



Perception and research of soil erosion by water until the mid-20th century – examples from central Europe and south-eastern USA

M. Dotterweich

University of Mainz, Institute of Geography, Germany (mail@markus-dotterweich.de)

Since the beginning of agriculture during the Neolithic Revolution, many phases of agricultural expansion and regression occurred with associated land clearance and reforestation. As a result, soil has been washed downslope by soil erosion and gullies have incised, leading to the development of colluvial and alluvial deposits in many areas worldwide. While an increasing number of studies on past soil erosion shows significant loss of soil as an effect of human activity and extreme rainfall events, only little is known about the knock-on effects on soil fertility, possibly triggering crop failures and land abandonment until the beginning of the coordinated research programmes on soil conservation. Based on historical documents and literature reviews this paper gives examples on how soil erosion had been perceived previously by farmers, land owners, researchers, and policy makers in central Europe and south-eastern USA. It presents different types of problem solving strategies and their long term efficiency – a helpful tool to evaluate the long term effects of current soil conservation practices under changing climatic conditions and increasing land use pressure.