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Between the northern and southern regions of Western Europe: The Acheulean site of La Grande Vallée (Colombiers, Vienne, France)

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ABSTRACT

Poitou is located between the Paris and Aquitaine Basins, flanked by the extensions of the Massif Central and the Armorican Massif. Many sites attributed to what in Western Europe has been termed "the Acheulean" are preserved within this region, though research has largely been limited to surface collection of material from fields and open sand quarries situated on alluvial terraces. The discovery of the site of La Grande Vallée in 1995, within the district of Colombiers in Vienne therefore provided the first opportunity to conduct a rigorous scientific examination of a stratified Pleistocene archaeological deposit. The sedimentary sequence preserved at La Grande Vallée itself (U5) has produced five archaeological layers attributable to the Acheulean. The archaeological layers contained abundant lithic remains, reflecting the in situ production of many tools, including the key tool, the biface. The large slabs of flint used gave rise to specific working methods, indicating adaptation to the raw material. Micro-wear studies have revealed that butchery activities, including slicing and chopping of meat and bone, were also carried out in situ. These observations, along with the presence of many burnt flints, suggest that this locale acted as a mixture of habitation site/workshop. Currently, thermoluminescence dates on heated flint support the geomorphological study: unit U5 appears to have been deposited between 500 ka and 400 ka. The site of La Grande Vallée is a key sequence for understanding the Acheulean of the region. The geographical position of the site at the Seuil du Poitou, between the northern and southern regions of Western Europe, makes it a reliable and insightful observation point into Middle Pleistocene settlement in Western Europe.

1. Introduction

Poitou is located between the Paris and Aquitaine Basins, flanked by the extensions of the Massif Central and the Armorican Massif (Fig. 1). Many sites attributed to what in Western Europe has been termed "the Acheulean" are preserved within this region, though research has largely been limited to surface collection of material from fields and open sand quarries situated on alluvial terraces. This is true for the entire Poitou-Charente region: the valley of the Charente (Saint-Amand-de-Graves region, from Saint-Même-les-Carrières to Jarnac [Guillien, 1941; Patte, 1956, 1972; Airvaux, 1983]), the Deux-Sèvres (terraces of the Dive and Thouet [Germond, 1982]), the Vienne (north of Châtellerault [Patte, 1941]), and further north, bordering central France, on terraces of the Creuse (La Revaudière [Fritsch, 1972; Gratier and Macaire, 1981]). Although these sites were discovered from the earliest years of the discipline, from the 19th century onwards, no excavations have ever been conducted at any of these sites: the lithic and faunal assemblages thus lack any stratigraphic context or chronological control.

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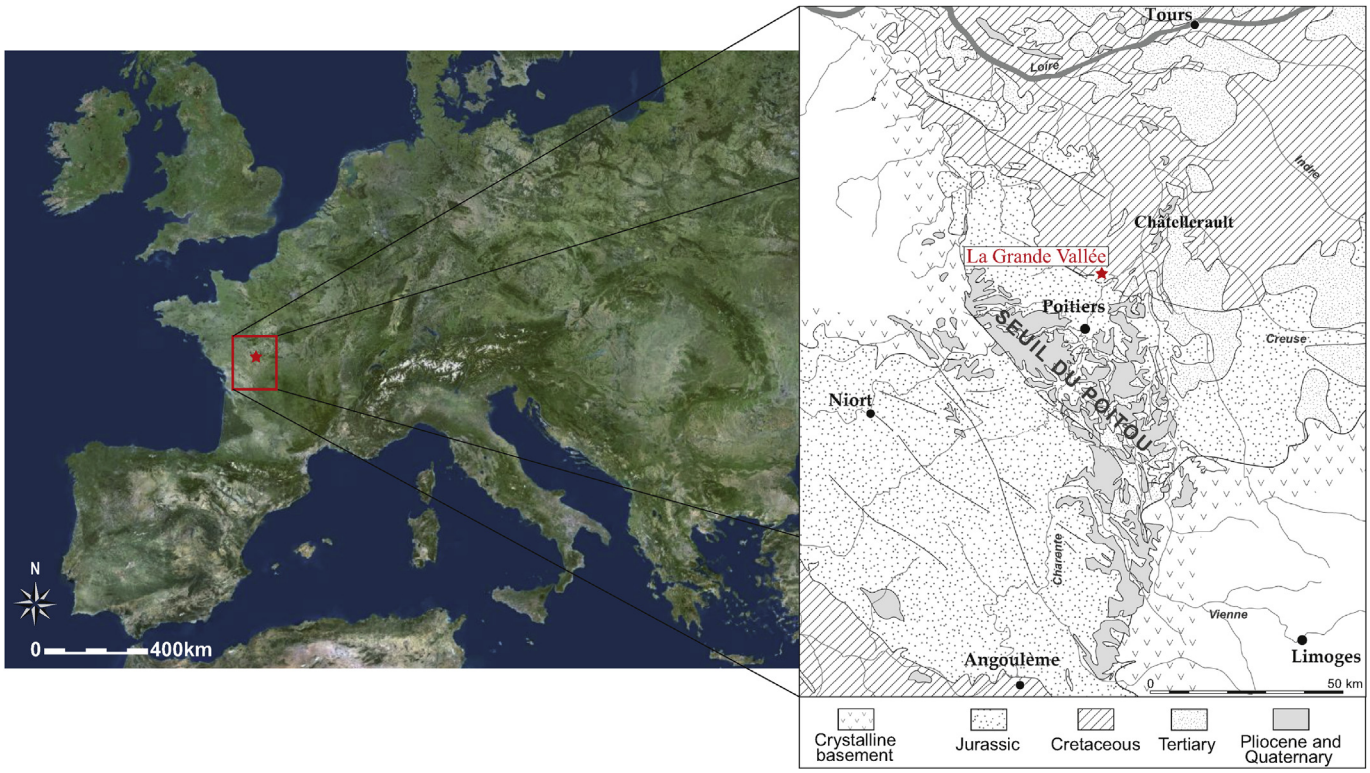

Fig. 1. Location of La Grande Vallée in Europe and in its regional geological context.

The discovery of the site of La Grande Vallée in 1995, within the district of Colombiers in Vienne, thus provided the first opportunity to conduct rigorous scientific exploration of well-preserved Pleistocene archaeological layers. After an initial test pit in 2005, a three-year excavation program between 2006 and 2008, and a last test pit in 2012, the site is now well documented. La Grande Vallée is now regionally important for understanding the Lower Palaeolithic, being the first site in Poitou to be excavated and well-dated: it is also, therefore, the key reference site for west central France. Beyond this regional context, however, its geographical position at Seuil du Poitou between the northern and southern regions (Fig. 1), as well as its early date make it a key reference site for understanding the Middle Pleistocene settlement of Western Europe. The aim of this paper is to deliver an overview of the recent discovery of primary context archaeological layers at the site. The geological, stratigraphic and chronological context of the site has previously been presented (Hérisson et al., 2012), and thus are summarised only briefly here. In this article, we focus instead upon the nature and the characteristics of the lithic assemblages.

2. La Grande Vallée: geographical and geological context

The Poitou region in West Central France, is a region of horsts and grabens (Le seuil du Poitou), bounded by the central and Armorican Massifs extension, and separating the Parisian Basin, northward, from the Aquitaine Basin, southward (Fig. 1). The underlying Jurassic deposits outcrop at the edge of the primary massifs, surrounding the Cretaceous landscapes that characterise these two large sedimentary basins. The Upper Turonian stage has been heavily altered right up to south Touraine. The clayey alterites resulting from this transformation contain an impressive quantity of tabular flint. The site of La Grande Vallée is located on the edge of these Upper Turonian alterites, in Colombiers, near Châtellerault in Poitou, at an elevation of 125 m NGF (Fig. 1). The archaeological site is situated on a bench near the plateau summit, today located some 90 m above wide floodplain of the Envigne river (more than 6 km across). It lies immediately below Upper Turonian weathered rock containing large slabs of flint. This represents the southernmost extension of the siliceous Turonian formations exploited throughout prehistory, from the Lower Palaeolithic until the Neolithic, as shown by the considerable quantities of lithic material collected from fields in the modern valley bottom.

La Grande Vallée was discovered in 1995 by one of us (J. Airvaux), during maintenance work on a road embankment. A small road linking Beaumont and Colombiers curves around the western side of the valley edge (Fig. 2). A drainage ditch revealed the presence of Pleistocene deposits with abundant artefacts (including handaxes) at the bottom. This discovery allowed a multidisciplinary research program investigating the archaeological site of La Grande Vallée to be launched in 2005 (Fig. 3).

3. Stratigraphy, geomorphology and dating

3.1. Stratigraphy and lithostratigraphic units

Exceptional geomorphological conditions at La Grande Vallée have acted to preserve the archaeological layers with unit U5. A structural bedrock bench acted as a sediment trap, within which the traces of human occupation were also preserved. This complex was subsequently sealed by a series of slope deposits, resulting from solifluction and debris flows.

The excavated sequence comprises 3 m of deposits (Fig. 4). The lowermost sediments consist of 1.4 m of massive clays, interspersed with sandy lenses upslope, and lenses of pebbles ands cobbles downslope (unit U5). This unit is overlain by a thick sheet of 0.6 m

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