

GHANA

A Preliminary Archaeological Survey of the Oti-Daka Corridor, Northern Ghana

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The Oti-Daka corridor is the name we have given to the land between the Oti and Daka Rivers in northeastern Ghana. It is a well-known route for the kola and slave trade network in West Africa in the 18th and 19th centuries, and its geographical position suggests that it was an important locus for human activity throughout prehistory. Archaeological research undertaken in all directions around the Oti-Daka corridor has often questioned the movements of people into and around Ghana, yet this obvious transportation route has never been subjected to archaeological investigations. In July of 2006 we surveyed 15 miles of the Oti-Daka corridor in order to assess its potential for future research.

The Oti-Daka Corridor is a relatively high ridge of land between the Oti and Daka rivers which flood seasonally, water-logging the lower lying land and rendering it infertile and uninhabitable. Today the road and all but the smallest and most ephemeral of farming hamlets are located on this ridge of land, and it is entirely likely that in the past, human activity was similarly circumscribed by the geography of the area.

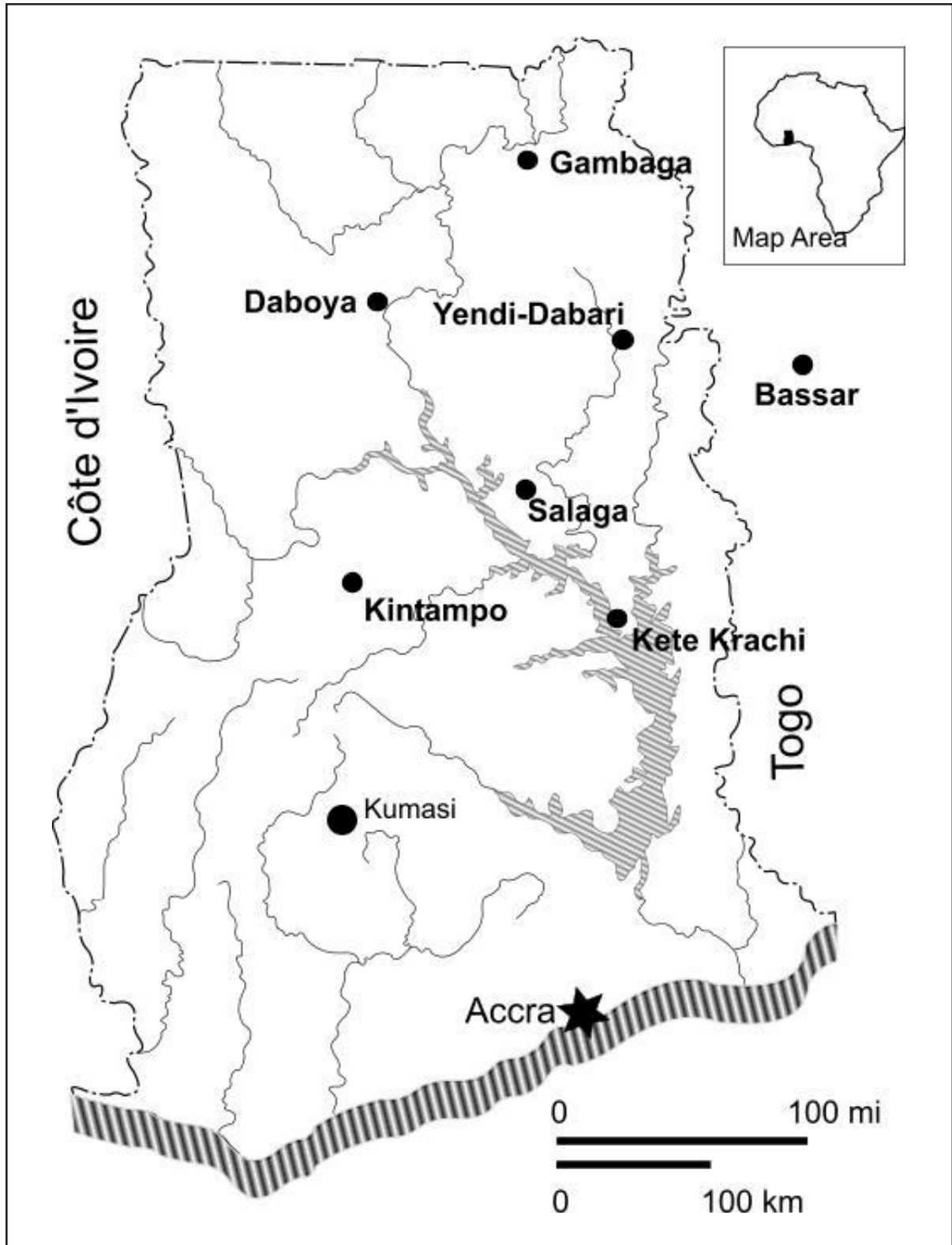
The Oti-Daka corridor is on the periphery of the Dagomba, Gonja and Ashanti indigenous state systems which emerged in the 14th through the 19th centuries. On the other side of the Oti River, in the Bassar region of Togo, a long and intense history of iron production dating as far back as 400 BC (DeBarros

2003) records three exponential increases in production that coincide with the rise of these states. In Bassar, iron production was so intense that it is thought to have produced more iron than Meroe did at its peak, and likely supplied iron throughout the region, and especially to the emergent Ghanaian states (DeBarros 1986, 1988, 2001). In the late 18th Century the Ashanti state made the town of Salaga (Figure 1) the only savanna market town mediating the kola-trade between the Hausa States of Northern Nigeria and other areas of the Sahel to the north and the forests and the coast to the south. The three main trade routes from the north-east subsequently met and coalesced at the town of Yendi and proceeded as one into Salaga. Other smaller routes extended from Hausaland straight to Salaga.

At the peak of its historic trading era Salaga received several hundreds of caravans with some consisting of about up to 1000 slaves and at least as many animals. These caravans arrived in Salaga every day throughout the trading (dry) season of November to April and their numbers led to an annual swelling of the population of Salaga from around 3000 to upwards of 50,000 (Johnson 1986; Lovejoy 1980, 1982). Sandwiched between the emerging states and their center of industry and supply of essential trade goods, and also as the main artery for 18th and 19th Century trade, the Oti-Daka corridor certainly had an important role in transportation, warehousing, provisioning, security and support.

Despite its enormous potential, this area has received no previous archaeological attention. Even Oliver Davies who tirelessly surveyed virtually the whole of Ghana for archaeological sites made it only to the bank of the Daka River just east of Salaga (Davies 1972). Closest to the research area, evidence of intensive and widespread iron production activity has been recorded from archaeological surveys in the Salaga area to the East of the Daka river and also in the far west of the East Gonja District in the Deber-Kpalangase area by Okoro (forthcoming). Iron Age research has been undertaken most intensively on the other side of the Oti River in Togo (DeBarros 1986, 1988, 2001, 2003), but also on the Gambaga escarpment (Godfrey-Smith and Casey 2003; Okoro 1989), in the Kintampo area (Stahl 1985) and in Daboya (Kense 1983). Research on the Late Stone Age Kintampo Complex of Ghana has been most intense to the north of the area along the Gambaga escarpment (Casey 2000), and to the southwest at Kintampo

Figure 1: Map of Ghana Showing Sites Mentioned in the text.



(Flight 1976; Stahl 1985; Watson 2005). To the south, ethnoarchaeological and historical research, as well as general archaeological surveys have been undertaken at Kete Kratchi (Agorsah 2003). Research into the archaeology and history of Salaga has been ongoing since 1992 (Okoro 2002) and projects focusing on the rise of the Gonja and Dagomba kingdoms have been undertaken at Daboya (Shinnie and Kense 1989) and Yendi-Dabari (Shinnie and Ozanne 1962) respectively. Many questions that have emerged from the research in these areas concern the movements of people within the country and from outside of it. The Oti-Daka corridor provides an obvious link between the north and center of Ghana and consequently it stands out as a glaring omission in our understanding of the archaeology of West Africa.

The Survey

This survey took place during the second and third weeks of July 2006. July is not the ideal month to conduct archaeological survey in the area because it is during the wet season and the high vegetation hampers ground visibility. Unfortunately this was the only time that both investigators had available this year. Our aim was to do a general reconnaissance of a portion of the area in order to assess its potential and plan for a more systematic series of surveys during subsequent dry seasons. This season we surveyed a 15 mile stretch of the area between the bank of the Daka River and the town of Chamba-Gungunpa along the Salaga-Yendi road (Figure 2).

Along this stretch of road are a series of villages, not all of which appear on the available topographic maps which were printed in 1970 [Sheets 0801B3 and 0801B4]. The villages in this area are dominated by Konkomba people, with a sizeable Ewe fishing community in the riverside village of Sabonjida, and occasional families of Fulani herders and Akan traders in some of the other villages. The Daka River marks the boundary between East Gonja and Nanumba districts. Throughout the Northern Region generally, the Gonja, Dagomba and Nanumba kingdoms control the land, but much of the territory in their districts is actually settled by other peoples. This has been creating considerable ethnic tensions that remain unresolved.

The virtually monoethnic composition of the villages in the area is of quite recent origin, but with

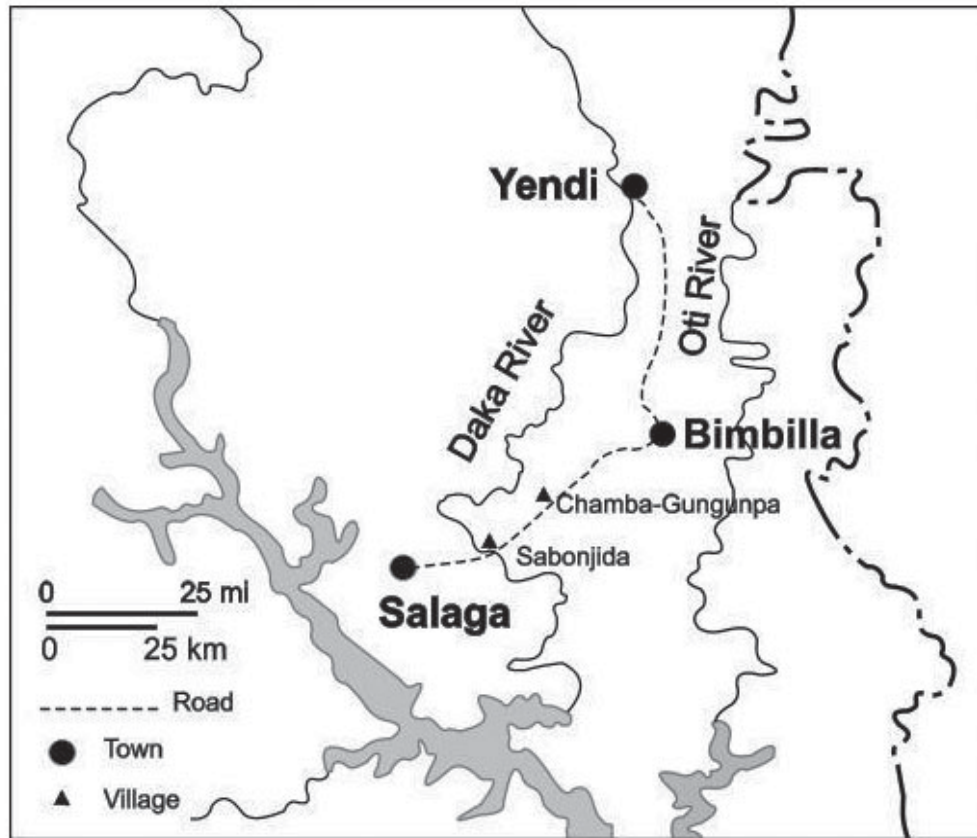
emotions still running high, it was felt imprudent to probe too deeply into the recent history of the villages we visited. Questions about the village shrines and the performance of rituals to them invariably elicited the response that the land belongs to the Nanumbas, and should they ever return, the current custodians will give them back the responsibility for making the sacrifices and performing the rites.

We centered our surveys around 7 villages between the Daka River and the town of Chamba-Gungunpa. We commenced by conducting lengthy public interviews with village elders on village history and composition, farming practices, local resources and ritual activities. We then arranged to return and do a foot survey of the land around the villages with young farmers as our guides. The people in this area farm yams, maize, guinea corn and peanuts in a system that actively works plots of land for 3-4 years then fallows them for 7-15 years. Farms can be located 10 miles or more from the villages and people therefore have a very good knowledge of the landscape for many miles in every direction.

Because of the difficulties with seeing the ground, we relied heavily on our guides to direct us, and it was slag mounds that we were most commonly shown. Slag mounds are obvious features of the landscape and the people in the area recognize that they are the product of blacksmithing waste. Slag from ancient mounds is used in many parts of Ghana for magical and practical purposes. Furthermore it is difficult to farm on a slag mound, so the presence of a slag mound is something that people notice. In the process of being led to slag mounds we were also able to observe other parts of the landscape and look through open fields and bare patches for other kinds of archaeological sites. When our guides could see exactly what we were looking for they were able to volunteer information about other such sites.

We used a GPS unit to record the location of the sites, and collected samples of diagnostic artifacts. We recorded 59 sites in all. Thirty four of these are slag mounds ranging in size from 3 - 65 m in diameter with a maximum height of 2.2 metres. They take the form of round heaps, crescents, ridges and rings. Seven slag mounds had the visible remains of furnaces, tuyere dumps or both, and in a few cases we were able to see places where raw material had been collected and broken for use in the furnaces. Ceramics and pecked or ground stone artifacts were collected from 14 of the mounds.

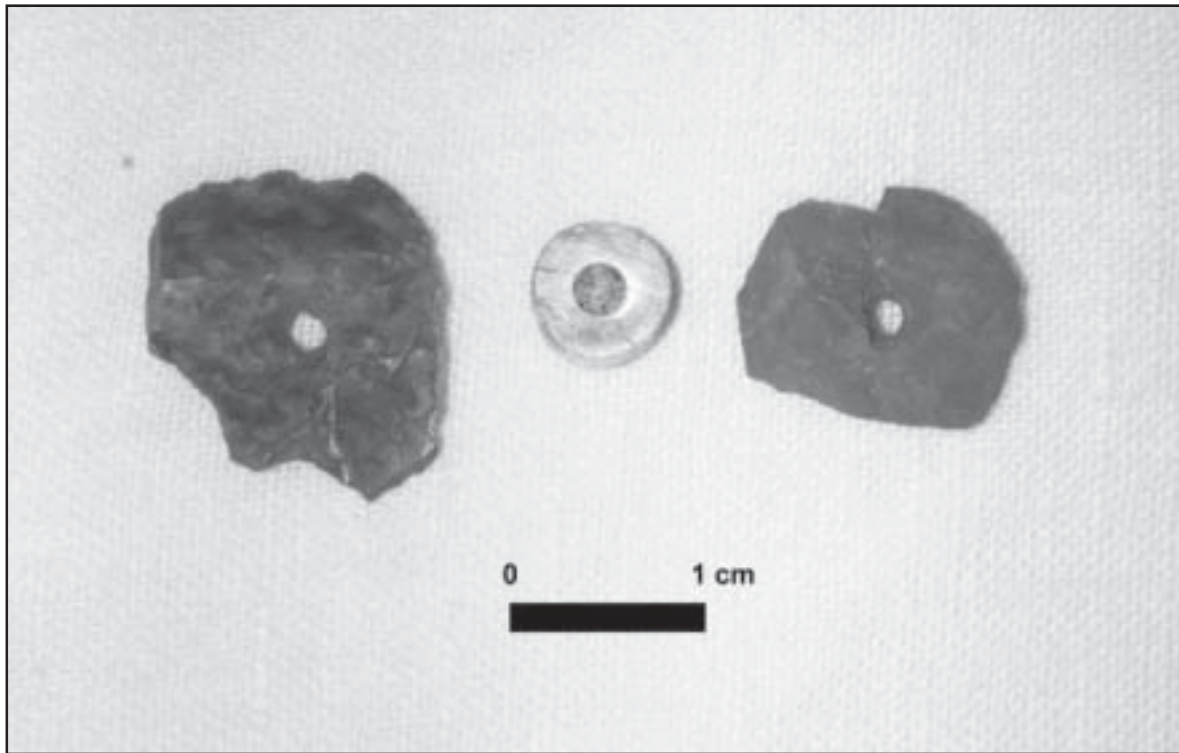
Figure 2: The Oti-Daka Corridor.



We also found 15 occupation mounds containing grinding stones, ceramics, ground stone tools and in a few cases, ground slag balls. One site contained evidence for bead making including two rough pieces of exotic stone material (Figure 3) with holes drilled through them, grooved stones which elsewhere have been thought to be bead polishers, and a finished stone bead that fits precisely into one of the channels of the grooved stones (Figure 4). We do not yet know enough about the culture history of this area to be able to date the occupation sites by their ceramics (although we found no Kintampo ceramics), but the presence of worked slag at some of them, offers the possibility for finding communities that were contemporaneous with iron working activity or which date to later time periods. We found no historical artifacts at any of these occupation mounds.

Quartz flakes occurred near many of the sites as well as randomly on the footpaths. The geology

of the area is comprised mainly of a weakly cemented conglomerate of iron concretions and small, rounded quartz pebbles weathering into individual pebbles. Some of the quartz flakes may be of natural occurrence, although thermal fracture is likely the only way that they could have broken in this geologically inactive environment. Generally, however, quartz flakes were overwhelmingly struck from larger pebbles and tended to occur in clusters, often near to loci of other human activity. In some of the better quality quartz it was possible to observe bulbs of percussion and crushing characteristic of bipolar percussion. Quartz is the ubiquitous lithic raw material of the LSA and we are hopeful that further research will indicate the presence of an LSA occupation, but until other diagnostic artifacts or contexts are found, we are interpreting these quartz flakes with caution. The recovery of an isolated groundstone axe (nyame akuma) is also suggestive of the LSA. We also recorded eight sites that had been abandoned within living memory.

Figure 3: Beads from Sabonjida.

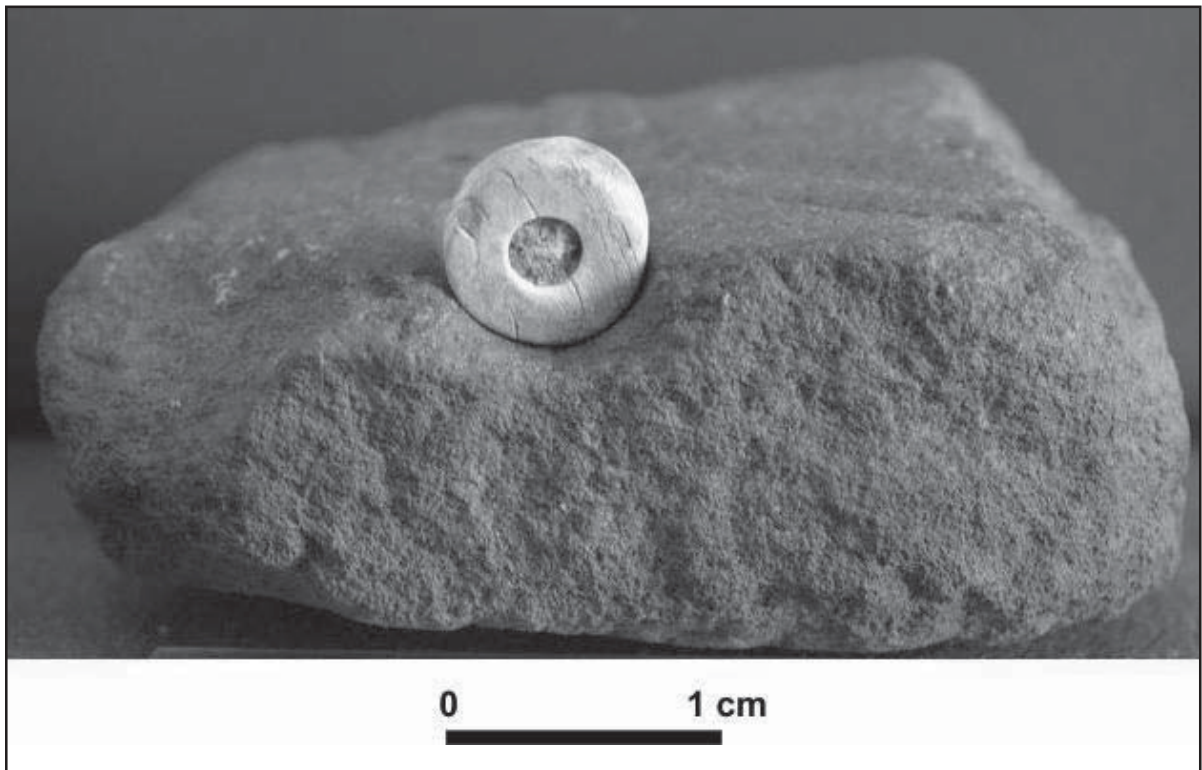
Discussion

We were very much encouraged by the preliminary results of the survey. Even in less than ideal conditions we found sufficient sites to confirm that the area has been occupied far into prehistory. As over much of Ghana basic chronologies need to be worked out in order to understand the culture history of the area and make it possible to date sites from artifact styles, but in the process of working out the chronologies, this area has the potential to enable us to address higher order questions regarding state formation and the role of peripheral areas. The large number of slag mounds is particularly interesting given the proximity to Bassar with its vast deposits of high quality ore, and the contention that Bassar supplied most of the iron to Ghana, particularly during the rise of the indigenous states.

Several questions immediately present themselves. First, does iron production in the Oti-Daka corridor increase with the rise of the states as it does in Bassar, or was iron production controlled from

Bassar and therefore restricted in the area during that time? Second, who are the Oti-Daka iron workers? Although iron-smelting sites have been recorded in other parts of northern Ghana, virtually nothing is known about the peoples who are associated with the sites. Iron smelting and smithing are not necessarily performed by the same ethnic group, even in limited regions, and even today smiths can exhibit quite a high degree of mobility (Okoro 1989). Related to both these lines of inquiry is the question of the relationship between this region and Bassar, specifically, is there any evidence for the movement of Bassar ironworkers into the area in order to exploit the iron ore resources or to have access to the markets and opportunities brought about by the trade route? A program of dating and inventorying the iron working sites in the Oti-Daka corridor can help to address these and other questions. The geographical circumscription of useable land in this area can enable us to understand the relationship between habitations and iron smelting sites in the process of working out the chronologies.

Figure 4: Bead Polisher with Bead from Sabonjida.



The presence of quartz flakes and a ground stone axe suggest Late Stone Age (LSA) occupations in the area. Kintampo occupations are present to the north and the south of the Oti-Daka corridor, so it would seem likely that they should also occur in between. Kintampo is known only from Ghana, a fact that defies logic because Ghana's borders were artificially and recently determined by Europeans and do not represent boundaries that would have in any way naturally impeded human movement. In 1999 DeBarros (2000) surveyed the valley of the Oti River in Togo, specifically looking for Kintampo sites and found LSA and ceramic LSA sites, but no evidence for the Kintampo Complex. Finding Kintampo sites in the Oti-Daka corridor would confound the issue of Kintampo boundaries even further, but the absence of Kintampo sites may help us to understand the distribution of Kintampo, specifically whether these regionally diverse peoples had environmental requirements that determined where they settled, or whether there were contemporaneous peoples restricting their movement.

Our survey was biased heavily toward mound sites that were more easily seen in the thick wet-season foliage but we have no doubt that a survey in the dry season when visibility is better will recover many more sites from all time periods. Most importantly we hope to recover evidence for the use of the corridor as a trade route in the 18th and 19th centuries. As with the preliminary survey we will continue to conduct interviews at all villages and enlist the assistance of local historians, farmers, hunters and assistants who serve as guides. The next phase of our research will be to survey the rest of the Oti-Daka corridor to the town of Yendi. While we are interested in finding sites from all time periods, understanding the relationship between iron working and state formation in the area has presented itself as an important avenue of inquiry. Dating the sites and building a ceramic chronology for the area is therefore critical and will be the primary objective of our next survey.

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