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Climate and humans in soil genesis since the late Pleistocene. Micromorphological aspects of the Haplic Luvisols, Sols Lessivées a Pseudogley, Aqualfs, in the Ghiardo area (Northern Italy).

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In Ghiardo area (Reggio Emilia, Northern Italy), luvisols on top of middle Pleistocene terraces developed on Upper Pleistocene loess; their profile characteristics (argillic horizons, Fe Mn concretions, mukkara type microrelief) were acquired through processes determined by the rise in precipitation and local water-lodging acting in the area since early Holocene. However, degradational processes as ferrolysis affected the upper part of the soil, leading to the formation of bleached E horizons and, in most cases, planosolisation features. These features may have had and anthropogenic origin and may be due to wood clearance and cultivation in the Neolithic/Calcolithic periods. This interpretation is discussed on the base of field characteristics, micromorphology, TL dating and archaeological evidence.