Data Collection

Interrill plots received rain until runoff began. After runoff was initiated, two different samples were taken at set time intervals, a composite sample to measure water quality and an erosion sample to measure the amount of compost or soil leaving the plot. Recall that interrill erosion measures the sheeting action of material off of the plot during a rainfall event.

Data Collection on Rill Plots

Rain was applied to the rill plots until runoff was observed. After runoff began on the rill plots, a hose was placed at the top of the plot and a measured flow of water was added to the plot. The data collection procedure for these plots was to take an erosion sample and a flow rate sample at set time intervals. The photo below represents two rill plots after a sampling event.

Note the formation of the small channels ("rills") down the length of the plot.

Data Collection from Grasseed Plots

Types of Field Data Collected

Samples of soil, compost, and storm runoff were collected in the field during two summers of testing to determine the following:

- Nutrients & metals originally present in soils and compost
- Interrill runoff rates
- Interrill erosion rates
- Nutrients & metals in Interrill runoff
- Rill erosion rates
- Growth of planted erosion control vegetation
- Weed growth
Once the grass had been analyzed, the project team collected erosion and water quality data similar to the bare plots. Sample collection from a grassed interrill plot is displayed below.

Notice the careful construction of the plots to minimize disturbance of the grass canopy and density in the sampling area. The streaking down the side of the metal collection tray is an example of interrill erosion. Recall that interrill erosion is caused by the impact of rain on the soil surface and the sheeting action across that soil surface.