Watching the river flow: a small-scale survey of the floodplain deposits in the Vezere Valley


Valley known as La Voie Royale de la Préhistoire check original source and use in arguments about how prehistory has overshadowed the historical record

Find Bourguignon et al. 2004 source

Vezère valley significantly narrower than many of the northern river valleys potentially negative consequences on floodplain preservation of human activity

"surface deposits...underlain by Upper Cretaceous (Coniacian) limestone...On the plateaus these limestones underlie Tertiary weathering products rich in flints...while in the valley bottoms the limestones are covered by gravel, sands and silts deposited by the Vezère and its tributaries. Travertine deposits formed where the Beune joins the Vezère" p.2

River has broad meandering loops; slope of ~47 cm/k between Le Moustier and Les Eyzies

has produced several large floods; difference of about 6.5 m

Incising of river into cliffs created five different terraces+fill deposits

Overbank deposits = metres of loam and loamy sand

Looking at the floodplain image on p.3 suggests it might be useful to calculate the proximity of sites to large floodplain areas

Tributaries largely infilled, and are green, humid sometimes swampy areas

Several side valleys show evidence of deep Holocene deposits

"Some archaeological sites that nowadays are more or less at the level of the river valley...were several metres above the valley bottom during the (Late) Weichselian" p.4 doesn't affect Medieval deposits but important to remember

High limestone cliffs (falaises) border river

Two fault lines: 1. La Cassagne; 2. Saint Cyprien (SE-NW)

2 synclines: 1. Sarlat; 2. Montignac

Number of fords influenced Paleolithic locations...how about medieval/Roman?

Semi-continuous rock shelter horizon between Middle and Upper Coniacian

Vezère erodes ancient valley fill

"Present river course appears to be dominated by courser overbank deposits and to have incised in older overbank loams" at Tursac p.8

Despite narrower valley constrained by towering cliff faces some evidence of river meandering within these geologic confines

Paleochannel uncovered at Lespinasse

OSL samples from channel base give younger than Iron Age, while C14 suggest Iron Age for sedimentation of channel

Late Glacial and Early Holocene Age for sediments on terrace at Lespinasse

Evidence of "incision and a change to a more energetic system, dated roughly to the Iron Age" corroborated by transects at Bout-du-Monde, Lespinasse, and Tursac p.10

Smaller tributaries less sensitive to climate or hinterland change this might make them attractive in times of climate change?

Much younger age for incision in Tayac transect but still provides overall late date for final incision of river

Pleistocene—formation of terraces

Final phase Late Pleistocene—erosive;
Holocene–depositional; several meters of overbank loam deposited on Pleistocene terraces
final incision phase around Iron Age or later; since then energetic deposits with sand and levees

"The finds from this fluvial matrix were probably "displaced" from the abri deposits by the (Holocene) activities of the Vézère" p. 15-16
evidence of iron ore processing in sediments near Laugerie-Haute Est

Holocene erosional activities, probably from high river levels, deposited rock shelters debris within fluvial deposits at base

Paleolithic tributaries were much deeper and some may have been canyons
majority of current floodplain deposits mostly Holocene

large parts of Pleistocene deposits destroyed by erosion but some maybe be in place