The role of free-ranging wildlife in the deposition of Escherichia coli into Texas floodplains

The purpose of our research is to determine the role of free-ranging meso and large mammals in the deposition of Escherichia coli into Texas floodplains. Our ultimate goal is to determine the impact of these mammals on water quality. Our research is ongoing with no results to report. We have 1 more season of data collection followed by 3-6 months of data analysis. Initial research has demonstrated that our methodology leads to adequate data collection and quality.

As of September 2009 we conducted extensive data collection on 2 properties in Central Texas. These 2 properties are bisected by Cedar Creek, the experimental water body. We began preliminary data collection in March 2008. Main study data collection commenced in June of 2008. We have conducted meso-mammal trapping (>4000 trap nights), camera trapping (approx. 1500 trap nights), deer trapping (approx. 50 trap nights), hog trapping (approx. 120 trap nights), fecal transects (approx. 500), and cattle sampling (approx. 60 individuals). We have collected hundreds of fecal samples from a variety of species. Our final field season will end January 2010. We will conduct meso-mammal trapping, camera trapping, deer trapping, cattle sampling, and fecal transects.

We used the monies provided by TWRI/USGS to hire assistants for summer 2009 and autumn 2009 data collection.