in such spots which Mr Bell, not ineptly, in a representation of one of them has denominated a Bituana club house and where we first saw the process of constructing corosses (fur mantles), whistles, knives, etc.' The preparation of

one of these skin garments often took months to complete (Crisp, 1896: 14–15).

It should be borne in mind that the chief's *kgotla* was the highest of several grades of courts, each with a different level of jurisdiction. Sometimes as many as four levels of courts were distinguished below that of the main court, namely those settling disputes concerning the family group, the sub-ward, the ward or the district (Schapera, 1938: 278–283). Appeals could be made from a lower court to a higher court, or more serious cases could be referred to a court of a higher grade. The main *kgotla* was also the venue where all the tribute was delivered to which the chief was entitled. According to Schapera (1938: 63), this consisted 'primarily in the breast-portion (*sehuba*) of every big game animal, in one tusk of every elephant, and in the skins of every lion and leopard killed by his subjects, whether hunting alone, or in a regiment, or in a *letsholô* (tribal hunt)'.

Besides serving as a venue for the highest court cases, the reception of important visitors, the delivery of tribute, the performance of national political and religious activities and the execution of various crafts by senior males, the main *kgotla* was also the place where most of the leading men and visiting dignitaries ate during the day. This is evident from the gastronomic feast witnessed by Campbell (1822[I]: 234–235) at the Kaditshwene court: 'He [Kgaswane, a visiting chief] made a present of an ox to the Marootze Regent. I witnessed about an [sic] hundred of the captains feasting on it at the gate of the public inclosure where the waggons stood. The Regent was seated in the centre.... A very large wooden dish was laid before him, full of boiled flesh, which he cut with a knife, holding the ends of the bones in his left hand while he cut off the meat. He seemed to act as chief carver, helping all around.'

According to Mönnig (1967: 190), among the Pedi '[m]en eat separately from women and children and have their own utensils.... A woman and her children usually eat together in their courtyard, but a man is never summoned to a meal, and his food is either kept for him, or sent after him. Usually men eat in their gathering-place, and all the men present share their meals.' This also applies to the Tswana, as indicated by Masiangoako (1939: 6), who maintains that in the case of men, 'all the food goes to the *kgotla*. That is why every male person is compelled to go to the *kgotla* and not anywhere he desires'. Although ethnographic sources differ as to whether two or three meals were traditionally prepared each day, it is clear that the main meal was served around midday, 'when the sun is hot', i.e. about 11–12 noon (Quin, 1959: 261; see also Mönnig, 1967: 189 and Grivetti, 1981: 309).

In view of all the activities conducted in the chief's

Table 1

Radiocarbon dates from the second central court midden at Kaditshwene (site 2526AC2). All radiocarbon dates are based on charcoal samples and calibrated (one-sigma range) for the southern hemisphere using Program CAL4H, June 1997 (updated October 2001), developed by the Quaternary Dating Research Unit, CSIR, Pretoria. For historical reasons, as explained in the text, *1823 was used as a cut-off date. Measurements refer to depth of samples below the present soil level.

Lab. no.	Excavation & layer	Midden depth (cm)	C-14 date (BP)	Calibrated age
Pta-5293	KLF1.1.2	10–20	180 ± 20	1682–1698;1720–1745; 1807–1819
Pta-5870	KLF1.1.6	50–60	180 ± 45	1675–1772; 1800–*1823
Pta-5296	KLF1.1.11	100–110	200 ± 20	1677–1689;1733–1768; 1802–1813
Pta-7039	KLF3.1.3	20–30	160 ± 50	1680–1755;1804–*1823
Pta-7046	KLF3.1.5	40–50	220 ± 45	1664–1691;1730–1814
Pta-7033	KLF3.1.11	100–110	200 ± 40	1671–1698;1720–1780; 1795–1819

great council-place, it comes as no surprise that the central court midden is usually the largest ash-heap in the settlement. The Tswana proverb quoted in the title of this article thus aptly reflects the role of the main court and its associated midden as the hub of the capital. In full, the proverb reads as follows: '*Kgosi thothobolo e olelwa matlakala.*' This can be translated literally as 'A chief is like an ash-heap on which is gathered all the refuse', the cultural meaning of which has been explained as 'The higher the position the greater the responsibility' (Plaatje, 1916: 47; Matumo, 1993: 400). Not only did the chief bear the greatest responsibility, but he had to care for the well-being of all the members of the community – all their troubles could be 'dumped' on him. Tlhaping spokesmen interviewed by Language (1943: 10) quoted the same proverb to stress the fact the chief had to be accessible to all and that he was obliged to make no distinction between his subjects: 'The Tlhaping say: '*Kgosi ke thutubudu*' (the chief is a midden); everybody, good and bad, will always come to him and he must treat all of them equally and impartially. It is essential for the maintenance of the tribe that his subjects are treated all alike by the chief.'

It is clear from the above that the faunal remains from the court midden can be associated mainly with the male members of the Kaditshwene settlement, especially the chief and the leading men of the capital. The bulk of the remains would have derived from a variety of socio-political, economic, religious or juridical activities in which the leading men of the capital and other subordinate towns participated. In addition to animals slaughtered during public ceremonies or feasts, the faunal specimens were also derived from the daily meals consumed by high-status males in the capital's main assembly area.

THE MIDDEN EXCAVATIONS AND THE ARCHAEOFAUNAL ANALYSIS

Two test excavations, in 1990 and 1995 respectively, were carried out in the midden (25°21'25"S 26°10'03.5"E) that abuts the second central court.

The 1990 excavation consisted of a block of 4 m × 2 m that was reduced to a 2 m × 2 m square after the first 10 cm. The excavation was conducted in arbitrary spits of 10 cm each until sterile reddish soil was reached at a depth of about 115 cm in layer 12. The 1995 excavation, which was positioned about half a metre away from the previous excavation, opened up a 2 m × 1 m block, also excavated in 10 cm spits to approximately the same depth. All the midden material was put through a 1 mm sieve and initially sorted on site. Charcoal retrieved from the midden excavations yielded six tightly clustered radiocarbon dates, the results of which suggest that the ash-heap accumulated over a relatively short period, sometime between the late eighteenth century and the 1820s (Table 1). As explained above, oral historical and documentary evidence suggests that the midden assemblage accumulated over an even shorter period, between about 1813 and 1823.

Using the comprehensive reference collection in the Archaeozoology Division of the Ditsong National Museum of Natural History (formerly Transvaal Museum), the animal remains from the two midden excavations were analysed according to internationally accepted procedures (Reitz & Wing, 1999). Animal size and age classes and osteomorphological landmarks were determined according to procedures suggested by Brain (1974), Voigt (1983), Peters (1986) and Plug (1988). The Bovidae (Bov) size classes are listed in Table 2. In the original analysis, the results were listed as per excavated spit. However, as the historical and archaeological evidence pointed to a relatively short and well-defined period of occupation, and as there was no evidence for stratigraphic separation or cultural variation throughout the deposit, the contents of the layers were combined for the purpose of this article.

Similarly, the results from the two faunal reports on the two excavation units, designated as KLF2 and KLF3, were integrated (see Plug & Meyer zu Bargholz, 1993, 2000). No attempt was made to calibrate the MNI (Minimum Number of Individuals) counts originally listed in each of the two reports, which means that MNI counts could be slightly

Table 2
Bovidae size classes (after Brain, 1974).

Categories	Live-weight range (kg)	Upper limit
Bov I (small)	0–23	Large female common duiker
Bov II (medium)	23–84	Large male blesbok (including sheep and goats)
Bov III (large)	84–296	Large wildebeest or roan antelope (including cattle)
Bov IV (very large)	>296	Buffalo and eland

higher than would otherwise have been the case. As MNI counts cannot be used in mathematical and arithmetical calculations, no adjustments were made. Both NISP (Number of Identified Skeletal Parts or Specimens) and QSP (Quantifiable Skeletal Parts) counts are accumulative and are not affected. QSP adjusts for skeletal complexity and fragmentation and is based on NISP (see Plug & Plug, 1990, De Ruiter, 2004). The listing of the mammals is arranged according to the classification of Meester *et al.* (1986). Age classes of domestic animals are based on tooth wear and tooth eruption categories suggested by Voigt (1983), whereas relative age categories, mostly relevant to wild species, are listed according to Plug (1988). Genus and species names are in accordance with those used by Skinner and Chimimba (2005).

Total assemblage

Table 3 lists the composition of the total assemblage, consisting of nearly 24 000 specimens. Of these 2041, or 8.57%, could be identified to genus, species, family or animal size class. In total, remains of at least 45 taxa were retrieved (Table 4). This count includes indeterminate entries for which no equivalent species were identified, for example small rodent, small bird, etc. The assemblage is dominated by domestic bovids, cattle in particular. Their relative proportion might even have been

higher as it may well be assumed that many of the indeterminate Bov III and Bov II bones were of cattle and sheep/goat (During, 1986). The elephant remains consist of ivory only, and the ostrich remains of a distal long-bone fragment and eggshell beads and fragments.

Age, skeletal elements, pathology and sexing

Age classes of domestic animals, presented in Table 5, show that all classes are represented in the samples of both the cattle and sheep/goat category. As is clear from Table 5, the different domestic bovid age classes are not equal in the time spans they represent. With reference to the NISP/QSP counts, 62.16% of cattle and 63.52% of sheep/goat teeth represent individuals that were under 30 months when slaughtered (Table 5). Therefore, in both instances, nearly two-thirds of the teeth fall within the juvenile to young adult group. The remaining teeth represent an additional ten to twelve years or so for cattle and four to six years extra for sheep/goat. The emphasis was therefore on the slaughtering of younger animals. This accords well with the interpretation that the high-status males who received their meals in the court would have had access to the choicest meat cuts. This might have changed during periods of drought or military stress as perhaps indicated by at least 22 ossified rib cartilage fragments, mostly of Bov III size (probably cattle), which belonged to individuals that were relatively old when slaughtered. Obviously, the excavated assemblage accounts for only a small portion of the court midden and is not representative of the site as a whole, and perhaps not even of the entire ash-heap. The presence of newborn animals in the assemblage could be the result of natural mortality amongst the very young, rather than deliberate slaughter (Plug, 1988).

Table 6, skeletal elements represented, lists all the bovids. Sheep and/or goats are combined with Bov II and cattle with Bov III. The dense limb-bone fragments are well represented, as are many of the other elements. The horn-core and skull elements are mostly very fragmented, hence the large NISP, but relatively low MNI counts. The Bov III group is best represented. As the assemblage comes from a restricted part of the midden, the skeletal element representation may, to a certain extent, be an

Table 3
Total midden faunal assemblage:
KLF1.1.1-1.1.12 and KLF3.1.1-3.1.12

Bovid teeth	257
Bovid skeletal element fragments	1 216
Other identified remains	568
Total identified	2 041
Enamel fragments	372
Skull fragments	4 063
Vertebra fragments	852
Rib fragments	4 566
Miscellaneous fragments	8 932
Bone flakes	2 978
Total unidentified	21 763
Total assemblage	23 804
Mass identifiable fragments (g)	24 992
Mass unidentifiable fragments (g)	42 567
Total mass (g)	67 559
No. of specimens burnt	3 477

Table 4

Species present, NISP, QSP, MNI and mass (g). (NISP: Number of Identified Specimens; QSP: Quantifiable Specimens; MNI: Minimum Number of Individuals).

Species	NISP	QSP	MNI	Mass (g)
Shrew	5	5	1	0.1
<i>Cercopithecus pygerythrus</i> , vervet monkey	3	3	1	0.3
<i>Canis familiaris</i> , domestic dog	10	9	1	23.7
cf. <i>Canis familiaris</i> , probably domestic dog	1	1	0	0.3
<i>Canis mesomelas</i> , black-backed jackal	15	15	1	21.8
<i>Otocyon megalotis</i> , bat-eared fox	12	11	1	45.3
cf. <i>Otocyon megalotis</i> , probably bat-eared fox	1	0	0	14.1
<i>Canis</i> sp.	2	1	0	5.4
<i>Ictonyx striatus</i> , striped polecat	9	9	1	1.7
<i>Parahyaena brunnea</i> , brown hyaena	1	1	1	3.7
Mongoose	1	1	1	1.6
<i>Panthera leo</i> , lion	2	2	1	2.5
cf. <i>Panthera leo</i> , probably lion	1	1	0	3.9
<i>Panthera pardus</i> , leopard	3	4	1	2.8
Small to medium carnivore	1	0	0	0.3
<i>Loxodonta africana</i> , elephant (ivory fragments)	40	1	1	47.2
<i>Equus quagga</i> , zebra	13	14	2	352.2
<i>Equus</i> sp., horse/zebra	1	0	0	21.2
<i>Phacochoerus africanus</i> , warthog	11	11	2	79.9
<i>Potamochoerus larvatus</i> , bush pig	1	1	1	15.4
Suid	1	1	1	0.3
<i>Bos taurus</i> , cattle	929	541	27	20 188.3
cf. <i>Bos taurus</i> , probably cattle	25	20	0	653.5
<i>Ovis aries</i> , sheep	51	44	6	375.5
<i>Capra hircus</i> , goat	2	2	1	35.5
cf. <i>Capra hircus</i> , probably goat	4	3	0	37.3
<i>Ovis/Capra</i> , sheep/goat	217	164	18	991.9
cf. <i>Ovis/Capra</i> , probably sheep/goat	2	2	0	5.9
<i>Alcelaphus buselaphus</i> , red hartebeest	1	1	1	13.2
cf. <i>Alcelaphus buselaphus</i> , probably red hartebeest	1	1	0	6.7
<i>Damaliscus pygargus</i> , blesbok	2	2	1	16.7
<i>Sylvicapra grimmia</i> , grey duiker	2	2	1	6.6
<i>Raphicerus campestris</i> , steenbok	1	1	1	5.9
cf. <i>Raphicerus campestris</i> , probably steenbok	1	0	0	4.6
<i>Aepyceros melampus</i> , impala	5	4	1	55.9
cf. <i>Aepyceros melampus</i> , probably impala	1	0	0	2.7
<i>Tragelaphus strepsiceros</i> , kudu	9	5	2	416.5
<i>Redunca fulvorufula</i> , mountain reedbeek	1	1	1	7.9
cf. <i>Redunca fulvorufula</i> , probably mountain reedbeek	1	1	0	0.5
Bovid small (Bov I)	19	9	1	39.3
Bovid small to medium (large Bov I)	1	0	1	4.7
Bovid medium (Bov II) non-domestic	12	6	0	65.9
Bovid medium (Bov II) indeterminate	104	62	0	355.1
Bovid medium to large (large Bov II)	1	1	1	4.6
Bovid large (Bov III) non-domestic	7	7	0	101.4
Bovid large (Bov III) indeterminate	74	53	0	651.9
<i>Pedetes capensis</i> , springhare	1	1	1	0.3
cf. <i>Rattus rattus</i> , probably European house rat	6	6	2	0.6
Rodent very small	2	2	1	0.2
Rodent small	7	7	1	1.5
Rodent medium, rat-size	4	3	2	0.6
Rodent large	1	0	0	0.1
Lagomorph	2	1	1	0.3
Mammal small indeterminate	3	1	0	1.6
<i>Gallus domesticus</i> , domestic fowl	1	1	1	0.4
<i>Struthio camelus</i> (distal long-bone and ostrich eggshell fragments)	354	3	2	233
cf. <i>Torgos tracheliotus</i> , probably lappet-faced vulture	1	1	1	8.7
<i>Sagittarius serpentarius</i> , secretary bird	5	4	1	12.3
Bird small	3	1	1	0.6
Bird medium	2	1	1	0.4
Bird large	1	1	1	0.3
Agama lizard	1	1	1	0.1
Tortoise	1	1	1	0.1
Frog	7	7	2	0.2
Fish	1	1	1	0.3
<i>Potamonautis</i> sp., freshwater crab	1	1	1	0.3
<i>Succinea</i> sp., small gastropod	2	2	2	0.1
<i>Unio caffer</i> , freshwater mussel	3	2	2	8.2
<i>Aspatharia</i> sp., freshwater mussel	2	2	2	14.9
Unionidae, freshwater mussel	16	6	2	14.8
Freshwater small gastropod	6	5	6	0.3
Veneridae, marine clam	1	1	1	0.4
Total	2 041	1 085	117	24 992.3

Table 5

Domestic animal age class categories based on tooth eruption and tooth wear (NISP/QSP have the same values in this table) (Partially adapted from Voigt, 1983).

Age class	Age (months)	NISP/QSP	MNI
Bos taurus			
I	<6	4	2
I/II	4–10 (estimated)	4	1
II	6–15	16	3
III	15–18	29	3
IV	18–24	6	1
V	24–30	10	2
VI	30–42	4	1
VII	>42	21	4
VIII	Mature animals	5	1
IX	Aged animals*	12	4
Total		111	22
Ovis/Capra			
I	<3	1	1
II	3–10	15	2
III	10–16	27	4
III/IV	14–18 (estimated)	1	1
IV	16–30	10	3
IV/V	25–40 (estimated)	1	1
V	30–60	18	3
VI	>60	12	2
Total		85	17

*Females mostly beyond breeding age.

artefact of sampling. Cultural factors may also have influenced the content of the assemblage. Although ethnographic sources do not provide exact guidelines, it is clear that in traditional Tswana society, meat cuts were distributed and consumed according to specified cultural rules. According to Breutz (1941: 85), for example, the chief was supposed to receive the three upper right ribs from each slaughtered cow as tribute from his subjects. Enquiries among the direct descendants of the former inhabitants of Ntsweng revealed that the western Kwena presently regard the head and the neck of an animal as 'the most prestigious body part' (Reid, 2004: 318). Overall, the skeletal elements represented in the midden assemblage do not show any marked trends except to note that the phalanges are not particularly well represented, considering that there are eight of each type of phalanx in the bovid skeleton. As these bones generally preserve well, their apparent under-representation in the assemblage needs to be accounted for. The best explanation, based on the available ethnographic evidence, is that phalanges constitute low-status meat cuts that are usually given to herdsmen (Reid, 2004: 318).

A rib fragment of a Bov III-sized animal had broken in life and healed, displaying regrowth callus. A metapodial fragment of a sheep had also broken in life and knitted with the ends misaligned. Due to the fragmentation of the assemblage it was not possible to determine the sex of animals.

Bone modification

Many fragments show modification in the form of smoothed or polished ends and/or sides. Most are rib and bone flake pieces, numbering 380 in all. Some of this smoothing might have resulted from the processing of hides, one of the main activities carried out regularly by males in the *kgotla*. During his first visit to the Tlhaping at Dithakong in 1813, Campbell (1815: 183) visited the court of an outlying district and noted that 'some of the men were employed in stretching skins with pins on the ground; others in rubbing the inside with rough bones, which gives them much the appearance of woollen cloth'. The ventral margin of a freshwater mussel of the family Unionidae is polished. One half of an *Aspatharia* sp. shell and an additional six freshwater mussel shell fragments are polished on one edge. Cut and/or chop marks are visible on 124 specimens. One specimen shows colouring consistent with ochre staining.

Three bangle fragments made from elephant ivory have straight edges, polished flat. Ostrich eggshell beads were common and a total of 206 was recovered. Three small bone beads, about similar in size to the ostrich eggshell beads, were identified. Two larger bone beads were also present, one made from the midshaft of the long-bone of a small mammal and the other from that of a bird. One very heavily burnt fragment appears to be the remnant of a bone bead. A tarsus–metatarsus shaft of a vulture (*cf. Torgos tracheliotos*) was cut and snapped at both ends, just below the proximal and above the distal articulations.

Carnivore damage is present on 54 fragments and another six are stomach-etched. Only 15 specimens were gnawed by rodents. Many specimens, 3477 in total, including 25 of the ostrich eggshell beads, show traces of fire damage, ranging from being scorched to calcined.

DISCUSSION

Domestic animals

Historical accounts almost without exception claim that the Tswana were traditionally extremely reluctant to slaughter their cattle, sheep or goats, but instead relied primarily on game for their meat supply (Crisp, 1896: 17; Manson, 1990: 54). Twentieth-century ethnographic investigations by Schapera (1953: 25), too, seem to confirm the abovementioned historical pattern: 'Domestic animals provided milk, but they were seldom slaughtered, save by wealthy owners or on ceremonial occasions; meat was more usually obtained by hunting'. This reluctance of African farmers to slaughter livestock may, however, represent a more recent development resulting from, among others,

Table 6
Number of bovid skeletal elements.

Skeletal element	Bov I	Bov II	Bov III	Total	%
Horncore	0	1	143	144	9.78
Skull	0	29	88	117	7.94
Mandible	2	36	73	112	7.54
Teeth	4	109	144	257	17.45
Hyoid	1	2	15	18	1.22
Atlas	0	1	10	11	0.75
Axis	0	1	4	5	0.34
Other vertebrae	0	0	3	3	0.20
Scapula	0	37	38	75	5.09
Humerus	4	25	34	63	4.28
Radius	3	38	45	86	5.84
Ulna	1	10	28	39	2.65
Pelvis	0	14	50	64	4.34
Femur	5	20	34	59	4.01
Patella	0	1	4	5	0.34
Tibia	1	18	51	70	4.75
Metacarpal	1	10	34	45	3.05
Metatarsal	0	12	31	43	2.92
Metapodial	0	13	19	32	2.17
Calcaneum	0	8	13	21	1.43
Talus	0	3	12	15	1.02
Os malleolare	0	0	4	4	0.27
Os centroquartale	0	1	6	7	0.48
Carpals	1	2	40	43	2.92
Tarsals	0	0	2	2	0.14
Sesamoid	1	0	21	22	1.49
Phalanx proximalis	0	8	46	54	3.67
Phalanx media	0	2	41	43	2.92
Phalanx distalis	0	2	13	15	1.02
Total	24	403	1046	1473	100

socio-economic disruptions and setbacks caused by the upheavals of the *difaqane*, colonial wars and conquests, as well as the rinderpest pandemic of the 1890s (Voigt, 1983; Badenhorst, 2008). This is borne out by the composition of the Kaditshwene faunal assemblage, from which it would appear that the *kgotla* attendants relied on their herds of cattle, sheep and goats for most of their animal protein.

Based on the number of elements corrected for skeletal complexity, cattle remains outnumber those of the sheep/goat group at a ratio of 2.6:1. Archaeologically, the importance of cattle to the Hurutshe is also signified by the large size of the cattle enclosure associated with the second central court in the *kgosing*. It encompasses an area of approximately 3375 m². Campbell (1822[1]: 233) estimated that 'about five hundred cows and oxen' were kept in this enclosure, which was divided by a stone wall from the court area in which the visitors' wagons stood. According to information obtained from Free State cattle farmers by Dreyer (1992: 371), a space of about 10 m² per animal is normally required in an enclosure. This implies that about 340 cattle could have been penned in the central kraal at Kaditshwene and that Campbell perhaps overestimated their number. On the economic importance of cattle to the western Tswana, Camp-

bell (1822[1]: 291) noted: 'All the interior nations are so dependent on their cattle for subsistence, that to deprive them of either the whole or a part must make them almost desperate, and render them formidable enemies.' Cattle were not only a primary source of milk and meat, but they were also the most visible sign or symbol of wealth and status. Not surprisingly, chiefs had the largest herds, an occurrence that is archaeologically attested to by the comparatively large size of chiefly cattle kraals. The herds of chiefs were swelled by their claim to all stray cattle, as well as by animals received as part of fines imposed in court cases, or collected as tribute or gifts from subordinates and allies or their emissaries. Cattle constituted the main form of bride-price and enabled wealthy individuals, mainly royals, to contract multiple marriages and expand the influence of their particular lineage.

In addition, cattle were used to transport goods, while their hides were refashioned into karosses and shields. On their way from the Molopo River to Kaditshwene, Campbell (1822[1]: 208–209), for example, noted that pack-oxen were used to carry untanned animal skins which the Hurutshe had bartered from the Thamaga of Madibogo, a neighbouring group of mixed Tswana-Khoekhoe descent. Tlhaping traders who accompanied

Campbell (1822[1]: 118–119) on his journey from Dithakong to Kaditshwene took along 'red paint' (ochre), 'blue shining powder' (specularite), glass beads and skin cloaks to be exchanged for cattle, iron and copper. Besides their essential economic value, cattle also served as the preferred sacrificial animal in various religious ceremonies and rituals. The body of a chief was wrapped in the skin of a black ox before he was buried in the cattle kraal next to the main court. In cases where diviners believed a drought to be due to the 'restlessness' of a former chief, a black ox was slaughtered on his grave to appease the ancestor spirits and beckon the coming of the rains (Schapera, 1971: 111–113).

Cattle could also be procured through barter or their numbers would increase through natural herd growth, but cattle raids made an equally important contribution. Gulbrandsen (1987: 22) has argued that cattle raids played a major role in the rise of the Ngwaketse under Makaba in the late eighteenth and early nineteenth centuries. In his travelogue, Campbell (1822[1]: 174, 230) documented the frequency with which cattle raids were carried out among the western Tswana. During their stay at Kaditshwene, members of Campbell's following were invited to join the Hurutshe on a hunting trip. This turned out to be a ruse to trick them into a cattle-raiding venture, as they were marched to within sight of a cattle-post belonging to Makaba, the leader of the Ngwaketse. The post was located about a day's walk from the Hurutshe capital. In the end, the visitors were not requested to attack the cattle-post, probably because their guides sensed their objection to, and indignation at, such conduct (Campbell, 1822[1]: 254). The central role played by cattle in early internecine conflicts among the Tswana has been encapsulated in a popular song, which can be translated as follows: 'Beast, god of the home, god with the damp nose; beast that makes kingdoms fight, you have killed many people' (Schapera, 1934: 14; Comaroff and Comaroff, 1990: 195).

The frequency of these cattle raids was undoubtedly exacerbated by the depravation of the drought that plagued the western interior shortly before the *difaqane*. This might have induced the Hurutshe to keep more of their cattle than usual in their mountain capital, as was noted by Campbell (1822[1]: 256): 'The Marootzee greatly abound in cattle. I witnessed their herds returning in the evening to the kraals, or inclosures in the town. For two miles in one direction the road was covered with droves of cattle.' Another vivid reminder of the former presence of cattle herds in the capital are the stands of blue buffalo grass (*Cenchrus ciliaris*) that occur on middens and in some stock enclosures on the Kleinfontein-Bloemfontein hill. This grass is more tolerant of the

concentrated salt deposits contained in the soils of abandoned stock enclosures (Denbow, 1979: 408).

During his stay at Kaditshwene, Campbell (1822[1]: 232) noted that the cows were milked in the morning. In this regard, the following observation by Burchell (1824: 368) during his visit in 1812 to the Tlhaping capital, Dithakong, sheds valuable light on the stock-keeping practices of the western Tswana: 'The *cattle* usually kept at the town, are generally cows, retained there only by those who prefer or require sweet milk. Some pack-oxen for occasional service, and a few *goats*, are also fed in the surrounding plain; but oxen for slaughter are always pastured at the outposts, and driven to town only as they are wanted for use. Of these last, a considerable number are brought in every night, and killed the next morning.'

The large cattle herds observed among the Hurutshe are not unexpected since the grazing-lands in the vicinity of Kaditshwene were well suited to cattle-farming. According to a classification by Bonsma (1976: 40), Kaditshwene falls within one of ten farm regions in which it is possible to raise 'reasonably large cattle'. The surrounding Enselsberg (Tswenyane) area forms part of the western Bankenveld, a hill-and-valley landscape with an altitude that varies largely between 1200 m and 1500 m (Wellington, 1955: 37, 82–84). Many fountains and streams originate in this hilly landscape, and, in more recent times, the mean annual rainfall has been measured at about 600 mm (1:250 000 rainfall map, 2526 RUSTENBURG, 1966). The vegetation type, which can be described as Mixed or Sourish Mixed Bushveld, belongs to the Savannah Biome of the Central Bushveld (Acocks, 1988; Low and Rebelo, 1996; Mucina and Rutherford, 2006). Besides stock losses resulting from the ingestion of poison-leaf (*Dichapetalum cymosum*), the most important impediment to cattle farming in the area is the prevalence of the variegated tick, *Amblyomma hebraeum*, the carrier of the heartwater virus, *Rickettsia ruminantium*. Indigenous stock is, however, more resistant to this disease than imported breeds (Mönnig and Veldsman, 1954: 107–109). There is no direct evidence that tsetse flies were present at Kaditshwene during the period that the site was occupied or after it had been abandoned.

Although its exact location still needs to be determined, it is known that Kaditshwene had a slaughter area, as was observed by Campbell (1822[1]: 273): 'They have a public inclosure appropriated for the slaughtering of cattle, a convenience which I did not hear of at any other town.' Evidence of butchering can be seen in the chop and cut marks on the bone fragments. These are mostly concentrated close to the articulation ends, indicating dismembering of

the carcasses. The fragmentation of many of the bones indicates fracturing consistent with the deliberate smashing of the limb bones, to prepare them for cooking and marrow extraction. During his journey through Tswana territory in the mid-1830s, Andrew Smith observed the way in which this was done (Kirby, 1940: 109): 'They break in pieces the heads and porous portions of bone, lay them on the coal for a few minutes, and then chew them. The marrow and oily parts liquified [*sic*] by the heat flows out and is swallowed. The bony part they reject, usually giving it to dogs.'

It is well known that cattle-posts have long been part of the herd management structures of the Tswana. The cattle-post system is well suited to the drier western interior and is still maintained in many areas of Botswana (Grivetti, 1981; Plug, 1985; Plug and Voigt, 1985). On his way to Kaditshwene, Campbell (1822[II]: 181) noted that the Barolong booRatlou of Khunwana, near present-day Lichtenburg, had 'many outposts for cattle, at all of which there [were] inhabitants'. Cattle-posts were manned mostly by young, unmarried men and boys, but in some cases poorer families could also be commissioned to attend to the cattle-posts of their wealthy overlords (Breutz, 1952: 264–265). This practice tied in well with the *mafisa* system, according to which the rich loaned cattle to their poorer compatriots as a way of spreading risk, thereby minimizing the impact of a sudden outbreak of disease (Coertze, 1986; Dreyer, 1992: 370). As compensation the subordinates could use the milk and were rewarded some of the offspring. During a rain-storm on their return journey from Kaditshwene, Campbell (1822[I]: 279) and his entourage took shelter in 'an old Marootzee cattle-place', with 'a few low huts left standing'. In this regard, it should be noted that the age distributions of cattle in the faunal assemblage do not show noticeable gaps in the categories represented and thus do not shed any light on herding practices with regard to cattle-posts.

No mention is made of the presence of sheep or goats at Kaditshwene in Campbell's journal, but remains of both have been retrieved from the excavated midden. Campbell (1822[II]: 277) calculated that should a blacksmith be employed at the envisioned mission station at Kaditshwene, he would be able to obtain one sheep for a knife and one ox for a 'rough-made axe'. No attempt has as yet been made to identify the enclosures in which the sheep could possibly have been kept. Campbell was particularly struck by the fact that the sheep of the Barolong booRatlou, near neighbours of the Hurutshe, were covered with hair instead of wool. Their capital Khunwana was his last stopover before he reached Kaditshwene. Campbell (1822[II]: 178)

considered the hairy coat of indigenous sheep perhaps to have been 'the most remarkable difference between European and African animals, of the same species, that [was] to be met with'. The precolonial sheep breeds of southern Africa were all hairy. Such hairy sheep can still be found in southern Africa and include Pedi, Nama and Damara sheep (Ramsay *et al.*, 2000).

Only a few bones of domestic dog were found in the midden. Their under-representation in the faunal assemblage may be due to the fact that they were probably left to die and be buried elsewhere. It is unlikely that the Tswana would have considered their dogs as a food source, as is clear from the following observation by Campbell (1822[II]: 214): 'The Matchappees [Tlhaping] consider dogs and tame cats as unclean, they will neither skin nor eat any of them, but they will eat wild cats, jackals, wolves, &c.' Dogs were undoubtedly widely used for hunting by all Tswana groups, as they are still used today in rural areas of South Africa and Botswana. Successful hunting-dogs could earn their owners valuable trophies, as noted by Campbell (1822[II]: 213): 'If dogs pursue an animal, the proprietor of the dog, who first seized it, has the carcase when killed.' Campbell (1822[I]: 248–249) was less impressed by the way in which these animals were cared for by the Hurutshe: 'Even the dogs, to whom they seem greatly attached, are living skeletons, from want of food. It required a sharp look out, and a severe use of the lash, to prevent them from running off with the meat cooking at the fires. No opportunity is lost by these animals for seizing anything eatable within their reach. Their perseverance and boldness in the pursuit of food is unconquerable.'

Elsewhere, when recording the woes of his party, Campbell (1822[II]: 236) elaborated on the insatiable appetite of the dogs roaming the central ward of Kaditshwene: 'One of the Hottentots had both his shoes eaten by the hungry dogs during the night: and both of the horses had the leathern ropes, by which they were fastened to the waggons, eaten as high as to their mouths.'

Carnivore marks on some of the excavated bones indicate that dogs scavenged on the court midden. This may also explain the relatively few chicken bones found, as dogs would consume a chicken bone in its entirety, leaving no residue. This characteristic has been documented by Gallant (2002: 25) in his book on the modern-day descendants of the African dog: 'In the natural world of the Africanis there is seldom abundance. Their senses are always tuned to the retrieval of food. They are innate scavengers and will leave no scrap untouched.' However, Campbell might have been somewhat mistaken as regards the condition and treatment of

the dogs. His observations were no doubt coloured by his European background, as is evident from the following comment by Gallant (2002: 26): 'Although these dogs thrive on very little, they are gluttonous when food is available. For this reason, they are usually overfed in Western society. For an Africanis to be in good shape, its ribs should just be visible.'

Recent DNA studies on the assumed dog remains associated with Later Stone Age sites in the Western Cape have established that all these remains are from jackals (Horsburgh, 2008). The dog remains from Kaditshwene conform more to domestic dog than to jackal. The presence of dogs at the capital was well documented by Campbell (1822). Therefore, although some doubt may remain, we are fairly sure that the remains so identified are indeed from dogs.

Wild animals

Two famous nineteenth-century hunters and marksmen, the Kora leader Jager Afrikaner and the Khoekhoe evangelist Cupido Kakkerlak, accompanied Campbell on his journey to Kaditshwene. Upon their arrival on the mountain stronghold on 4 May 1820, Campbell (1822[1]: 224) was informed that the plains well to the north of Kaditshwene teemed with big game, elephants and buffaloes. The Hurutshe were perhaps hoping to induce Campbell to make available the guns possessed by members of his group, either for hunting or, as alluded to above, for cattle raiding. Elephant ivory, in particular, was a much-sought-after trading commodity.

However, it soon became clear to the visitors that game was no longer abundant in the area surrounding Kaditshwene. Their scarcity was, in fact, alluded to by the regent, Diutwileng, shortly before the departure of Campbell (1822[1]: 271) and his entourage on 13 May 1820: 'He thus touched upon the very reason we had for departing the next day, viz. while part of the ox he gave us remained, for, had this been consumed, we could not have departed for want of food, the game being very uncertain.' The dwindling numbers of game in the immediate environs of early nineteenth-century Tswana capitals, some of which had large populations, might provide an explanation for the ever greater reliance on domestic animals as a meat source, as documented at Kaditshwene.

Wild animals identified in the faunal assemblage either still occur in, or were recorded from the region in the past. The meat of several game species listed in Table 4, including zebra and hare (Lagomorpha), as well as antelopes such as red hartebeest, blesbok, steenbok, impala, kudu and mountain reedbuck, certainly formed part of the diet of attendants to the central court in Kaditshwene. Since no clear-cut evidence for burrowing was noted,

springhare could possibly also be added to the dietary list. Compared to the species diversity recorded from the region during historical times, the number of wild taxa represented in the assemblage is limited (Du Plessis, 1969). This might reflect the dominance of herding and the resultant displacement of game species near the site. As we have noted above, the composition of the excavated faunal assemblage indicates that game was not the most important source of meat for the mostly senior males of Kaditshwene, who regularly attended court meetings and had their meals served in the chief's *kgotla*. Nevertheless, it should be borne in mind that such an inference is based on a very limited faunal sample, which was retrieved from a small portion of a single midden only. More samples from different units and localities on the site should provide a clearer picture. It is noteworthy that on a visit to the Marico in 1836, well-known hunter William Cornwallis Harris (1852: 70, 74, 94–97, 103, 127, 129–130, 132–133) recorded the occurrence of several species in the area that are absent from the faunal assemblage: white rhinoceros, black rhinoceros, giraffe, buffalo, tsessebe and blue wildebeest. Rhinoceros horn was in high demand to make handles for knives and battle-axes. Campbell (1822[1]: 205, 295) noted in his journal that the Barolong booRatlou of Khunwana hunted rhinoceros and that four battle-axe handles could be carved out of one rhinoceros horn.

It has been argued that hunting among the Tswana was a male activity that served as 'a ritually heightened counterpart' to stock farming (Kuper, 1982: 13). Major collective hunts were organized during key moments of the annual cycle, such as initiation rites, the installation of leaders, preparations for war and rainmaking ceremonies. Similarly, communal hunting was widespread among the Bantu-speaking people of southern Africa and was practised for the same reasons as among the inhabitants of Kaditshwene (see, e.g., Casalis, 1861; Kidd, 1904; Richards, 1939; Reynolds, 1968; Gelfand, 1971; Shaw, 1974; Hayes, 1978; McGurk, 1981). Hunting weapons included spears, bows and arrows, knobkieries (clubs) and axes. Some wild animals were probably trapped or snared, such as the hares, springhares and some of the birds. Gathering of animal food would include the ostrich eggs, molluscs, crab and tortoise. The ostrich itself, as well as the secretary bird and the vulture, would have been hunted.

Not all the wild animals identified from the midden assemblage can be regarded as food sources. Some were primarily hunted for their skins, as well as for social, medicinal or ritual purposes. The vervet monkey, leopard, lion, brown hyaena, bat-eared fox and black-backed jackal fall in this

category, although there is evidence that, under exceptional circumstances, some Tswana people would use some of these animals as food (Kirby, 1940: 207; Grivetti, 1981: 99–100). Interestingly, no remains were uncovered of the chacma baboon (*Papio hamadryas* – *tshwene* in Tswana), the totem of the Hurutshene and the ubiquitous primate from which Kaditshwene derives its name. Its absence complies with a general taboo among the Tswana, which forbids people to kill or eat their totem animal (Schapera, 1953: 35).

As we have noted, the preparation of animal skins was the duty of adult (initiated and circumcised) men and was done in the public assembly areas. The wide range of wild and domestic animal skins prepared by the Tswana is evident from the list of skin cloaks documented by Campbell (1822[II]: 219) among the Tlhaping:

1. Of cat-skins, called tzeepa, which are most valued by strangers, but not esteemed by themselves more than the skins of other animals.
2. Of dark-coloured jackal's skin, called cooboo pooloojay.
3. Of red jackal's skin, called cooboo klooss.
4. Of ox or cow skin, called cooboo, or komo, or the beast-cloak, which is made soft by scraping, rubbing, &c.
5. Of lion's skin, retaining the hair, called cooboo a tou.
6. Of knoo's skin, called kokong.
7. Of hartebeest-skin, from which the hair is scraped; this is worn only in warm weather, called kamma.

They also have cloaks of tiger, leopard, and red cat skins, and a few made of sheep-skins.¹¹

According to Crisp (1896: 37), Tswana infants used to be 'slung behind their mother's backs in a well-prepared skin called a 'thari'. He noted that the equivalent Tswana proverb for 'counting chickens before they are hatched' was, '[a]re you braying a 'thari' for the child which is not yet born?'

Skins also served as status symbols, and those of some animals were the preserve of royalty. Cloaks made of the skins of the mountain reed buck (*motsosa*) could only be worn by the wives of chiefs (Ellenberger, 1937, 39). In this connection, it is interesting to note Campbell's description (1822[II]: 268) of the dresses worn by the all-male assembly of about '300 to 400 captains' during the *pitso* ya *dikgosana* in the central court of Kaditshwene on 10 May 1820: 'There were a great diversity of dresses

at the *peetso*. They all resembled each other, however, in having their bodies painted with pipe-clay from head to foot, and in wearing a kind of white turban, made from the skin of the wild hog, the bristles of which are as the whitest horse-hair. Many wore tigers-skins [leopard skins], and several were ornamented with eight or ten coverings resembling fur tippetts, hanging from their shoulders, and others wore them depending from the middle of their bodies. There were a great variety of skin cloaks without the hair.'

The wild hog, from which the head-dresses worn by the *kgotla* attendants were made, no doubt refers to the bush pig, *Potamochoerus larvatus*, whose skin is covered with a crest of long whitish hair. An atlas fragment of this suid species was recovered from the midden, as well as several bone specimens of the warthog (*Phacochoerus africanus*). Both the bush pig and the warthog were also prized as a food source.

Leopard skins served as markers of leadership, and a chief received his leopard skin cloak on the day he was installed (Language, 1943: 120). According to Schapera (1938: 61), only a chief was allowed to wear such a cloak. He was informed that a regent 'was not originally invested with the leopard-skin', a practice which he interpreted as a more modern development. However, it is clear from Campbell's watercolour sketches of both the regent, Diutwileng, and his brother's son, Moilwa, that they were draped in leopard skins during the *pitso* that was held at Kaditshwene (Boeyens, 1998: 282). Their cloaks clearly show the broken rings or rosettes with which a leopard's skin is covered. Diutwileng's cloak is described by Campbell (1822[II]: 260) as follows: 'He wore, sometimes before and sometimes behind, one of the hand-somest tiger-skins I had seen, and was loaded with beads.' Several explanations have been offered for the significance and symbolism of the leopard skin cloak, the most plausible one of which reads as follows (Language, 1943: 121): 'Another characteristic of the leopard is that when he licks himself, he would lick the black as well as white spots on his body; he does not only select the black spots on his body. This is what is expected of the chief too. His tribe consists of good and bad people, of poor and rich. The chief should not discriminate between members of his tribe. When he delivers judgement or distributes food, he should be impartial and lick one as well as the other.'

During his stay among the Barolong booRatlou, Campbell (1822[II]: 302) noted that jackals were hunted mainly for their skins. He added the following caption to an unpublished sketch of the wife of Kaditshwene's official rainmaker: '...Her hairy cap is made of jackal skin. Her cloak of tanned skins

¹¹In modern orthography, the Tswana words should be rendered as follows: tzeepa > *tshipa* [genet]; cooboo pooloojay > *kobo ya phokoje*; cooboo klooss > *kobo ya mothose* [*mothose* refers to the bat-eared fox and not to the black-backed jackal ('rooijakkals' in Afrikaans)]; komo > *kgomo* (thus *kobo ya kgomo*); cooboo a tou > *kobo ya tau*; kokong > *kgokong* [blue wildebeest]; kamma > *kgama*.

made nearly as soft as woollen cloth...’ (Campbell, 1820). A few years after Kaditshwene had been destroyed during the *difaqane*, Kuruman missionary Robert Moffat received ‘an elephant’s tooth, two musk-cat [genet] karosses, one very large klouse (vaal-jakkal) kaross’ from a former inhabitant of the Hurutsh capital, in addition to a number of hartebeest skins and a ‘neat mouse-hond [polecat] kaross’ which he had bought from him (Schapera, 1951: 262). As listed in Table 4, remains of the black-backed jackal (*phokoje*), the bat-eared fox (*motlhose*) and the striped polecat (*tshipa*) were retrieved from the midden excavations.

The reference to Kaditshwene’s rainmaker raises the possible contribution of diviners or medicine-men (*dingaka*) to the faunal assemblage. According to Schapera (1953: 62), those *dingaka* who were ‘renowned for their skill were generally employed to help the chief in the various public rites for which he was responsible’. Such ceremonies included the making of rain, the doctoring of warriors before they engaged in war, the consecration and protection of the town’s headquarters and boundaries, the initiation of boys and girls, as well as festivals pertaining to the planting and harvesting of crops (Schapera, 1938: 70). The entire well-being of the community largely depended on the close cooperation between the ruling elite and the *dingaka* (Gulbrandsen, 1987: 208).

Animal remains were key components of the tool kits and medicines of the *dingaka*. As listed in Table 4, the remains of a probable lappet-faced vulture were retrieved from the midden. Vulture body parts, the heads in particular, are regarded even today as very strong medicine that could improve one’s ability to perceive things or events in the future or out of sight (Jackson, 2009: 8). The *Vulture Study Group of South Africa* still mounts guards near vulture colonies during the breeding season to prevent traditional healers from killing the adult birds. The present-day use of vulture remains among the Tswana in traditional medicinal and ritual practices (P. Benson, pers. comm., 1999) could also have existed in the past, and the vulture bone tube was probably part of a divining set or used as an amulet. The discovery of fragments of the radius and ulna of the secretary bird in the midden probably points to the performance of magical rites similar to those recorded by Breutz (1941: 88) among the Tswana: ‘After the evil was cast out, the protection of the fields became the responsibility of the chief. He gave orders that the medicine-man should work against hail storms with a whistle or pipe (*makana*) that had been made out of the leg-bone of a secretary bird.’

Perhaps the most hazardous task belonged to the ‘tribal’ rainmakers, who had to collaborate closely

with chiefs in performing the annual or seasonal ceremonies during which the rain clouds were summoned. They were also held responsible for executing the rites aimed at averting droughts and hail storms, or at removing those antisocial influences that kept the rains away (Schapera, 1971: 129–133). ‘Morokey’, the rainmaker at Khunwana, described one such rainmaking ceremony to Campbell (1822[I]: 305): ‘To procure rain, an ox is killed, the fat is chopped and mixed with different kinds of wood and leaves of trees; and all these are then burned.’ To ensure adequate rain, various taboos had to be adhered to, some of which involved wild animals, as recorded by Campbell (1822[II]: 204): ‘No elephants should be killed while the corn is growing, nor must a tooth of that animal be touched till a sufficient quantity of rain has fallen, lest what is necessary should be prevented from coming.’ Andrew Smith recorded similar beliefs among the Tswana during his journey into the interior in the mid-1830s: ‘When the corn is young they will not kill elephants; they think the corn will burn up.... They can also kill elephants after harvests. The last month the corn and *mackatan* were burnt up and that was by the elephant’ (Kirby, 1940: 27).

The rodents and shrew are accidental to the excavated faunal assemblage in the sense that they were most probably self-introduced into the deposit, living on the refuse and insects present in the midden. The probable presence of the house rat, *Rattus rattus*, accords with existing archaeological evidence that these exotics had already been present in southern Africa long before Europeans colonized the region (Plug *et al.*, 1979). The small freshwater molluscs were probably introduced via reeds and sedges transported to the town. A mandible of the Agama lizard found in the midden was most probably also not introduced by human action, although it is known that medicine-men often made use of substances derived from reptiles. The faunal collection from Mmakgame, the capital of the Bahurutsh boMenwe prior to their relocation to Kaditshwene, yielded bones of the water monitor (*Varanus niloticus*) (Brown, 1996), an animal which was treasured by rainmakers. In 1835, explorer and naturalist Dr Andrew Smith was told by a Tiharo resident of the Northern Cape that they were forbidden to kill a ‘large lizard’ (a monitor), otherwise springs would dry up, and that the remains of accidentally discovered dead ones constituted an important ingredient of traditional rainmaking medicines (Lye, 1975: 193–194).

It would appear from early historical records that a general aversion to fish as food was found among the western Tswana (Grivetti, 1981: 107–108). As to be expected, very few aquatic animals are repre-

sented in the faunal collection, except for a few invertebrates. The polished edges of the freshwater mussels and the giant land-snail shells suggest that they were probably used to smooth the clay of pots and house walls, as is still done today. The presence of the marine cockle shell (*Veneridae*) is indicative of some trade or exchange activities that formed part of an East Coast trading network. In fact, many wild animals or their by-products were prized as trade items. Campbell's (1822[i]: 276) list of 'articles of trade' in Kaditshwene that were manufactured from animal remains includes knife-handles, whistles, arm and leg rings of ivory, as well as cloaks, caps, sandals and shields of leather.

A broken ivory arm bangle was recovered from the midden. It was made of elephant ivory and had a diameter of about 60 mm. Besides its use to manufacture ornaments, ivory was an important trading commodity. Campbell (1822[i]: 240–241) was informed that the Hurutshe exchanged elephant tusks for imported glass beads with the western Kwena, renowned copper workers who were settled to the north of the Dwarsberg Mountains. The western Kwena, in turn, procured the glass beads from Tsonga traders, who had established a long-distance trading network that extended from the East Coast to the interior. It would seem that Tswana chiefs tried to control such trading transactions, because Campbell (1822[i]: 267–268) records that Diutwileng was upset after discovering that one of his subjects had exchanged an elephant tusk for glass beads with a Khoekhoe member of the visiting party, without his prior notification and approval. Elephant tusks were also prized as gifts to establish or cement political alliances. Campbell (1822[i]: 233, 243, 260), for example, received two elephant tusks as gifts from the regent, Diutwileng, and one from Senosi, the leader of the neighbouring Bahurutshe booMokgatla. Diutwileng also presented a large elephant tusk to 'Munameets', a Tlhaping visitor from Dithakong (Campbell, 1822[i]: 272). In general, Campbell (1822[i]: 246) recorded that the Hurutshe were greatly disappointed because he and his entourage had not brought along beads 'to exchange with them for cattle and elephants' teeth'. Altogether, only a few imported items of European or Indian Ocean origin, such as 130-odd glass beads and a few Dutch brass button caps, have been recovered from the court midden assemblage (Boeyens, 2003: 73; Wood, 2008: 191). This suggests that interregional trade in local commodities, for example in cattle, animal skins, grain and metals, was pivotal to the economies of the Hurutshe and neighbouring Tswana-speaking communities of the western interior. By the beginning of the nineteenth century, the populations and economies of Kaditshwene and Khunwana, as

well as those of other Tswana capitals in the Rustenburg-Pilanesberg area such as Marothodi (Tlokwa), Boitsemagano (Kwena) and Molokwane (Kwena), had reached an unprecedented scale, which probably diminished the impact of long-distance trade and foreign imports as prime movers of socio-cultural change (*cf.* Hall *et al.*, 2008).

CONCLUSION

Oral historical and documentary evidence indicates that Kaditshwene, the capital of the Bahurutshe booMenwe, was occupied for little more than a generation, from about AD 1790 to 1823. The excavated midden itself accumulated over a very short period and can be confidently linked to activities associated with the second main court (*kgotla*) in the central division (*kgosing*) of the settlement. This court served as the great council-place of the last ruler of the town, the regent Diutwileng, who succeeded his brother Sebogodi sometime after mid-1813. The first-hand account and sketches of missionary-explorer John Campbell, who visited Kaditshwene from 4 to 13 May 1820, provide a tantalizing glimpse of life at the Hurutshe capital during this brief period and greatly facilitates a cultural interpretation of the faunal record.

As outlined, the faunal assemblage originated from a variety of socio-political, economic, religious or juridical activities in which leading men from the capital and subsidiary towns participated. In addition to animals slaughtered during public ceremonies, feasts or rituals, the specimens were also derived from the daily meals consumed by leading men in the capital's main assembly area. In its dietary composition, the midden assemblage therefore reflects a distinctly high-status and masculine bias. It would appear that the *kgotla* attendants relied primarily on their herds of cattle, sheep and goats for most of their animal protein. Cattle also served as a symbol of wealth in pre-colonial Tswana society. Chiefs usually had access to the largest herds, which they used to cement or sustain political ties and military alliances.

Ethnographic evidence confirms that animal remains were key components of the medicines and tool kits of diviners and medicine-men (*dingaka*), including rainmakers. Bones of the lappet-faced vulture and the secretary bird were recovered, body parts of which were most certainly used for magical purposes. Remains of a variety of game species were retrieved, including zebra, springhare, hare, warthog, bush pig, as well as bovids such as steenbok, impala, blesbok, red hartebeest, kudu and mountain reedbuck. While the meat of all these animals could have contributed to the diet of the *kgotla* attendants, their skins, as well

as those of cattle, sheep and goats, were also treasured and either worked into cloaks or traded. Not all the wild animals identified from the midden assemblage can be regarded as food sources. The vervet monkey, leopard, lion, brown hyaena, bat-eared fox and black-backed jackal, for example, were prized mainly for their skins. Elephant ivory, a highly valued trade item, was used to manufacture ornaments such as bangles. The ostrich was hunted and its eggshells were used to make beads.

Only a few imported trade items were recovered from the midden, including a small number of glass beads and a marine cockle shell (Veneridae). This suggests that internal trade among Tswana chiefdoms was of far greater importance than trade relations with the East Coast or with the Cape Colony. Animals, in particular cattle, and their by-products, for example skins, were key commodities in the burgeoning inland trade among the populous Tswana towns of the western interior.

Finally, this analysis has shown that due account should be taken of the chronological and spatial context of bone assemblages before interpreting their cultural significance (Reid, 2004: 321). In this regard, it should be noted that the preponderance of domestic animals, particularly cattle, in the Kaditshwene court midden assemblage, together with the occurrence of a relatively wide range of wild animal species, accords well with the composition of faunal assemblages recovered from the core areas of contemporary early nineteenth-century Tswana capitals, such as the Kwena towns of Molokwane and Boitsemagano near Rustenburg (Pistorius and Plug, 2001; Plug and Badenhorst, 2006). The central court area in the *kgosing* of these towns constituted the hub of the settlement, a place where the leading men of the chiefdom gathered daily to have their meals and to practise crafts such as hide-working. Here they also entered into the most important economic transactions, performed the most critical religious ceremonies and rituals, gave judgement in the highest court cases and debated and decided on key political issues. The material refuse of these activities, including the animal bones, were discarded in the associated central court midden, thus providing zooarchaeologists with a unique, if incomplete, insight into past human behaviour.

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He worked as a volunteer and research assistant at both the Transvaal Museum and the University of South Africa. His close involvement with UNISA's Archaeology Division began as a student when, in 1990, he participated in excavations in the Marico. He left a substantial bequest to UNISA, which is to be used for archaeological research and bursaries.

REFERENCES

- ACOCKS, J. P. H., 1988. *Veld types of South Africa*. 3rd edn. *Memoirs of the Botanical Survey of South Africa*, No. 57. Botanical Research Institute, Pretoria.
- BADENHORST, S., 2008. Subsistence change among farming communities in southern Africa during the last two millennia: a search for potential causes. In: BADENHORST, S., MITCHELL, P. and DRIVER, J. C., eds, *Animals and people: Archaeozoological papers in honour of Ina Plug*, pp. 215–228. BAR International Series 1849. Archaeopress, Oxford.
- BOEYENS, J. C. A., 1998. Die Latere Ystertydperk in suidoos- en sentraal-Marico. D.Phil. thesis, University of Pretoria, Pretoria.
- BOEYENS, J. C. A., 2000. In search of Kaditshwene. *The South African Archaeological Bulletin* 55(171): 3–17.
- BOEYENS, J. C. A., 2003. The Late Iron Age sequence in the Marico and early Tswana history. *The South African Archaeological Bulletin* 58(178): 63–78.
- BONSMA, J., 1976. *Bosveldbome en weistreke*. Van Schaik, Pretoria.
- BRAIN, C. K., 1974. Some suggested procedures in the analysis of bone accumulations from southern African Quaternary sites. *Annals of the Transvaal Museum* 29(1): 1–8.
- BREUTZ, P.-L., 1941. *Die politischen und gesellschaftlichen Verhältnisse der Sotho-Tswana in Transvaal und Betschuanaland*. Friedrichsen, De Gruyter & Co., Hamburg.
- BREUTZ, P.-L., 1952. *The tribes of Rustenburg and Pilansberg districts*. Ethnological publications, No. 28, Government Printer, Pretoria.
- BREUTZ, P.-L., 1953. *The tribes of Marico District*. Ethnological publications, No. 30, Government Printer, Pretoria.
- BROWN, A. J. V., 1996. Kaditshwene 13/66 [Vergenoegd 279 JP]. Revised unpublished faunal report, Department of Archaeology, University of the Witwatersrand, Johannesburg.
- BURCHELL, W. J., 1824. *Travels in the interior of southern Africa*. Vol. 2, reprinted in 1953. Batchworth, London.
- CAMPBELL, J., 1815. *Travels in South Africa*. 3rd edn. Black, Parry & Co, London.
- CAMPBELL, J., 1820. Unpublished journal and watercolour sketches (MSB77). South African Library, Cape Town.
- CAMPBELL, J., 1822. *Travels in South Africa, being a narrative of a second journey (1820)*. Vols I and II. Westley, London.
- CASALIS, D. C., 1861. *The Basutos*. James Nisbet, London.
- COERTZE, R. D., 1986. Livestock in the social and cultural life of African communities. *South African Journal of Ethnology* 9(3): 129–135.
- COERTZE, R. D., 1990. *Bafokeng family law and law of succession*. Revised edn. SABRA, Pretoria.
- COMAROFF, J. and COMAROFF, J. L., 1990. Goodly beasts, beastly goods: cattle and commodities in a South African context. *American Ethnologist* 17: 195–216.
- COMAROFF, J. L. and COMAROFF, J., 1992. *Ethnography*

- and the historical imagination. Westview Press, Boulder.
- CRISP, W., 1896. *The Bechuana of South Africa*. Society for the Promotion of Christian Knowledge, London.
- DENBOW, J. R., 1979. *Cenchrus ciliaris*: an ecological indicator of Iron Age middens using aerial photography in eastern Botswana. *South African Journal of Science* **75**: 405–408.
- DE RUITER, D. J., 2004. Relative abundance, skeletal part representation and accumulating agents of macro-mammals at Swartkrans. In: BRAIN, C. K., ed., *Swartkrans: a cave's chronicle of Early Man*, pp. 265–278. Transvaal Museum Monograph No. 8, Transvaal Museum, Pretoria.
- DE WET BRONNER, E., 1995. The faunal remains from four Late Iron Age sites in the Soutpansberg region: Part III: Tshiriluluni. *Southern African Field Archaeology* **4**: 109–119.
- DREYER, J. J. B., 1992. The Iron Age archaeology of Doornpoort, Winburg, Orange Free State. *Navorsing van die Nasionale Museum, Bloemfontein* **8**(7): 261–390.
- DU PLESSIS, S. F., 1969. The past and present geographical distribution of the Perissodactyla and Artiodactyla in southern Africa. M.A. dissertation, University of Pretoria, Pretoria.
- DURING, E., 1986. *The fauna of Alvastra*. OSA **12**: supplement 1.
- ELLENBERGER, V., 1937. History of the Ba-Ga-Malete of Ramoutsa. *Transactions of the Royal Society of South Africa* **25**(1): 1–72.
- GALLANT, J., 2002. *The story of the African dog*. University of Natal Press, Pietermaritzburg.
- GELFAND, M., 1971. *Diet and tradition in an African culture*. E. and S. Livingstone, Edinburgh.
- GRIVETTI, L. E., 1981. Dietary resources and social aspects for food use in a Tswana tribe. Ph.D. thesis, University of California, University Microfilms International, Ann Arbor.
- GULBRANDSEN, Ø., 1987. *Privilege and responsibility: on transformations of hierarchical relations in a Tswana Society*. Department of Social Anthropology, University of Bergen, Bergen.
- HALL, S., ANDERSON, M., BOEYENS, J. and COETZEE, F., 2008. Towards an outline of the oral geography, historical identity and political economy of the Late Precolonial Tswana in the Rustenburg region. In: SWANEPOEL, N., ESTERHUYSEN, A. and BONNER, P., eds, *Five hundred years rediscovered: southern African precedents and prospects*, pp. 55–85. Wits University Press, Johannesburg.
- HARRIS, W. C., 1852. *The wild sports of southern Africa*. Bohn, London. (Facsimile reprint of 5th edition, 1963. Struik, Cape Town.)
- HAYES, G. D., 1978. *A guide to Malawi's national parks and game reserves*. Montford Press, Limbe.
- HORSBURGH, A., 2008. Wild or domesticated? An ancient DNA approach to canid species identification in South Africa's Western Cape Province. *Journal of Archaeological Science* **35**: 1474–1480.
- JACKSON, N., 2009. Afrika-aasvoëls ál meer in moetiespot. *Beeld*, 8 June, p. 8.
- KAY, S., 1834. *Travels and researches in Caffraria*. Harper, New York.
- KIDD, D., 1904. *The essential Kafir*. Adam and Charles Black, London.
- KIRBY, P. C., ed., 1940. *The diary of Dr Andrew Smith, 1834–1836*. Vol. 2. V. R. S. No. 21. The Van Riebeeck Society, Cape Town.
- KUPER, A., 1982. *Wives for cattle: bridewealth and marriage in southern Africa*. Routledge & Kegan Paul, London.
- LANGUAGE, F. J., 1943. *Stamregering by die Thaping*. Nasionale Pers, Cape Town.
- LEGASSICK, M., 1970. The Griqua, the Sotho-Tswana, and the missionaries, 1780–1840: the politics of a frontier zone. Ph.D. thesis, University of California, Los Angeles.
- LESTRADE, G. P., 1928. Some notes on the political organisation of the Bechuana. *South African Journal of Science* **35**: 427–432.
- LICHTENSTEIN, H., 1815. *Travels in southern Africa*. Vol. 2. Colburn, London. (Reprinted 1930, Van Riebeeck Society, Cape Town.)
- LOW, A. B. and REBELO, A. G., 1996. *Vegetation of South Africa, Lesotho and Swaziland*. Department of Environmental Affairs and Tourism, Pretoria.
- LYE, W. F., ed., 1975. *Andrew Smith's journal of his expedition into the interior of South Africa, 1834–1836*. Balkema, Cape Town.
- MANSON, A., 1990. The Hurutshe in the Marico district of the Transvaal, 1848–1914. Ph.D. thesis, University of Cape Town, Cape Town.
- MASIANGOAKO, J., 1939. Village construction, animal husbandry and other customs of the Bakgatla. Van Warmelo Collection, A327, K32/13, S 178, National Archives Depot, Pretoria.
- MATUMO, Z. I., 1993. *Setswana-English-Setswana dictionary*. Macmillan, Gaborone.
- McGURK, C., 1981. The Sambuyu. In: GIBSON, G. D. and LARSON, T. J. D., eds, *The Kavango people*, pp. 97–157. Franz Steiner Verlag, Wiesbaden.
- MEESTER, J. A. J., RAUTENBACH, I. L., DIPPENAAR, N. J. and BAKER, C. M., 1986. *Classification of southern African mammals*. Transvaal Museum Monograph No. 5. Transvaal Museum, Pretoria.
- MÖNNIG, H. O., 1967. *The Pedi*. Van Schaik, Pretoria.
- MÖNNIG, H. O. and VELDMAN, F. J., 1954. *Handboek oor veesiektes*. Nasionale Boekhandel, Cape Town.
- MOFFAT, R., 1842. *Missionary labours and scenes in southern Africa*. John Snow, London.
- MUCINA, L. and RUTHERFORD, M. C., eds, 2006. *The vegetation of South Africa, Lesotho and Swaziland*. SANBI, Pretoria.
- PETERS, J., 1986. *Bijdrage tot de archeozoölogie van Soedan en Egypte*. Ph.D. thesis, Rijksuniversiteit, Ghent.
- PISTORIUS, J. C. C. and PLUG, I., 2001. The faunal remains from Molokwane, capital of the Bakwena ba Modimosana, Northwest Province, South Africa. *South African Journal of Ethnology* **24**(1): 25–39.
- PLAATJE, S. T., 1916. *Sechuana proverbs with literal translations and their European equivalents*. Kegan Paul, Trench, Trubener & Co., London.
- PLUG, C. and PLUG, I., 1990. MNI counts as estimates of species abundance. *The South African Archaeological Bulletin* **45**: 53–57.
- PLUG, I., 1985. Appendix 2. The faunal remains from two Iron Age sites, Rooikrans and Rhenosterkloof, central Transvaal. In: HALL, S. L., *Excavations at Rooikrans and Rhenosterkloof, Late Iron Age sites in the Rooiberg area of the Transvaal*. *Annals of the Cape Provincial Museums (Human Sciences)* **1**: 131–210.
- PLUG, I., 1988. *Hunters and herders: an archaeozoological study of some prehistoric communities in the Kruger National Park*. D.Phil. thesis, University of Pretoria, Pretoria.
- PLUG, I. and BADENHORST, S., 2006. Notes on the fauna from three Late Iron Age mega-sites, Boitsemagano,

- Molokwane and Mabjanamatshwana, North West Province, South Africa. *The South African Archaeological Bulletin* **61**(183): 57–89.
- PLUG, I., DIPPENAAR, N. J. and HANISCH, E. O. M., 1979. Evidence of *Rattus rattus* (house rat) from Pont Drift, an Iron Age site in the Northern Transvaal. *South African Journal of Science* **75**: 82.
- PLUG, I. and MEYER ZU BARGHOLZ, D. A. G., 1993. The faunal remains from Kleinfontein or Olifantspruit 62 JP (Kaditshwene), a Late Iron Age site in the Marico district, Transvaal. Unpublished report, Department of Archaeozoology, Transvaal Museum, Pretoria.
- PLUG, I. and MEYER ZU BARGHOLZ, D. A. G., 2000. The faunal remains from Kleinfontein or Olifantspruit 62 JP (Kaditshwene), a Late Iron Age site in the Marico district, North West Province (1995 excavation). Unpublished report, Department of Archaeozoology, Transvaal Museum, Pretoria.
- PLUG, I. and VOIGT, E. A., 1985. Archaeozoological studies of Iron Age communities in southern Africa. In: WENDORF, F. and CLOSE, A. E., eds, *Advances in world archaeology* **4**: 189–238.
- QUIN, P. J., 1959. *Foods and feeding habits of the Pedi*. Wits University Press, Johannesburg.
- RAMSAY, K., HARRIS, L. and KOTZÉ, A., 2000. *Landrace breeds: South Africa's indigenous and locally developed farm animals*. Farm Animal Conservation Trust, Pretoria.
- REID, A. M., 2004. Access to cattle resources in a Tswana capital. In: REID, A. M. and LANE, P. J., eds, *African historical archaeologies*, pp. 301–324. Kluwer Academic/Plenum Publishers, New York.
- REITZ, E. J. and WING, E. S., 1999. *Zooarchaeology. Cambridge manuals in archaeology*. Cambridge University Press, Cambridge.
- REYNOLDS, B., 1968. *The material from Gwembe valley*. National Museum of Zambia. Kariba Studies, Vol. III. Manchester University Press, Manchester.
- RICHARDS, A. I., 1939. *Land, labour, and diet in Northern Rhodesia*. International African Institute, London.
- SCHAPER, I., 1934. The old Bantu culture. In: SCHAPER, I., ed., *Western civilization and the natives of South Africa: studies in culture contact*, pp. 3–36. Routledge, London.
- SCHAPER, I., 1938. *A handbook of Tswana law and custom*. Frank Cass, London.
- SCHAPER, I., 1943. *Native land tenure in the Bechuanaland protectorate*. Lovedale Press, Lovedale.
- SCHAPER, I., ed., 1951. *Apprenticeship at Kuruman (being the journals and letters of Robert and Mary Moffat)*. Chatto & Windus, London.
- SCHAPER, I., 1953. *The Tswana*. International African Institute, London.
- SCHAPER, I., 1971. *Rainmaking rites of Tswana tribes*. African Studies Centre, Cambridge.
- SHAW, M., 1974. Material culture. In: HAMMOND-TOOKE, W. D., ed., *The Bantu-speaking people of southern Africa*, pp. 86–131. Routledge and Kegan Paul, London.
- SKINNER, J. D. and CHIMIMBA, C. T., 2005. *The mammals of the southern African subregion*. Cambridge University Press, Cambridge.
- SMITH, A., 1836. Unpublished historical notes on Tswana, Sotho and Matabele tribes. Vol. XII, South African Museum Library, Cape Town.
- TLOU, T., 1974. The nature of Batswana states: towards a theory of Batswana traditional government – the Batawana case. *Batswana Notes & Records* **6**: 57–75.
- VOIGT, E. A., 1983. *Mapungubwe: an archaeozoological interpretation of an Iron Age community*. Transvaal Museum Monograph No. 1. Transvaal Museum, Pretoria.
- VOGEL, J. C., FULS, A. and VISSER, E., 2001. Radiocarbon adjustments to the dendrochronology of a yellowwood tree. *South African Journal of Science* **97**: 164–166.
- WELLINGTON, J. H., 1955. *Southern Africa: a geographical study; volume 1: physical geography*. Cambridge University Press, Cambridge.
- WHITEHEAD, N. L., 1995. The historical anthropology of text. *Current Anthropology* **36**(1): 53–73.
- WILLOUGHBY, W. C., 1905. Notes on the totemism of the Becwana. *Journal of the Royal Anthropological Institute of Great Britain and Ireland* **35**: 295–314.
- WOOD, M., 2008. Post-European contact glass beads from the southern African interior: a tentative look at trade, consumption and identities. In: SWANEPOEL, N., ESTERHUYSEN, A. and BONNER, P., eds, *Five hundred years rediscovered: southern African precedents and prospects*, pp. 183–196. Wits University Press, Johannesburg.
- WOOKEY, A. J., 1945. *Dicò tsa Secwana*. London Missionary Society, Vryburg.