



## **USDA-CSREES 2007 National Water Quality Conference**

### [Filter strip attenuation of feedlot runoff contaminants](#)

Feedlots are a common component of Midwestern animal agriculture, providing an economical option for the feeding and raising of livestock. However, feedlot runoff, if not properly treated, can contribute to environmental pollution. Filter strips are designed to treat runoff by reducing concentrations of nutrients and sediment, mitigating potential environmental impacts. The goal of this study is to determine the ability of a filterstrip to attenuate pollutants. Research was conducted in southwest Wisconsin at the University of Wisconsin-Platteville's Pioneer Farm. The filter strip was constructed in the 1970's according to Natural Resource Conservation standards and treats effluent from a feedlot containing dairy young stock. Filter strip treatment performance was determined by comparing water samples entering and exiting the filter strip. Water samples were collected and water volume determined using United States Geological Survey gauging stations. Samples were analyzed for the following: total solids, suspended solids, nitrate-N, ammonium-N, total-N, organic-N, dissolved reactive phosphorus, and total phosphorus. Treatment performance was based on percent removal for each of the above constituents.

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