



An innovative soil scientist adapted the bicycle to the railroad tracks and used it for soil survey transportation in 1913.



Bull probes or push probes are common features on vehicles used today.



**Celebrating 100 Years
of the
National Cooperative
Soil Survey
1899-1999
Photos from the Past**

**This year marks the
centennial of the soil
survey in the United States
— perhaps the largest and
most valuable natural
resource database in the
world.**



Some soil scientists used this rig in 1927 to save the backbreaking work of an auger.

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Early tools of the trade included the auger for excavation.



In the early days, it was not uncommon for the soil scientist to push the limits of their transportation buggy to find that typical landform and describe that typical soil profile.



Two soil scientists are gathering soil samples in 1914. The canvas cloth on the ground contains color vials. These vials were tested as a mechanism to standardize colors.



Distances are very important. An odometer was mounted on some horsedrawn buggies to automate the measuring.



The early soil scientist used a plane table and sighted through an alidade to plot soil lines on the base map.



The agriculture experiment stations were active partners in producing soil surveys from the very beginning. The sign on the car says, "Texas Agricultural Experiment Station Soil Survey."