A000-Eur-England-Kent-Northfleet-Clactonian-Chopper-424,000 BP-374,000 BP

Fig. 1. England-Kent-Northfleet-Clactonian-Chopper-424,000 BP-374,000 BP

Fig. 2. A reconstruction of *Homo erectus* at the Westfälisches Landesmuseum, Herne, Germany, in a 2006 exhibition. From <https://upload.wikimedia.org/wikipedia/commons/thumb/c/cb/Homo_erectus_new.JPG/200px-Homo_erectus_new.JPG>

Case No.: 1

**Formal Label:** England-Kent-Clactonian-Chopper-424,000 BP-374,000 BP

**Display Description:**

Clactonian refers to the flint tools found in a paleo-channel at Clacton-on-Sea in Essex, England, in 1911 (Warren 1922). The present chopper was found near the destroyed flint quarries of Barnfield Pit and Rickson's Pit, Swanscombe area, Kent County, England (Darvill, 30 Jan 2017; Tester 1984). This chopper was made by *Homo erectus* in the early Hoxnian Interglacial, Marine Isotope Stage 11, 424,000 BP-374,000 BP (Lisiecki and Raymo 2005; Stringer 2006). It was made on a cordiform or heart-shaped, flint nodule. It has a simple bilateral symmetry. The distal end has had bifacial working to form a robust point. The proximal end has bifacial working to shape it to fit the hand. The tool has the remnants of an ancient patinated cortex on both sides.

**Accession Number:**

**LC Classification:** GN772.22.G7

**Date or Time Horizon:** 424,000 BP-374,000 BP.

**Geographical Area: Northfleet,** Kent County near Swanscombe.

**Map, GPS Coordinates:** 51.44107 0.33694;40° 26' 46" N 79° 58' 56" W.



Fig. 3. “Swanscombe and neigbouring Palaeolithic sites on the south side of the valley of the Thames, below London,” (Keith 1916).



Fig. 4. Map, Northfleet, Kent, 2016. From http://latitude.to/img/latitude-logo.svg/

**Cultural Affiliation:** Lower Paleolithic, Clactonian.

**Medium:** flint.

**Dimensions:   
Weight:**

**Provenance: found in the** Northfleet Area east of Swanscombe.

**Condition:** original, with ancient patination and sheen.

**Discussion:**

Clues to the nature of the environment in which this Clactonian tool was used are provided by faunal remains from the gravel at Swanscombe, which includes bones of Pleistocene animals, including the straight-tusked elephant *(Palaeoloxodon antiquus*) (Glass 2016) and the giant hippopotamus, (Hippopotamus amphibius) (Schreve 2009**;** Tester 1984), indicating a temperate climate in a fertile, marshy valley bordered by woodlands.



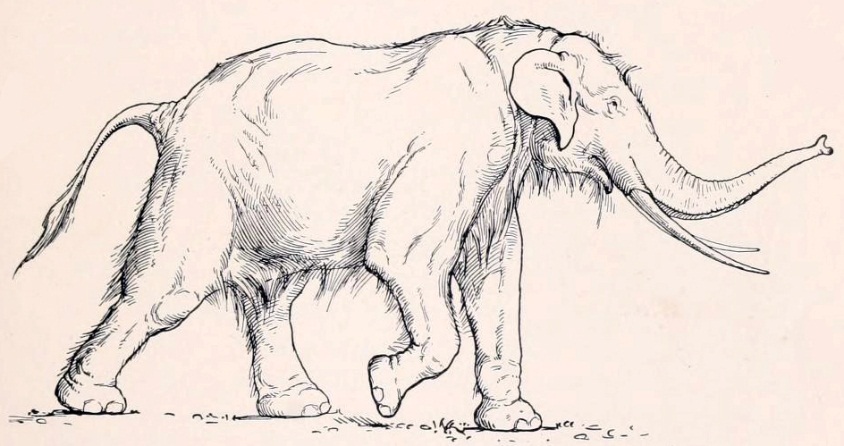
 

Fig. 5. Reconstruction of the Ebbsfleet Valley, south of Swanscombe, Kent, in the early Hoxnian Interglacial, Marine Isotope Stage 11, ca 424,000 BP.

From <http://library.thehumanjourney.net/2732/1.hassmallThumbnailVersion/1-Prelims.pdf>. Cover illustration © Natural History Museum

Fig. 6. *Paleoloxidon antiquus* (lived 781,000–50,000 BP) with a height of 3.90 m (12 ft). From http://upload.wikimedia.org/wikipedia/commons/c/c0/Elephas\_antiquus\_Straight\_tusked\_elephant.jpg

Fig. 7. Hippopotamus amphibious, taxidermy showing replica teeth, from https://assets.catawiki.nl/.jpg

There is also a controversy are these Clactonian choppers part of the more advanced Acheulian bifacial hand axe industry? In 2004 an excavation of a butchered *Paleoloxidon antiquus* at the Southfleet Road site “High Speed 1” in Kent recovered Clactonian flint tools including choppers but no Acheulian hand axes, which would have been more useful, with their bilateral sharp edges, than a chopper, with only a sharp distal end to dismember *Paleoloxidon antiquus*. This is considered strong evidence that those who butchered the *Paleoloxidon antiquus* did not comprehend Acheulian flaking technology (see Wenban-Smith 2013).

However, in another environment this conclusion appears contested (Ashton et alii 1994). At East Farm, Barnham, Suffolk the Clactonian and Acheulian industries may be culturally distinct but not technologically distinct. That is, *Homo erectus* may have been working flint at the same time horizon (ca 400,000 BP) as *Homo neanderthalensis* (Oxygen Isotope Stage 11, Bowen 1989; Ashton et alii 1994), which suggests a complex hominin dynamic that influenced the type of flint industry type chosen. Similarly, the raw material component appears to have been chosen on the basis of the end use, which affected the selection of the quality and quantity of flint available. This suggests that hominin behavior is not as constrained by a biologically-driven cultural framework as it is by a technological one.

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