



human development in landscapes
GRADUATE SCHOOL AT THE UNIVERSITY OF KIEL

BIWEEKLY COLLOQUIUM
Monday, 12th of December 17.00

HISTORICAL SOIL EROSION IN TWO REGIONS OF THE UNITED STATES
Prof. Stanley W. Trimble, UCLA

Two regions of the US which have suffered severe soil erosion since European settlement are the Southern Piedmont in the Southeast and the upper Mississippi River valley hill country in the Midwest. Erosion in both regions was especially severe with hillsides often being stripped of soil and with frequent gullies. Floods became more frequent and sediment filled stream valleys to depths of more than five meters, burying roads, bridges, dams, houses and even villages. Several factors explain the erosion but a major factor was that rainstorms in the US were much greater and more intense than the traditional Western Europeans farming methods could control. New methods such as contour strips and better crop rotations were developed in the early 20th century and were placed into use starting in the 1930s. Additionally, rapidly increasing agricultural productivity in the US meant that marginal land could be taken out of production and this was important in the Piedmont, allowing marginal land to revert to forest. The results of soil conservation have been almost miraculous. Gullies have mostly healed and erosion has been reduced to a small fraction of that existing in the early 20th century. Tributary streams are now mostly now and native fish populations have returned to many streams. However, the thick deposits of historical sediment are still subject to remobilization by streams with further deposition downstream, a serious legacy of this environmental history.

Venue: Leibnizstraße 1, Seminar Room 204