Located in the infamous Rift Valley of Central Ethiopia, the Gademotta region contains one of the earliest known sites of the Stillbay Complex. At site ETH-72-8b there is evidence of many disparate stone tool production techniques which marks the transition from late Acheulian to the Middle Stone Age. There is also convincing evidence of a large hut that more than likely housed a large extended family for a long period of time.

Nancy Singleton and Frank Servello excavated 24 square meters in the Gademotta region in the field seasons of 1971 and 1972, later to be named ETH-72-8B. From the original square formation they excavated another 3-6 meters in each direction in order to locate the boundaries of the remains. Also a large series of trenches and cuts were made throughout the Gademotta region so that a precise lithostratigraphic history could be identified.

As stated above, the Gademotta region is located in Ethiopia within the Rift Valley. A more precise location within the Rift Valley is in the Galla Lakes region; a string of 4 large lakes that were, during the late Pleistocene, one gigantic lake. Site ETH-72-8B is located just west of the shores of the largest of the 4 lakes, Lake Ziway. Today, because of extensive charcoal production, the area that was once a dense thorn and acacia patch is covered by tall grasses and in places of farming the land is barren because of grazing and trampling.
The dates for this site were hard to locate and even harder to accept one over the other. J.D. Clark gave the earliest dates for the region; using K/Ar dating method for the tuff just above hand axes and below the cultural area he came to a date of 235,000 ya +/- 6000 yrs. Other dates, using the thermoluminiscence method places the ETH-72-8B area at just under 90,000 ya. Another form of Ar/Ar dating using sanidine placed the ETH-72-8B site at almost 180,000 ya. All of these dates, confusing and conflicting in themselves are also controversial because the earliest dates for other Stillbay Complex sites in East Africa are no older than 35,000 ya.

There is very little information on the paleo-environment of this area at this time. But time has shown that the Rift Valley, although fluctuating in temperature, remains a stable grass/woodland area throughout time. There is no reason to believe that the environment had changed extensively over the million or so years that preceded MSA occupation at Gademotta.

Artifacts recovered from the site are numerous and varied. Over 9,000 pieces of debitage, waste, tools, and cores were excavated; all of which came from a single source of green/black obsidian. The main component of this number is made up of crushed pieces of debitage (~ 44%). But there are also many blades from prepared cores and many representatives of both the Levallois and Mousterian industry. Because of the presence of the Levallois and Mousterian blades, points, etc. the site is considered a part of the Stillbay Complex. The tools found at this site do not seem to change that much over time, except for the fact that the number of blades increases through time.

The most interesting feature of this site is the presence of a large concave depression in the fossil soil. The excavators believe that this depression is an arbitrary pit
dug to be the floor of a large hut. They suspect this for a number of reasons, the most important being that outside the margins of the depression the number of artifacts decreases extremely rapidly, none existing more than a few fit from the pit. Within the pit there are reasons to believe that it was a base camp. Inside there are mostly finished tools and sharpening spalls, whereas outside of the ring there are more cores and primary flakes. The size and distribution of artifacts within suggest a large extended family living there over a long period of time.

Very few animals have been recovered from the site. The ones that were found all suggest that large game was the meal of choice. One species of equid, one species of hippopotamus, 2 species of large antelope, and one species of medium sized antelope were discovered. No evidence one way or the other was found or reported that would lead one to believe that they were hunting or indicating butchering strategies.

The Gademotta region is important in two respects. First, even with the conflicting dates it seems to be one of the earliest MSA sites. Secondly, this one being more important relying on the first, is that there is evidence of a living structure constructed to house more than a couple individuals. This site is a major stepping-stone into modernity for MSA peoples.