

■ SOUTH AFRICA

A Preliminary Assessment of Animal Distribution on a 19th Century VhaVenda Settlement

Annie Raath Antonites
Department of Anthropology
Yale University
New Haven, CT 06511, USA

Nelius Kruger
Department of Anthropology &
Archaeology
University of Pretoria
Pretoria, 0001, South Africa

Introduction

Nineteenth century South Africa was marked by colonial expansion and regional interaction. Situations of contact and conflict emerged on continually shifting frontiers. During this time, a series of well-fortified, stone-walled settlements appeared over a large area at Ha-Tshirundu in the central Limpopo Valley (Figure 1). VhaVenda groups, who derive their origins from the Shona in Zimbabwe and other local groups in the Soutpansberg (Loubser 1991), maintained a presence in the Limpopo Valley during the 18th and 19th centuries. The Ha-Tshirundu settlements generally display structural similarities with Venda-type sites across the Limpopo Valley. Elevated secluded areas, which include house floor remains, are prominent features on these sites. Separate residential areas occur lower with livestock enclosures nearby. Communal and individual household middens are scattered throughout the sites, and entrances to sites are clearly demarcated.

In 2008, the largest of the Ha-Tshirundu stone-walled settlements, named TSH 32, was extensively excavated by one of us (NK). VhaVenda ethnographic descriptions of settlement layout, coupled with the spatial distribution of certain excavated artefacts, provided a basis for identifying activity areas. Assigning general function to activity areas does not, however, adequately qualify the meaning of the site – how individual people acted in these spaces require more detailed study. Analysis of the use and discard of animal remains provides one such research avenue. Intra-site comparisons of animal remains give meaning to human actions governed by, among other things, public and private access, sacred and secular activities, gender and status (e.g., De Wet-Bronner 1995a, b; Muir and Driver 2002; Thorp 1995; examples in O' Day *et al.* 2004). A short deposition history and link to recent historical narratives at TSH 32 provides an opportunity for a more nuanced study of space in a 19th century VhaVenda community. It also provides an opportunity to study the accuracy and applicability of ethnographic models to archaeological datasets. In this paper, we present preliminary results on the spatial distribution of animal species across TSH 32.

The Project

TSH 32 is the largest of a complex of stone-walled settlements in the Ha-Tshirundu Mountains, located close to the South Africa/Zimbabwe border (Figure 1). Oral traditions, glass bead sequences and ethnographic references place occupation of TSH 32 between AD 1860 and 1913 (Kruger forthcoming). Historical narratives of the site's enclosure identify two major occupational events. During the first event, a wealthy headman known as Mulungufala occupied the site and more than 1000 of his followers lived in the adjacent landscape during a time of relative peace and stability. A second, short-lived event is marked by the forceful appropriation of the site by Mulungufala's stepson and feared diviner, Kham-Kham. This period is char-

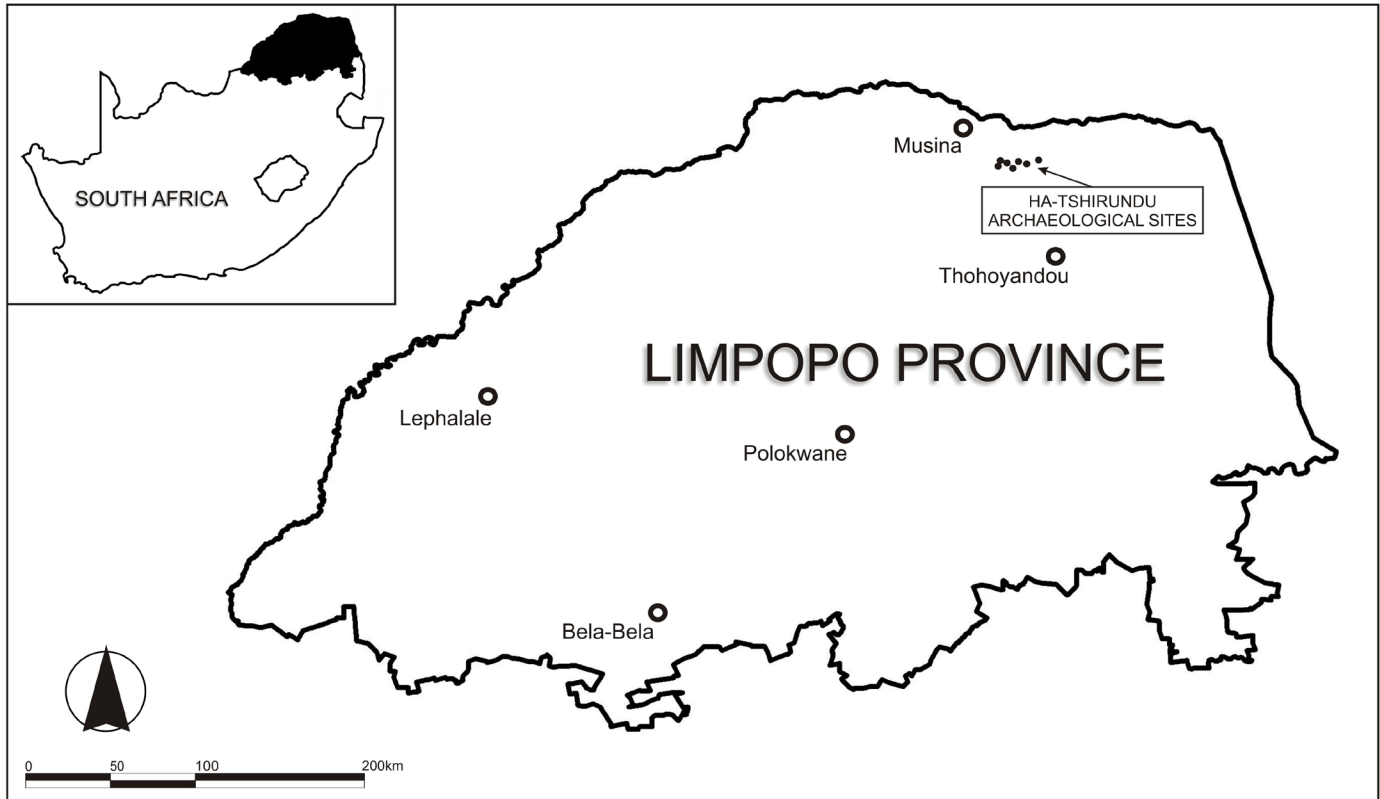


Figure 1: Location of the Ha-Tshirundu archaeological sites and TSH 32.

acterised by instability and conflict, followed by an abrupt abandonment of the site.

TSH 32 was first excavated by H. P. Prinsloo in 1996. A small area (1m x 2m) within the hilltop settlement’s midden deposit, located directly outside the periphery wall, was excavated. In 2008, multiple activity areas were excavated by University of South Africa (UNISA) faculty and students, under the directorship of NK (Figure 2). Kruger allocated specific activity areas within TSH 32’s complex stone walling according to ethnographic and ethnohistoric descriptions (e.g., Huffman 1987; Huffman and Hanisch 1987; Stayt 1931; van der Waal 1977). Excavated units within these areas include a 1m x 3m unit in the midden deposit adjacent to Prinsloo’s initial excavation (TSH32-01); a 3m x 3m unit at the main entrance to the site (TSH32-02); a 3m x 4m unit on the summit of the fortified hilltop (TSH32-03); shovel test pits of a large activity area inside the main enclosure (TSH32-04); and a 4m x 4m unit in the raised area adjacent to

the large activity area (TSH32-05). All the 2008 deposits were screened using a 2mm mesh size. The excavation and analysis of these activity areas and objects form part of a larger study on Ha-Tshirundu history (Kruger forthcoming) and are only briefly mentioned in this report for contextual clarity. We will interpret the animal remains using these spatial allocations as a starting point.

Animal remains from both the 1996 and 2008 seasons were submitted for analysis. In 2009, Dr. I. Plug initially identified some species, followed by a more detailed analysis in 2010 and 2011 by one of us (ARA). Species were identified – to the lowest possible taxonomic level – by means of the vertebrate comparative collection at Ditsong National Museum of Natural History (Pretoria). Skeletal portions were recorded to assess consumption and distribution patterns, some of which are reported here. Taphonomic features such as butchery marks, burning and weathering were recorded for future analysis of butchery practices, cooking meth-

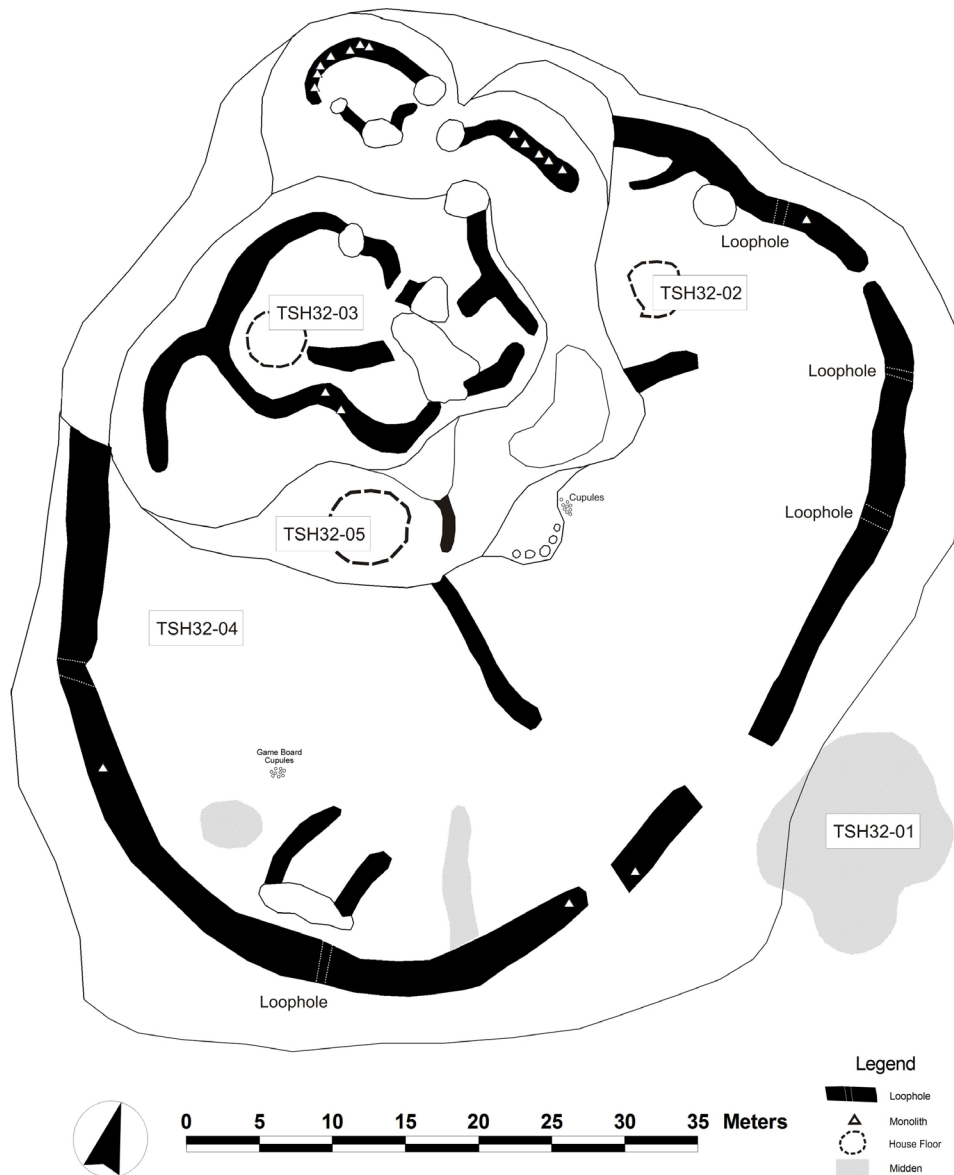


Figure 2: Site map of TSH 32 showing the five excavated areas.

ods and disposal patterns. The analysis of TSH32-01 and TSH32-04 is still in progress, and species identifications from these areas are preliminary.

Results and Discussion

Almost 3000 bones have been analysed, of which roughly 10% were identifiable to species, family or genus level (Table 1). In general, domesticates slightly outnumber wild animals, although a large variety of the latter are present. Cattle bones were recovered in certain excavations but sheep/

goat remains seem more numerous and more widely distributed across the site. This is somewhat unusual based on observations of slightly earlier sites in the area, where cattle bones dominate (De Wet-Bronner 1995a,b); but this probably reflects the devastating effect of the rinderpest cattle epizootic that swept through the area in the 1890s (Pastoret *et al.* 2006). Medium bovid head and front leg elements are slightly more numerous than other skeletal parts. Freshwater mussels, fish, birds and tortoise shell also occur frequently throughout the site. Both species and skeletal part observations

Species	TSH32-01	TSH32-02	TSH32-03	TSH32-04	TSH32-05
<i>Papio ursinus</i> (baboon)	X				
<i>Chlorocebus pygerythrus</i> (vervet monkey)	X				
<i>Canis familiaris</i> (dog)	X				
cf. <i>Hyaenidae</i> (hyena)	X				
Mongoose	X				X
<i>Felis</i> sp.	X				
Carnivore (small)	X				X
Elephant/Hippopotamus	X				
Ceratotherium/Diceros (rhinoceros)	X				
<i>Equus burchellii</i> (zebra)	X				
<i>Phacochoerus africanus</i> (warthog)	X				
Suid	X				
<i>Bos taurus</i> (cattle)	X			X	
<i>Capra hircus</i> (goat)	X				
<i>Ovis aries</i> (sheep)	X				X
Ovis/Capra (sheep/goat)	X		X	X	X
<i>Sylvicapra grimmia</i> (grey duiker)	X				
<i>Oreotragus oreotragus</i> (klipspringer)	X				
<i>Raphicerus campestris</i> (steenbok)	X				
<i>Aepyceros melampus</i> (impala)	X				
<i>Syncerus caffer</i> (buffalo)	X				
<i>Taurotragus oryx</i> (eland)	X				
Bovid (small)	X			X	X
Bovid (medium)	X			X	X
Bovid (large)	X			X	X
Xerinae (squirrel)				X	
<i>Pedetes capensis</i> (springhare)	X				
Rodent (small)	X		X	X	X
<i>Lepus saxatilis</i> (scrub hare)	X				
Lagomorph (hare)	X				
Mammal (small)	X				
<i>Gallus domesticus</i> (chicken)	X			X	
<i>Struthio camelus</i> (ostrich)	X				X
<i>Francolinus swainsonii</i> (Swainson's francolin)	X				
Numididae (guineafowl)	X				
cf. <i>Corvus</i> sp. (crow)	X				
Bird (small)			X		X
Bird (medium)	X				
Bird (large)	X				
Tortoise	X		X	X	X
<i>Varanus</i> sp. (monitor lizard)	X				
Gekkonidae (gecko)			X		X
<i>Crocodylus niloticus</i> (crocodile)			X		
Reptile (small)	X	X		X	X
<i>Pyxicephalus adspersus</i> (bullfrog)	X			X	
Frog (small)	X				
Fish (indeterminate)	X			X	
<i>Achatina</i> sp. (giant land snail)	X	X		X	X
Terrestrial mollusc (small)		X	X		X
Freshwater mollusc (large)	X				X

Table 1: Animal species present in the five excavated areas on TSH 32.

may change as more data from the midden become available and more in-depth taphonomic analyses are completed.

Below we discuss the faunal results from each excavated area independently, together with a brief description of the associated material remains to provide some context. Specific data on skeletal part distribution are only briefly considered where relevant and will be published once all the material has been analysed.

The midden (TSH32-01). A large variety of animals are represented here (Table 1), many of which are typically not regarded as food animals. Non-food animals include species that are rarely consumed or avoided as recorded in ethnographic, historic and oral accounts (e.g., Schapera 1937; Stayt 1931). Based on individual bone counts from the midden, wild animals (excluding carnivores, primates and certain reptiles and rodents) slightly outnumber domesticates. These numbers could be inflated because of high tortoise shell and bovid tooth counts. The presence of zebra, impala, grey duiker, steenbok and klipspringer suggests opportunistic hunting and snaring, while the remains of buffalo, eland and rhino also point toward a more skilled and perhaps organized activity.

The presence of an elephant or hippo sternum is unusual in that very few skeletal remains of these larger mammals are ever identified from southern African archaeological contexts. This leads to the question of whether large carcass portions were brought back to the site for consumption from, for example, the Nzhelele River some 15km away. Primates and carnivores, typically regarded as non-food, were also found in the midden. Although VhaVenda ethnography often associate hyenas, baboons and vervet monkeys with ritual activities, taboos and totems (e.g., Ralushai 1977; Schapera 1937; Stayt 1931; cf. Plug 1987), their remains were also discarded with other household refuse at TSH 32. While these animals could have been killed to protect crops or to defend human life, their use in ritual activities cannot be ruled out ei-

ther. Based on the presence of large carnivores and baboons at slightly earlier settlements in the area, De Wet-Bronner (1995a, b) suggested that primate and carnivore remains may be related to court or elite female activities. She also proposed a medicinal or divination role for the baboon remains. A much firmer understanding of context and other associated bones will move beyond such broad interpretations in the future.

Tortoise shell fragments occur in high numbers across the site and especially in the midden area. Some fragments have been worked into square shapes and perforated. A similarly worked ceramic fragment also occurs at the site. De Wet-Bronner (1995a) interpreted similar tortoise shell objects from late 17th to early 18th century Dzata (65km west of Thohoyandou) as pendants or spindle whorls.

Waiting area and hut (TSH32-02). According to the spatial layout of similar Venda-type sites, a hut and waiting area for visitors seeking an audience with the headman is situated at the main entrance to the site. Excavations revealed a similar area and related hut structure at TSH 32. Only small terrestrial snails, fragments of *Achatina* sp. and fresh rodent bones were identified here. Considering the function of this area, the faunal sample is not unexpected, as the area was probably kept free of debris. Meals would probably not have been prepared in this vicinity either.

Headman's residence (TSH32-03). A significant find came from the summit of the fortified hilltop. A crocodile skull with teeth removed was found on the veranda of an excavated house floor. This find corresponds to the metaphorical association between crocodiles and rulers as recorded in VhaVenda ethnographies (e.g., Ralushai 1977; Stayt 1931; see Huffman 1987, 1996 for detailed discussion). Interestingly, Stayt (1931: 204) mentions that a stuffed crocodile protected the headman's hut and that its presence was a close-kept secret. This find, in association with the isolated hilltop location, thus strongly suggests the presence

of a leader. The remainder of the material culture, such as a studded calabash medicine container, an arrow head, a worked piece of Chinese porcelain (probably part of a divination set), and *Mukuvhibvu* or *Chirirerlwa* ritual beads also suggest some kind of ritual leadership, probably associated with the second phase of occupation. A few smaller bovid, tortoise and bird remains were also found, which may well be the remains of meals or ritual activities, given its close association with the crocodile skull. However, the low occurrence of animal bones suggests that food was not generally consumed here, or that refuse was removed on a regular basis.

Communal female space (TSH32-04). Large amounts of upper and lower grindstones occur on extended courtyard (lapa) floors at this portion of the site. This suggests a communal female activity area as crop processing is commonly associated with women (and girls) in southern African societies (e.g., Schapera 1937; Wessman 1908). Here, animal remains seem to represent a generalised cooking repertoire, with no unusual or scarce species identified yet. Bovid remains dominate, with a particular emphasis on medium sized animals (wild and domestic). Bird (including chicken) and fish remains are also present. Fish remains were not reported at slightly earlier sites in the area (De Wet-Bronner 1995a,b) and their presence at TSH 32 may reflect specific dietary preference or easier access to such resources. TSH 32-04 is probably a female activity area where meal preparation took place.

High status female space (TSH32-05). The spatial layout of most Venda-type sites includes the residence of a higher status female (e.g., the sister, father's sister or primary wife of the headman). At TSH 32, a house floor situated on an elevated outcrop adjacent to the female activity area contained large amounts of *Vhulunghu ha Madi* or "Beads of the Water". These beads are thought to have strong female associations (Stayt 1931: 21; cf. Wood 2008) and its context in large numbers within the elevated house suggests the residence of a higher status female.

As with the neighbouring communal female space, medium bovids dominate, while small birds (francolin size) and freshwater mussels also occur in this area. Differential distribution of animal species between this area and the adjacent communal space is not significant at this stage. A slight predominance of medium bovid (mainly sheep and goat) forequarter elements could suggest a specific division of the meat. In VhaVenda ethnography, specific meat portions are distributed according to certain delineations (e.g., Stayt 1931). These typically depend on the purpose of the killing and the status of the animal's owner in the community. According to Stayt (1931: 41) one forequarter is given to a male relative, while the other presumably remains with the animal's owner. High status females such as the owner's mother, aunt (father's sister) and principal wife do not receive portions of the forequarter. Therefore, the pattern observed at TSH 32-05 does not correspond to Stayt's specific distribution example, and here direct ethnographic analogy should be treated with caution.

Inside vs outside periphery wall. There is a clear difference between the species represented inside and outside the periphery wall. Inside the wall, smaller species like small to medium wild bovids, sheep, goats, birds, fish and tortoise frequently occur; cattle and other large bovid remains are rare. The scarcity of cattle bones inside the hilltop settlement could suggest that activities inside the walls (whether domestic or non-domestic) were not frequently associated with cattle meat. Nor were they associated with any of the large mammals such as zebra, hyena, eland, buffalo and rhino, remains of which only occur on the outside of the wall. Ongoing research will, however, have to address the origin of the refuse in the midden to clarify its relationship with the enclosed hilltop settlement (cf. De Wet-Bronner 1995b: 118).

Conclusion

The analysis of animal bones from TSH 32 presented some interesting results on the spatial distribution of animal species across a 19th century

VhaVenda settlement. These results demonstrate the potential of such an approach to understand the way people created and used space on a daily basis. At TSH 32, activity areas traditionally associated with males, for example the messenger's hut and the headman's hut, produced very little food remains. The only significant animal remains from these areas were the powerful leadership and ritual symbol of a crocodile skull from the headman's hut. Areas associated with female activities have more abundant animal remains, albeit limited to certain species. As expected, the midden located just outside the hilltop's periphery wall contains the highest number of bones and variety of animals. There is a clear difference in species from the midden material, compared to both male and female areas inside the settlement.

On-going research on species identification and distribution, combined with a detailed analysis of bone taphonomy, will shed further light on the interpretation of these results. Ultimately, our study of space through animal utilization will move beyond mere confirmation of ethnographic and ethnohistoric reconstructions of activity areas, and explore how people actually lived within these created spaces.

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