

## A MIDDLE PALAEOOLITHIC SITE AT OOSTHOVEN (NORTHERN CAMPINE)

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### 1. Introduction

The site is located at the "Heideinde", some two kilometers to the north of the centre of Oosthoven (coordinates: north 51° 20' 21"; east 4° 58' 32"). It was discovered through occasional amateur surveys, during which lithic artifacts had been collected next to mainly historic material. When one of us was confronted with this collection, the presence of a few small handaxes was noticed.

The present morphology of the site area is a slight slope adjacent to the river "Oosthovense Loop" and culminating at 31 m asl in northwestern direction. Lithic artifacts appeared at the slope surface in a band between 26 and 25 m asl, suggesting the outcrop of Pleistocene sediments due to slope evolution. A small testpit was dug in the spring of 1993 which disclosed the presence of artifacts in stratigraphic position, within an tiny erosional layer on top of truncated sands.

### 2. The excavation

Following the composition of the surface collection and the evidence of the testpit, it was decided to proceed with a larger-scale operation. A long trench covering 200 square meters was laid out, parallel to the present slope direction. The upper sediments were mechanically removed, down to a depth of about 0.2 m above the inferred position of the erosional level.

### 3. The profile

The main stratigraphic units are shown in figure 1, representing a section of the east profile in the upslope area of the trench.

A: plow zone

C: orange-yellow consolidated sands, with thin layers of grey loam. Numerous frost-cracks are present. Late Glacial coversands.

D: grey sands with horizontal or subhorizontal layering; cross-bedded sands

This unit is truncated by an erosional level represented by dispersed gravels.

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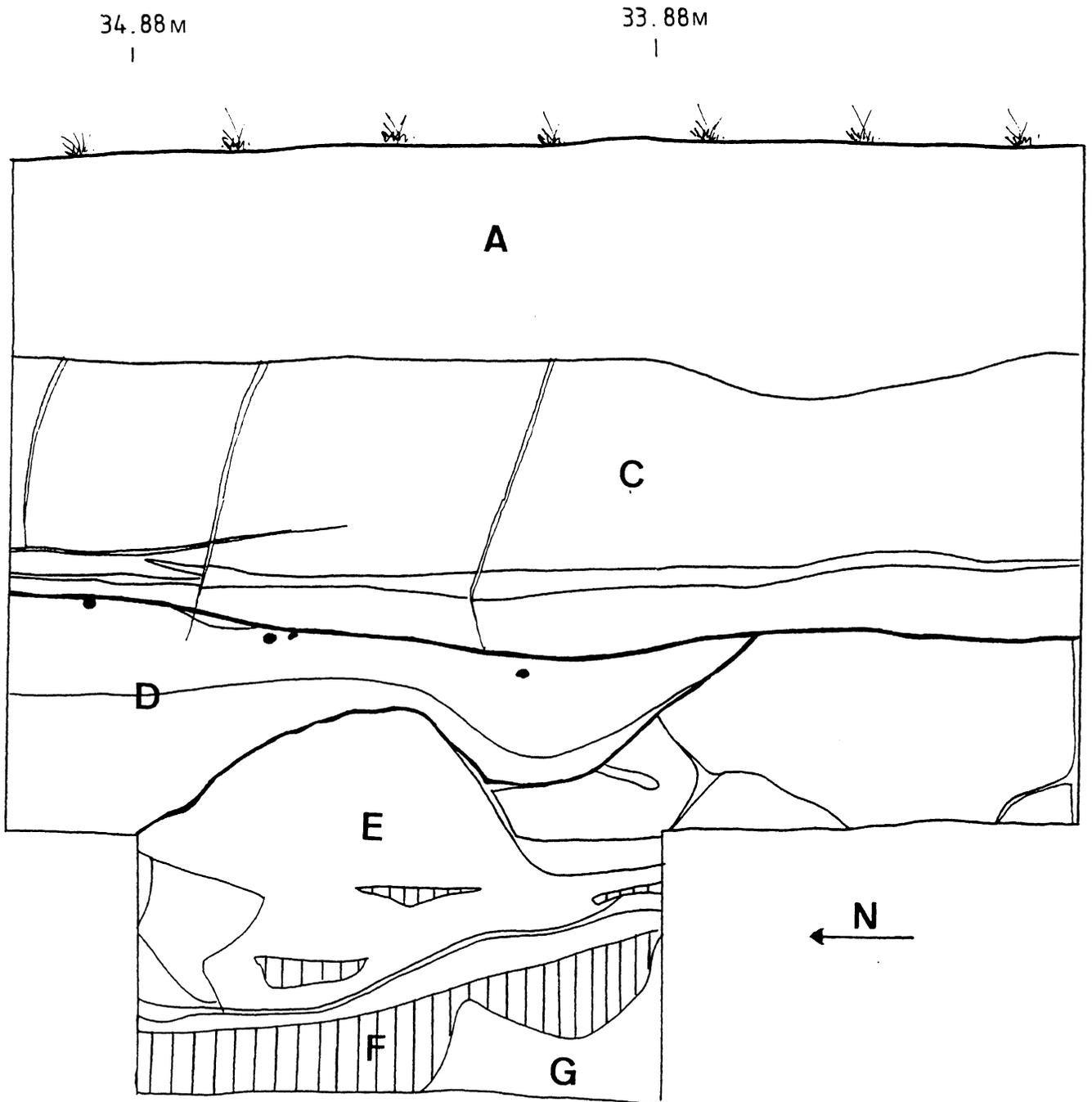


Figure 1: Section of the east profile between 33 and 35 m North.

E: grey homogeneous coarse sands, heavily cryoturbated.

F: cryoturbated peat.

G: homogeneous green sands.

In the southern part of the trench, the profile differs slightly. The cross-bedded sands of unit D are absent here and the erosional level has truncated the top of unit E or F. Unit D represents a system of gullies, flowing in southwestern direction, i.e. tangential to the present slope. These gullies are filled with redeposited unit E sediments, intercalated with grey loam layers.

The erosion which has truncated unit D in the north and units E and F in the south, can be equated with the level of Beuningen (22.000 - 16.000 BP). Its presence is attested in various profiles of the region (Haest 1985).

#### 4. The stratigraphic position of the artifacts

The evidence of the testpit was confirmed during the excavation. The lithic artifacts are very clearly associated with the level of Beuningen, especially in the southern part of the trench. For the north sector, the situation is slightly different. Here, artifacts occur preferentially at the base of the crossbedded sands and only few are comprised within the gravel layer which has finally truncated the system of gullies. Thus, it seemed that at least a part of the site had undergone two phases of reworking.

Our crucial question, then, was where the artifacts had been eroded from and out of which sediments.

#### 5. Some answers

##### *5.1. Assemblage composition*

The archaeological assemblage recovered is small and consists almost

exclusively of flint artifacts. A few fragments of charcoal, as well as a burned tooth fragment (undetermined) are present. Though the artifacts are generally of small dimensions, true chips are absent. Among the tools (about 25 percent of the collection), handaxes are by far the best represented category. They are small and mostly have thick, cortex-covered bases. Next to those, a few side-scrapers and points are present. The diminutive dimensions must be linked with the type of raw material that is locally available. These are small chert pebbles, occurring in Meuse terraces. Outcrops of such terraces are known in the region, although not in the immediate vicinity of the site. Next to (semi)local raw material, however, some tools seem to be made out of imported flint and may have been brought at the site in their finished form.

The high frequency of bifacial tools might be taken to suggest an early - Middle Pleistocene ? - date for the industry. The artifacts would have been eroded out of Middle Pleistocene sediments and redeposited in their secondary position from which they were recovered now.

##### *5.2. Stratigraphic evidence*

The peat layer F is a key unit in the profile. It is likely that it can be correlated with peat layers recorded in profiles at "Schuurhoven", some 500 m to the south of the site and at Beerse-Dam (Haest 1985), for which a radiocarbon date of about 38.000 BP is available. Various corings in the surroundings of the site, including the 31 m plateau, show an identical stratigraphic succession. The peat is apparently represented all over the area and was not touched by the Late Glacial erosion.

This means that the industry cannot have been eroded out of an original Middle

Pleistocene position by the Late Glacial erosion of Beuningen. In that case, the peat should be lacking of some profiles, at least the one of the 31 m plateau. If a Middle Pleistocene origin for the artifacts is to be maintained, large distance transport and perhaps various cycles of reworking must be taken into account. The latter hypothesis, however, is definitely contradicted by the physical condition of the artifacts. Though they are sometimes heavily patinated, they show no traces of damage by transport. Edges and ridges are generally fresh or even very fresh. A number of artifacts show one face (the side exposed during the excavation) much more intensively patinated than the other, the latter sometimes even not patinated. This suggests that the artifacts have been exposed at the surface for a significant period of time, but that very little alteration had occurred before that. It should, moreover, be noticed that no Middle Pleistocene deposits have up to now been recorded in the area (Haest 1985).

A Late Pleistocene age, probably isotope stage 3, is therefore the most likely.

### 5.3. *Horizontal distribution*

The overall artifact density is very small, on average less than one per square meter. Most of them, however, occur in the southern part of the trench. Only few are present in the northern part and they show a linear arrangement. This seems to evidence their position at the base of small gullies and their fluvial reworking. The relatively dense scatter in the south coincides with the portion of the profile where the erosion of Beuningen has truncated the top of the peat layer. In this area, a few extremely fresh artifacts, with no patina at all, occur. Another noteworthy point is a concentration of charcoal particles in an area of about 2 square meters, whereas no charcoal was found in other positions.

This evidence contradicts significant lateral movement of the archaeological record and suggests that it may have been locally eroded out of the top of the peat layer. The implication of this is that the present distribution does largely represent the original *in situ* situation. However, it should be said that no artifacts embedded within the peat have been recorded.

### 6. A palaeo-geographic reconstruction

Relative to the present slope, the peat layer F shows an opposed inclination. The truncated top of the peat dips in northern direction from about 20 m north (which represents the northern edge of the denser artifact concentration). It seems that this peat was formed in a slight depression. The existence of a depression is also suggested by the corings to the north of the site area. Afterwards, a slope inversion has taken place.

At the time when the peat growth came to a end (about 38.000 BP or slightly later), a Middle Palaeolithic settlement was installed at the southern edge of this depression, which may still have contained some water at that time. The concentrated presence of charcoal and a burned tooth fragment suggest the association of a fireplace with the lithic remains.

Along the edge of the depression other such concentrations must have existed as is documented by the transported artifacts in the northern part of the trench. Since they have been transported in gullies which stream in southwestern direction, they originate from concentrations located to the northeast of the presently excavated concentration.

### 7. Implications

An inferred date of about 35.000 BP for the Oosthoven site (which remains to be

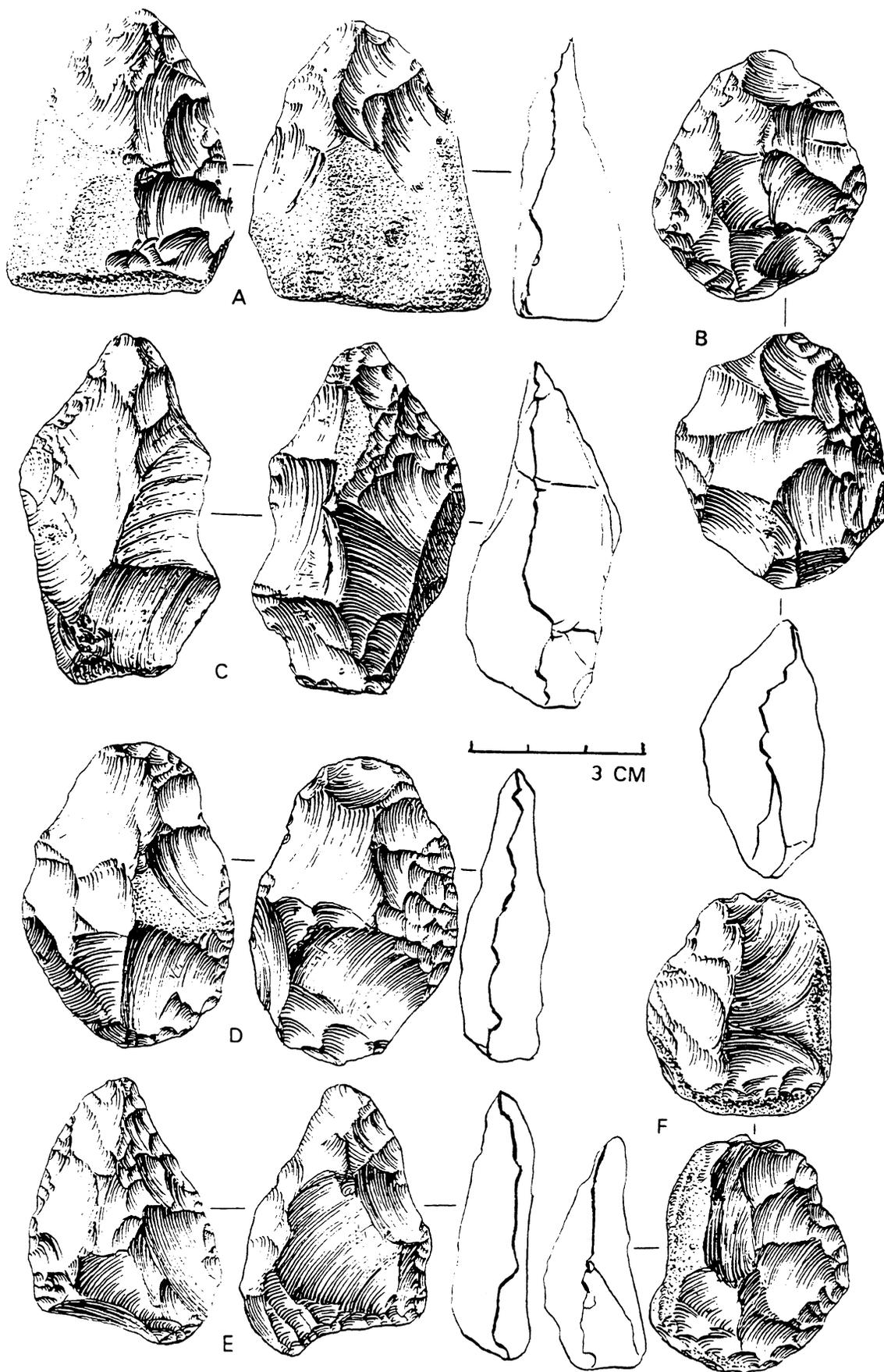


Figure 2: A-F: handaxes

confirmed by accelerated radiocarbon dates) means that this is the first late Middle Palaeolithic site in northern Belgium. Contrary to former beliefs, it demonstrates that there was human occupation in this region during the Pleniglacial.

In the composition of the lithic assemblage, the high frequency of handaxes is an outstanding feature. Next to that, a few points are present of which one is particularly interesting. It is an Emireh-point, characterized by inverse retouch of the edges and flat inverse retouch of the proximal area which has removed the bulb of percussion. The combined presence of handaxes and this type of point definitely suggest a Central European affiliation for the Oosthoven industry. In that sense, the assemblage differs radically from other Belgian Middle Palaeolithic industries of which the structure is similar to the classical Mousterian groups as known in France. Without going into more detail at the present moment, the Oosthoven site may possibly hold important clues relative to broader issues such as the nature of the changes attested in the western European archaeological record of 40.000 - 30.000 BP.

We want to conclude with a word of caution and state that much of the interpretation above is based on preliminary evidence. Radiocarbon dates and environmental analyses are awaited. Future work at the site will be aimed at testing the present palaeo-geographical reconstruction and at disclosing other concentrations.

#### 8. Reference

HAEST R., 1985. *Invloed van het Weichsel-Glaciaal op de Geomorfologie van de Noorderkempen*. Unpublished Ph. D. dissertation, Katholieke Universiteit Leuven.

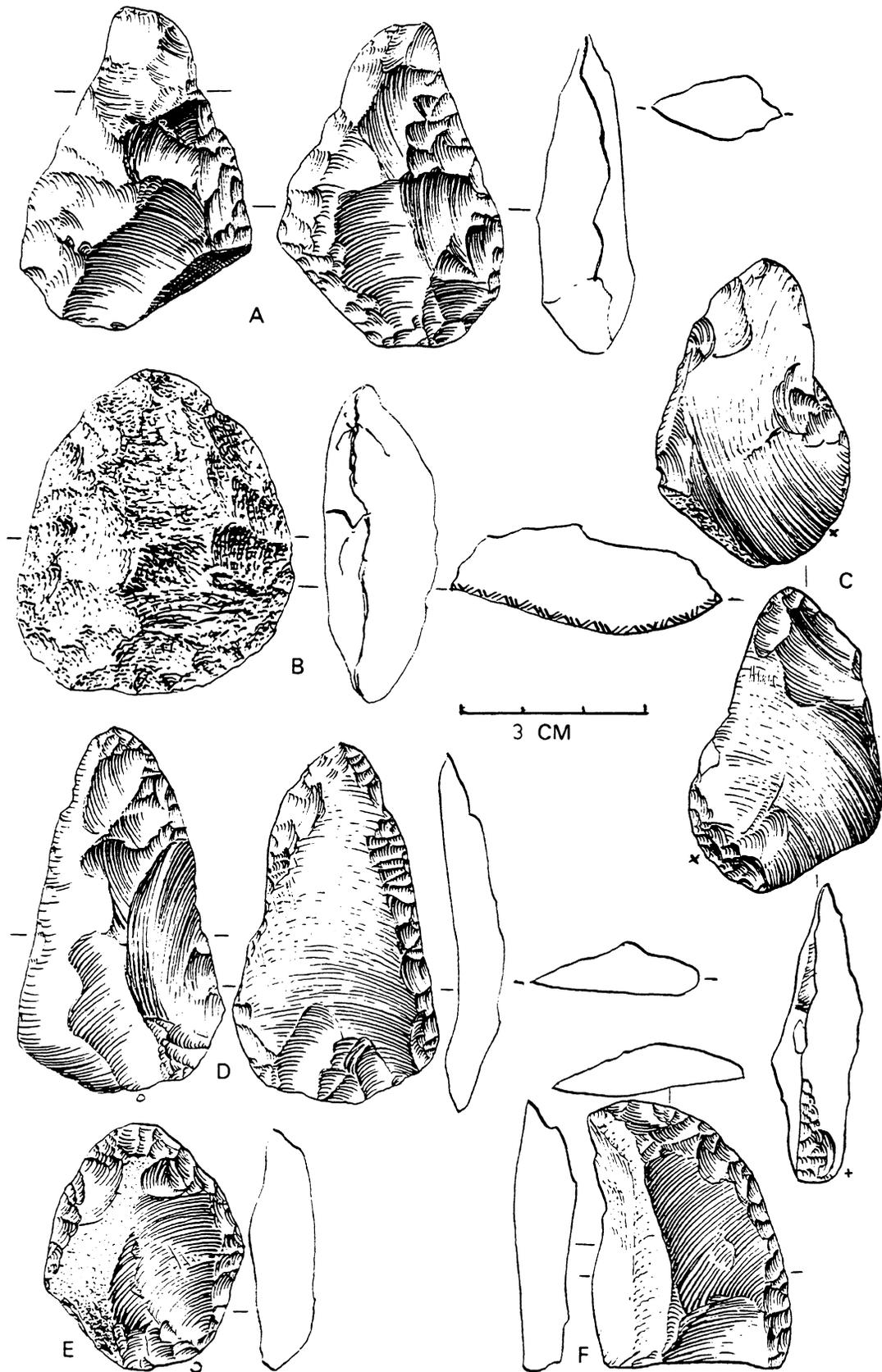


Figure 3: A-B: handaxes; C: Emireh-point ?; D: Emireh point; E-F: side-scrapers