Faunal remains from Chibuene, an Iron Age coastal trading station in central Mozambique

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ABSTRACT

We report on the small faunal assemblage from the Iron Age coastal trading station of Chibuene, situated on the coastal littoral of central Mozambique. The faunal assemblage was excavated in 1995 and contains bones from a variety of animals, including livestock, chickens, wild game animals, as well as aquatic species such as turtles and fish. Fish, turtle and shark remains dominate the assemblage. The fauna from the first and second millennium AD occupations share similarities with other contemporaneous sites to the north on the East African coast, rather than with sites located in South Africa.

KEY WORDS: Fauna, cattle, Swahili, Bantu speakers, trade, fishing.

In this paper we report on the faunal remains from Chibuene, a farming community site on the coastal littoral of central Mozambique (Fig. 1). The paper focuses on the faunal assemblage recovered during the 1995 excavations, which has not been published in detail previously. Chibuene was a coastal trading station during the late first and early second millennium AD (Sinclair 1982, 1987; Sinclair et al. 1987, 1995; Ekblom 2004). It is located opposite the Bazaruto archipelago in Vilanculos Bay, which is renowned for its marine life, and approximately 5 km from the present-day town of Vilanculos. In a wider context, Chibuene lies 700 km north of Maputo and 250 km south of the possible location of ancient Sofala, a trading town mentioned in both Arab and Portuguese sources. Chibuene was clearly integrated in the Indian Ocean trade network (Sinclair 1982, 1987: 90–1) and its importance as an intermediate settlement between interior and transoceanic traders is widely accepted (cf. Hall 1990; Pwiti 1991: 123; Mitchell 2002: 300).

Very few faunal assemblages obtained from archaeological settlements in central and southern Mozambique have been studied so far (Plug & Badenhorst 2001), so the relatively small faunal assemblage from Chibuene will contribute to our understanding of resource utilization in the area. An understanding of economic activities can also potentially shed light on the patterns of coastal trade, and on trade between the east coast and the interior of central and southern Africa, dating from the first millennium AD (e.g. Voigt 1983; Plug 1996; Scott et al. 2009).

DESCRIPTION OF THE SITE

Chibuene is located in a fossil coastal dune environment in what today is an open savanna with predominantly young trees/shrubs of *Julbernardia globiflora*. Near the sea cutting, the vegetation is denser and best described as a coastal thicket. The vegetation before ca. AD 1700 was considerably more wooded, consisting of a savanna-forest mosaic, as shown by pollen analysis. The loss of forests in the area is probably linked

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Fig. 1. The geographical trajectories of Chibuene (from Ekblom 2004).

to the severe droughts that occurred in the summer rainfall region of southern Africa between AD 1600 and 1800 (Ekblom 2008; Ekblom & Stabell 2008).

The site is situated on the shoreline. Part of it is now being eroded by the ocean. The main part of the site is marked by a 3 m high shell midden. The highest densities of finds occur near the sea and are associated with a well-defined cultural layer that extends 400 m along the sea cutting. This layer contained a number of burials (Sinclair 1982, 1987). High densities of finds extend some 500 m west of the sea cutting over an area of about 10 ha. This area is the main part of the site (Sinclair & Ekblom 2004). It is marked by numerous large baobab trees (*Adansonia digitata*) and relatively dense shrub. The site is intersected in the western part by a road. The area east of the road is legally protected by the Departemento de Monumentos, Direcção Naçional de Moçambique. In 1995, 66 test pits were opened west of the road. One, tp13, yielded especially large quantities of archaeological material. This area was further excavated in 1999 and 2000, but is now covered by newly erected buildings. An additional satellite settlement is situated 1.5 km inland on the northeastern side of Lake Nhaucati, and was excavated in 2000 (Ekblom 2004) (Figs 2 & 3).

The excavations from 1995 were carried out under the auspices of the regional project Human Responses and Contributions to Environmental Change in Africa,

funded by the Swedish Agency for Research Cooperation with Developing Countries. The 66 test pits were excavated in four east-west transects across the area, with some intermediate test pits. A phosphate survey was also carried out over the whole area. A 2 x 3 m trench (tr2) was opened close to the sea cutting, and nearby, a 2 x 2 m trench (tr1) was opened, which cut through the large shell midden. With the test-pit excavations, the site could be demarcated to the northwest and southwest. The test pits in the far western part and the southeastern part yielded a large amount of pottery and these excavations were therefore extended into 4 x 4 m trenches (tp13 and 35 respectively). These areas were later expanded in 1999 as tr3 and tr4 (Fig. 3).

The site has an early and a late occupation phase. Dates associated with the early occupation range from ca. AD 600 to 1300/1400, and cluster between AD 700 and 1000. The lowermost soil horizon (here referred to as layer 300), consists of a redyellow-brown or a dark-yellow-brown sandy silt. The next soil horizon, layer 200, consists of a light grey-brown or yellow-brown sandy silt, with moderate amounts of



Fig. 2. The Chibuene site complex showing the main part of the site, excavated in 1977–2001 and the approximate location of test pits over the larger area, including the surveys around Lake Nhaucati and Xiroche carried out in 2000–01 (from Ekblom 2004).



Fig. 3. Detail with legend (above) of the locations of testpits and trenches excavated in 1977–99 on the main part of Chibuene, with (below) the numbers of the testpits and trenches discussed in text (from Sinclair & Ekblom 2004).

charcoal. These main layers carry the characteristics of natural soil formation processes. Well-defined cultural layers, associated with the early occupation phase (here referred to as layer 400), were present at the sea cutting (in tr4 and tp1012) as dark organic and sooty layers (see Fig. 3). The archaeological material suggests two facies in the early occupation. However, when considering the site in its entirety, there is a considerable mixing of material between layers 200, 300 and 400. For this reason, a division of these layers into separate facies is very uncertain and has not been supported by radiocarbon dates so far.

Sinclair (1987: 87) inferred a 200-year break in occupation from about AD 1000 and dated the late occupation phase from ca. AD 1450. However, dates from the excavations in 1995 and 1999 indicate a continued occupation after AD 1000 (Ekblom 2004; Sinclair & Ekblom 2004). The late occupation is represented by the top horizon, layer 100, which is a well-defined cultural layer constituted by a dark-grey sandy silt that is high in phosphates, with a high amount of charcoal and a moderate organic content. It is characterized by high densities of finds and a homogeneous spread of pottery over the main part of Chibuene, but does not occur west of the road. Associated dates range from AD 1300/1400 to 1650/1700. It is not clear if the site was continuously occupied from AD 1700 until recently, since radiocarbon dates from this period are few, and calibration is uncertain for the last two centuries. Historic documents suggest that the Tsonga moved into the area in the eighteenth century, which may have caused considerable disruption amongst local communities. Thus, the site may have been temporarily abandoned (Liesegang 1990; Ekblom 2004).

A short description of finds and correlations with other sites in the region

The early occupation yielded artefacts such as locally produced ceramics, glass beads, Islamic glazed ware, glass fragments and metal, in low numbers. The ceramic assemblage from Chibuene is generally associated with the Gokomere/Ziwa tradition, dated between the seventh to tenth centuries in the larger region of southern Africa (see summary in Mitchell 2002). There are also repeated occurrences of individual sherds with affinities to the Matola tradition, which bears a strong resemblance to Kwale ware found further north in Tanzania and Kenya and possibly dated to the early first millennium AD, and to Triangular Incised Wares (= Tana) dated to the later first millennium AD on the East African coast (Sinclair 1987; Sinclair & Ekblom 2004).

The ceramic assemblage of the late occupation phase is completely dominated by shell stamping and shows strong similarities to the assemblage from Manyikeni, a stonewalled site 50 km inland from Chibuene, which is in turn related to the Zimbabwe tradition (Garlake 1976; Barker 1978; Sinclair 1987). Manyikeni was occupied between the twelfth and sixteenth to seventeenth centuries AD (Garlake 1976; Barker 1978; Sinclair 1987).

The glass beads are classified as Zhizo beads (Wood 2000) and the same type of bead is found in the interior of southern Africa, but in only limited numbers on the coast further north (Wood 2005). There are relatively few glass beads associated with the later occupation and second millennium AD. Other imported items are similar to finds recovered from Kilwa in Tanzania and from other sites on the East African coast. At Chibuene, these finds were accompanied by four human skeletons. The position

of one skeleton, lying fully extended on the right shoulder with its head facing north (Sinclair 1987: 87), suggests that it was one of the earliest Islamic burials on the East African coast.

FAUNAL REMAINS

This paper presents an analysis of the 1995 excavations. Preliminary analysis of the faunal remains from earlier excavations in Chibuene indicated that shells and fish, sheep and cattle bones were present in the assemblage. Sheep and cattle bones were present in the lower occupation units (Sinclair 1987: 88). A cursory examination of the bone assemblage from 1999 was carried out by M. Manyanga in the field (then from the Department of Archaeology, Harare University). It largely supports the findings presented here.

The faunal remains recovered in 1995 have been separated according to the three main layers: layer 100, associated with the late occupation phase; layer 200, associated with the upper layers of the early occupation phase; and layer 400/300, associated with the lower layers of the early occupation phase (as discussed above). The methods of analysis have been discussed elsewhere (Brain 1974; Voigt 1983; Plug 1988). The Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI) were used to quantify the fauna.

The 1995 faunal assemblage from Chibuene is small (Table 1). In summary, it contains the remains of a wide variety of animals, including mammals, birds, reptiles, amphibians, fish, crustaceans, molluscs and tubeworms (Table 2). Owing to the relatively small sample size, no attempt was made to infer differences between the faunal remains from the lower and upper occupations.

Human remains consist of a fourth metacarpal (tp5, tp200) and a first incisor (tr2, tr400). It is unclear if they are the disturbed remains of a grave. Domestic animal bones occur in all components. In addition, many of the indeterminate bovid bones could

							-		
	Late occupation			Early occupation				77 - 1	
	100	100-200	100-300	200	300	400	Unknown	Total	
Identified specimens	452		30	301	90	205	63	1141	
Unidentified specimens:	213	2	5	75	95	68	93	551	
(Enamel)	(3)	(1)		(2)	(2)	(6)		(14)	
(Skull)	(13)						(1)	(14)	
(Vertebrate)	(14)			(3)	(11)	(1)	(4)	(33)	
(Rib)	(36)	(1)		(9)	(4)	(2)	(12)	(64)	
(Miscellaneous)	(101)		(2)	(43)	(72)	(48)	(27)	(293)	
(Flakes)	(46)		(3)	(18)	(6)	(11)	(49)	(133)	
Total sample	665	2	35	376	185	273	156	1692	
Mass ID (g)	429.7	15.7		162.4	130.7	133.7	73.9	946.1	
Mass non-ID (g)	361.0	10.1		97.2	68.4	41.1	52.2	630.0	
Total mass (g)	790.7	25	5.8	259.6	199.1	174.8	126.1	1576.1	

TABLE 1

The Chibuene faunal sample expressed as NISP (Number of Identified Specimens).

derive from cattle and caprines. Chicken remains occur in the early occupation deposits. Wild animal remains in the assemblage include blue duiker (*Cephalophus monticola*), suni (*Neotragus moschatus*), vervet monkey (*Cercopithecus aethiops*), rhinoceros (*Ceratotherium* or *Diceros* spp.) and mongoose (Viverridae). Turtle and fish remains were common and shark remains were identified from their very distinct vertebrae (see Reitz & Wing 1999: 44). We also include here all the shell remains present amongst the fauna (Table 2).

A hundred and nine specimens are burnt, of which 24 are calcined. A further 10 specimens have cut marks and 14 have chop marks. Carnivore damage was noted on 29 specimens, and rodent gnawing on 53. Five abraded specimens show use-wear. Some specimens of goat, blue duiker, large bovid and of a genet-sized carnivore are represented by juvenile individuals. However, most of the sample contained the remains of adult animals (Table 3).

Medium bovids dominate the assemblage, and many of these could be caprines (Table 4). Teeth are the most common element retrieved, which is not unusual. Teeth are the most common element after ribs in the artiodactyl body and they are very dense. As a result, teeth are often well represented on Iron Age sites.

DISCUSSION AND CONCLUSION

Despite the small sample size, some general conclusions can be made. Marine resources were of major importance throughout the occupation. Most notably, the faunal assemblage is dominated by turtle, shark and indeterminate fish remains. The small rodents may not have been part of the diet, and could have been natural intrusions.

We found turtle specimens in all components. The thickness of the carapace and plastron specimens, as well as the robustness of the cranial specimens, suggests that the fragments most likely represent the loggerhead turtle (*Caretta caretta*). Loggerhead turtles are large and nest on the coasts of Mozambique, Madagascar and South Africa (Frazier 1980: 331). As in many parts of the world (Davenport 1945), turtle meat and eggs are widely regarded as delicacies on the East African coast (e.g. Edwards 1893: 17; Gardiner 1906: 327), where turtles are still actively hunted and gathered for food (Eliot 1926a, b; Frazier 1980). Turtles are not only easily stalked when they come ashore to lay eggs (Fryer 1910: 259; Elliot 1926b: 357), but are also actively hunted in a variety of other ways. For example, they may be speared (Fryer 1910: 259). Turtle flesh is prepared in various ways, but turtle soup and dried meat are commonly made (Fryer 1910: 260). Like shark fishing, turtle consumption appeared on the East African coast during the first millennium AD (Horton & Mudida 1993). We are not aware of any coastal farming settlements south of Chibuene in Mozambique or in South Africa where turtles were consumed on a regular basis.

The presence of shark remains is an intriguing aspect of the fauna from Chibuene. To our knowledge, no shark remains have been identified from farming sites south of Chibuene in southern Mozambique or on the southeast coast of South Africa. On the other hand, sharks are often associated with Swahili culture (e.g. Elliot 1926a: 245). People catch sharks in a variety of ways, including with nets (Elliot 1926a: 245, 1926b: 357) and with large iron hooks on chains (Kusimba 1996: 389). Shark meat is often consumed in a dried state (Donald 1895; Villiers 1948: 411), while the intestines, acting as a preservative, are often used to paint canoes, or to soften and treat planks (Weiss 1973: 178, 181). Shark meat is often traded (Farler 1879: 89). In

Taxa	Provenance						Total
	Late occupation		Early occupation				1
	100	100-300	200	300	400	Unknown	
Homo sapiens (human)			1		1		2
<i>Cercopithecus aethiops</i> (vervet monkey)	1						1
Viverrid/Mustelid	1						1
Carnivore/Primate						1	1
Genet-sized carnivore	1				2		3
Rhinoceros			2				2
Neotragus moschatus (suni)	1						1
<i>Cephalophus monticola</i> (blue duiker)	1						1
Ovis aries (sheep)	3		1				4
Capra hircus (goat)			3				3
<i>Ovis/Capra</i> (sheep/goat)	10	1	1	4	3		19
Bos taurus (cattle)	3		3	3	3	14	26
Bovidae small	3		1				4
Bovidae medium non-domestic					1		1
Bovidae medium	7	1	10	3	2	2	25
Bovidae large	7		1	2			12
Murid	5						5
Rodent small			9				9
Mammal large		1					1
<i>Gallus domesticus</i> (chicken)	1		4		11		16
cf. Gallus domesticus	1						1
Bird medium	4		1		1		6
Varanus sp. (monitor)	1						1

TABLE 2 Species represented at Chibuene (NISP).

Taxa	Provenance						Total
	Late occupation		Early occupation				
	100	100-300	200	300	400	Unknown	
Reptile small	1					1	2
Reptile small-medium					2		2
Marine turtle	28	1	9	2	1		41
cf. Pyxicephalus adspersus (bullfrog?)	1				1		2
<i>Sparodon/Cymatoceps</i> (musselcracker)	17		10	2	26	13	68
Condrichthyes (shark)	24		5	2			31
Fish (probably marine)	310	25	232	72	146	27	812
Marine crab	4		2				6
<i>Achatina</i> sp. (giant land snail)	1						1
<i>Cypraea annulus</i> (cowrie)	1						1
<i>Natica</i> cf. <i>queketti</i> (marine gastropod)	1						1
<i>Natica</i> sp. (marine gastropod)			1				1
Neogastropoda (marine gastropod)	1						1
Marine gastropod large	2						2
Marine gastropod	1				4		5
Ostrea sp. (oyster)						1	1
<i>Arcidae</i> sp. (marine clam)	1				1		2
Marine bivalve	1						1
Marine mollusc	8	1	4			2	15
Marine tubeworm			1				1
Total	452	30	301	90	205	63	1141

 TABLE 2 (continued)

 Species represented at Chibuene (NISP).

Domestic animal age classes at Chibuene (NISP/MNI). Age classes after Voigt (1983).

Age classes	100	200	300	400				
Bos taurus								
IV (18–24 months)		2/1	1/1					
V (24-30 months)	1/1		1/1	1/1				
VI (30–42 months)	1/1			1/1				
Ovis/Capra								
V (30–60 months)	6/2		1/1					

Element	Bovidae small	Bovidae	Bovidae	Total (%)
Licincia	Doridae official	medium	large	101111 (70)
Skull	1	4		5 (8.1%)
Mandible		1		1 (1.6 %)
Teeth		11	9	20 (32.5 %)
Scapula	1	3		4 (6.5 %)
Humerus proximal		1		1 (1.6 %)
Humerus distal		1		1 (1.6 %)
Radius proximal		1		1 (1.6 %)
Radius distal		1		1 (1.6 %)
Radius shaft		1	2	3 (4.8 %)
Ulna		1	1	2 (3.2 %)
Pelvis		1	3	4 (6.5 %)
Femur shaft	1	2		3 (4.8 %)
Tibia proximal	1			1 (1.6 %)
Tibia shaft			1	1 (1.6 %)
Metacarpal complete	1			1 (1.6 %)
Metacarpal shaft		1	1	2 (3.2 %)
Metatarsal proximal		2		2 (3.2 %)
Metatarsal shaft			1	1 (1.6 %)
Metapodial distal		2	1	3 (4.8 %)
Metapodial shaft		1		1 (1.6 %)
Carpal		1		1 (1.6 %)
Os Centroquartale	1			1 (1.6 %)
Phalanx 1		1		1 (1.6 %)
Sacrum		1		1 (1.6 %)
Total	6	37	19	62 (100 %)

TABLE 4 Bovid skeletal parts at Chibuene (NISP).

many places, dried shark meat was a staple food for the poor (Gilbert 2002: 29). The archaeological evidence indicates that shark fishing was well established on the east coast from Mozambique northwards by the end of the first millennium AD (Horton & Mudida 1993). The presence of shark remains in the earlier and later occupations at Chibuene therefore supports the consumption patterns found elsewhere on the East African coast.

In recent times, fish have been important to people in the Chibuene region (Earthy 1931). Both the white and black musselcracker occur in southern Africa. The black musselcracker (*Cymatoceps nasutus*, also known as the poenskop), found from Cape Town to Maputo, lives in both shallow and deep rocky, reef waters. Black musselcrackers are often caught from rocky promontories using lines, or in deeper water from boats at reefs. While it is difficult to land this species owing to their strength and fighting ability, they are often speared in shallower waters. On the east coast, their numbers increase significantly during the winter months, coinciding with their breeding season. Adults can reach a length of 1.3 m and weigh 45 kg (Van der Elst 1998: 346; Heemstra 2004: 222–3). The white musselcracker (*Sparodon durbanensis*, also known as brusher or white biskop) has a more limited distribution, occurring between St Helena Bay on the west coast and the Thukela River in KwaZulu-Natal (Van der Elst 1998: 369; Heemstra & Heemstra 2004: 222–3). The musselcracker remains from Chibuene are therefore more likely to be black musselcracker.

Inland farming sites in southern Africa, especially those from the second millennium AD, often have little evidence of fishing (e.g. Plug & Badenhorst 2006). However, firstmillennium sites often have evidence of fish (Plug & Skelton 1991, Whitelaw 1994). Ethnographies indicate a general prohibition against eating fish, especially for inland farming groups (see Hutten 2005 for a summary). On the other hand, fish remains, along with other marine resources, are a common feature on first and second millennium AD sites along the East African coast (cf. Horton & Mudida 1993: 682).

Chibuene has large shell middens spread over the site, the largest being 3 m high. Numerous marine and terrestrial shells were recovered, and it is likely that the bulk of the protein diet of the inhabitants of Chibuene came from shellfish. The remains of bivalves and gastropods such as the giant African land snail, various oysters, red mussels, scallop, wedge shell, surf clams, gold ringer, different cowries, spindle shell, top shell, tulip shell, rock shell, dove shell, olive shell, mangrove whelk, mudcreeper, turbo shell, crown conch and keyhole limpets have been identified from Chibuene (Ekblom 2004: 172–4). Bivalves are most common, and most of the shells from the sample are found in shallow waters. Oysters are more common during the early than the later occupation (Ekblom 2004: 91–2).

Oysters could have been collected for food and pearls. Pearls played no role in coastal societies of South Africa (Badenhorst 2005). In recent times, however, pearls have been of importance to coastal Bantu-language speakers of Mozambique (Reid 1913: 45). Trade in pearls dates back to at least the early second millennium AD on the East African coast, and is associated with Swahili culture (e.g. Dickinson 1975: 90; Donkin 1998: 122). Oyster shells have been found at sites such as University Campus in Maputo dating from the first to the second millennium AD (Sinclair et al. 1987: 53).

The domestic animal remains at Chibuene, namely cattle, sheep, goats and chickens, are consistent with those identified at farming community sites elsewhere in southern

Africa (Plug & Voigt 1985; Plug 1996; Plug & Badenhorst 2001). Worth noting is that the cattle remains provide evidence contradictory to Newitt's (1995: 32) conclusion that coastal people in central Mozambique did not keep cattle.

There has been long-standing debate on the spread and distribution of humped-back zebu (*Bos indicus*) and taurine (*Bos taurus*) cattle in eastern and southern Africa (e.g. Voigt 1983; Plug 1996; Magnavita 2006). The Chibuene faunal assemblage unfortunately contained no evidence that could shed light on this issue. Similarly, the assemblage is too small to evaluate the proposal of a shift in herding emphasis in southern Africa from caprines in the first millennium to cattle in the second (e.g. Badenhorst 2008, 2010).

Chicken remains are present in both the earlier and later occupation at Chibuene. Chicken bones have been recovered from other first millennium AD farming sites in southern Africa such as Bosutswe and KwaGandaganda (Plug 1996). These sites predate the occupation of Chibuene. The geographical point at which chickens entered Africa from Eurasia has not yet been established. Possible routes include the Nile Valley, via the Sahara Desert, or through early Greek-Roman trade along the East African coast between AD 100 and 500. Multiple routes of entry are highly likely (Macdonald & Blench 2000: 498). The chicken remains at Chibuene suggest that coastal trade routes played an important role in introducing these birds to the interior of southern Africa. According to Macdonald and Blench (2000: 498), early reports of chickens in Mozambique suggest that they were of a black-feathered variety, which resembles those from India. This lends support to the notion that Chibuene played an important role in the spread and introduction of chickens to southern Africa.

One of the most prominent sites in Mozambique with faunal data is Manyikeni, a Zimbabwe Culture site 50 km inland in central Mozambique. The site was occupied between the twelfth and sixteenth to seventeenth centuries (Barker 1978). The sample yielded the remains of animals such as warthog, hippopotamus, cattle, caprines, buffalo and other indeterminate bovids, zebra, black rhino, elephant, rodents, hares, dog, hyaena, primates, shrews, bats, snake, tortoise or turtle, frogs, bird and fish (Sigvallius 1988). Wild animal remains, particularly antelope, dominate the assemblage, suggesting that hunting was of great importance for the economy of this centre (see discussion in Sinclair 1987: 96; Sigvallius 1988). While this assemblage is larger than that of Chibuene, it also yielded a greater variety of species, which may reflect sample size variation rather than different economic strategies. As a result, it is difficult to compare animal usage at the two sites. A census carried out by Berger (2004) amongst households living in the Chibuene region today indicated that wild resources are very important in household subsistence. The cursory examination of the Chibuene faunal assemblage from 1999 indicates that the proportion of wild faunal remains may be greater in this assemblage.

At the early second millennium site of Mpambanyoni in KwaZulu-Natal, people relied on shellfish, fish and hunted game, with no firm evidence of farming (Robey 1980). Nonetheless, the faunal sample from Chibuene is distinctive in its large proportion of fish remains, when compared with farming community sites in South Africa.

The wild mammal remains that were identified from the Chibuene faunal assemblage belong to species that still occur in the region (Smithers 1983), or have done so during historical (Du Plessis 1969) or prehistoric times (Plug & Badenhorst 2001). They include two specimens identified as rhino. Both black and white rhinoceros occurred in historical times in central Mozambique (Du Plessis 1969). Although no rhino horn was recovered from Chibuene, these bones may indicate trade in rhino horn. This trade has a history stretching over the last millennium on the East African coast (e.g. Pouwels 2002: 392).

The faunal assemblage from Chibuene sheds light on patterns of resource utilization during the Iron Age of central Mozambique. From our admittedly small faunal assemblage, the faunal evidence indicates that shark fishing and turtle hunting, which occurred from the end of the first millennium AD on the East African coast, also occurred at Chibuene. In this respect, the fauna from Chibuene is more similar to coastal sites located further north, than to sites in the southern African interior.

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