



Mills and the Geoarchaeology of Alluviation with Special Reference to the British Isles

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Mills, weirs and related structures on floodplains both influence the dynamics of the fluvial system and are part of the geoarchaeology of river valleys. The degree to which they effect discharge and sedimentation depends upon their design which varies with local economic, social and even legal history. In the British Isles water-mill dams rarely, if ever, spanned the entire floodplain and appear to have been developed from naturally anastomosing reaches and tributary confluences. The high frequency of mills on low and middle order streams is a function of the use of lateral rather than longitudinal valley gradients. Rare examples of floodplain spanning weirs are associated with metal mining rather than milling. This paper examines the history of water-mills and their associated dams and leats in the British Isles and their effects on floodplain sedimentation and channel history.