

MONITORING PRECIPITATION CHEMISTRY ON
THE MONONGAHELA NATIONAL FOREST

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ABSTRACT

Personnel from the Monongahela National Forest and the Northeastern Forest Experiment Station are collaborating in forest-wide monitoring of precipitation chemistry. Present monitoring facilities consist of one continuous precipitation collector/pH recorder and 12 precipitation collectors. Samples collected in these facilities are picked up and analyzed bi-weekly for specific conductance, pH, acidity, alkalinity, calcium, magnesium, sodium, potassium, nitrate-nitrogen, sulfate, and iron. Precipitation monitored at six (6) ranger districts is analyzed for pH and specific conductivity only. Results to date indicate substantial spatial and temporal variation, among as well as within storms. Precipitation throughout the Forest is decidedly acid; its chemical composition depends largely on the relative location of industrial centers. Our paper will describe the monitoring network and methods used, the automatic collector/pH recorder, the need and usefulness of the data, the data collected to date, and plans to expand the monitoring program.