



Selected Aspects of Soil Science History in the USA – Prehistory to the 1970s

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Interest in understanding America's soils originated in prehistory with Native Americans. Following European settlement, notable individuals such as Thomas Jefferson and Lewis and Clark made observations of soil resources. Moving into the 1800s, state geological surveys became involved in soil work and E.W. Hilgard started to formulate ideas similar to those that would eventually lead to V.V. Dokuchaev being recognized as the father of modern soil science. However, Hilgard's advanced ideas on soil genesis were not accepted by the wider American soil science community at the time. Moving into the 1900s, the National Cooperative Soil Survey, the first nationally organized detailed soil survey in the world, was founded under the direction of M. Whitney. Initial soil classification ideas were heavily based in geology, but over time Russian ideas of soil genesis and classification moved into the American soil science community, mainly due to the influence of C.F. Marbut. Early American efforts in scientific study of soil erosion and soil fertility were also initiated in the 1910s and university programs to educate soil scientists started. Soil erosion studies took on high priority in the 1930s as the USA was impacted by the Dust Bowl. Soil Taxonomy, one of the most widely utilized soil classification systems in the world, was developed from the 1950s through the 1970s under the guidance of G.D. Smith and with administrative support from C.E. Kellogg. American soil scientists, such as H. Jenny, R.W. Simonson, D.L. Johnson, and D. Watson-Stegner, developed influential models of soil genesis during the 20th Century, and the use of soil information expanded beyond agriculture to include issues such as land-use planning, soil geomorphology, and interactions between soils and human health.