

Rebecca Hobbs

Department of Soil & Crop Sciences

Nature of the Problem

Two years ago Rebecca Hobbs did an internship at Texas A&M University working with Dr. Richard Weaver on constructed wetlands and on-site wastewater treatment. This interested her greatly so she desired to return and accomplish a Master of Science degree on this subject. Her research will be on developing a design model describing the performance of constructed wetlands. Some models exist but they have not been compared against data from constructed wetlands. The present models do not fit the data well. Miss Hobbs will be able to utilize data collected over several years in Texas demonstrating the effectiveness of wetlands for wastewater treatment under a range of conditions and circumstances. By using these data and accumulating additional data she will develop design parameters for making wetlands more predictable in treatment. It is becoming more competitive to obtain water resources in Texas. Treatment of wastewaters to secondary effluent quality is important for reuse of these waters. Constructed wetlands are one way of obtaining high quality effluent. Rebecca will be working on a project funded by USEPA to demonstrate the effectiveness of wetlands in providing high quality effluent.

Water resources and water quality are important to both Biological & Agricultural Engineering and The Department of Soil and Crop Sciences. Active programs are underway in both departments evaluating water quality and how to reuse water from various sources. Miss Hobbs will be a good liaison between departments to help facilitate interdisciplinary research. The area of wastewater treatment and reuse is important to both departments and related activities have been underway for several years.