AgriLIFE EXTENSION
Texas A&M System

SP-422
7/11

Feral Hogs and Water Quality in Plum Creek

Jared Timmons, James C. Cathey, Nikki Dictson, and Mark McFarland*
Texas AgriLife Extension Service
The Texas A&M University System

Feral hogs are a major problem in Texas with an estimated population between 1.9 and 3.4 million causing more than $52 million in losses to agriculture annually. Along with crop damage, feral hogs are suspected of predation of wildlife and livestock, disease transmission, and reducing water quality.

Feral hogs impact water quality largely due to behavior related to their physiology. Because feral hogs do not have sweat glands, they commonly wallow in and near water sources to keep cool (Figure 1). This process covers their skin with mud that they rub off on trees and utility poles to remove external parasites.

Figure 1. Feral hog wallowing along a water source.

However, wallowing damages riparian areas and increases sedimentation. At the same time, hogs defecate in and around the water source increasing levels of bacteria and nutrients. In some areas, hogs are contributing to water quality degradation so severe that the waterbody cannot support contact recreation (swimming, wading, etc.) or aquatic life. One example is Plum Creek.

Plum Creek Watershed

Plum Creek is a 52-mile long stream that begins in Hays County north of Kyle and flows southeast through Caldwell County, passing Lockhart and Luling before meeting the San Marcos River near the Caldwell-Gonzales County line (Figure 2). Beginning in 2002, portions of Plum Creek were listed by the Texas Commission on Environmental Quality as not meeting water quality standards for contact recreation because of high levels of bacteria. As of 2010, the entire plum creek watershed was listed for bacteria and also had concerns for nutrients including nitrates and phosphorus which negatively impact aquatic life.

*Authors are Extension Assistant; Associate Professor and Extension Wildlife Specialist; Extension Program Specialist; Professor and Extension Soil Fertility Specialist, respectively.

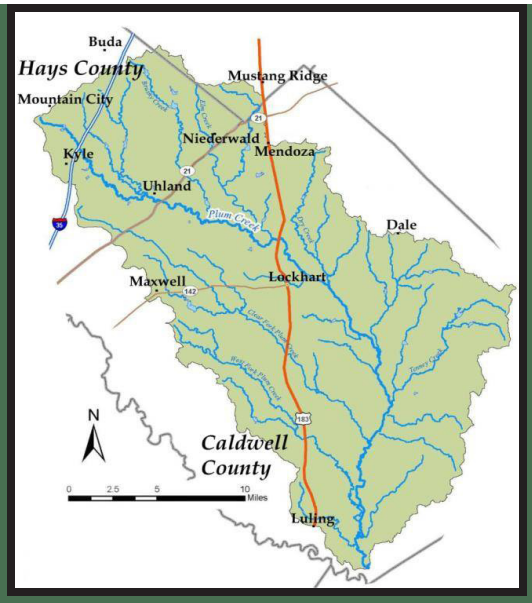

Figure 2. Plum Creek watershed in Hays, Caldwell, and Travis counties.

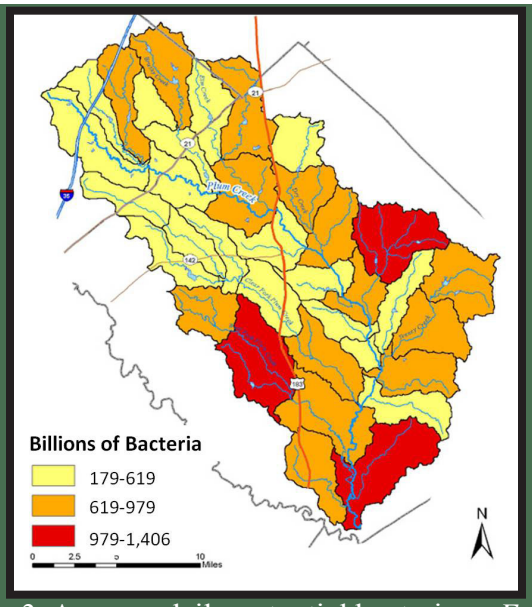

Figure 3. Average daily potential bacteria or *E.coli* load from feral hogs.

The Plum Creek Watershed Partnership is a collaborative effort between the citizens living in the watershed and state, federal, and regional agencies. During development of the Plum Creek Watershed Protection Plan, analysis of potential sources of pollution identified feral hogs as a significant contributor (Figure 3).

An Extension Assistant with the Texas AgriLife Extension's Department of Wildlife and Fisheries has been placed in the watershed to provide information and technical assistance to landowners concerning feral hogs. This individual works directly with landowners to assist them in determining the best methods for feral hog control on their property. In addition, the position develops educational resources and delivers training programs for citizens in the watershed.

Additional Information

To hone your knowledge of feral hogs and methods for their control, several publications were developed by the Texas AgriLife Extension Service and can be downloaded at no charge by going to the Plum Creek Watershed Partnership website at http://plumcreek.tamu.edu/feralhogs.

This website also has an on-line tool which allows landowners and the general public to report feral hog sightings and control measures.

Contact Information

For more information contact:
Jared Timmons at 979-845-7471 or
jbtimmons@ag.tamu.edu.

Acknowledgement and disclaimer
Publication date: June 2011. This publication was developed with funding support from the U.S. Environmental Protection Agency through a Clean Water Act §319(h) Nonpoint Source grant administered by the Texas State Soil and Water Conservation Board and from the National Institute of Food and Agriculture, U.S. Department of Agriculture, National Integrated Water Quality Program. The U.S. Department of Agriculture prohibits discrimination in all their programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.