

## FERAL HOGS: A TEXAS PERSPECTIVE

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**Abstract:** Feral hog (*Sus scrofa*) populations are a growing concern, and evidence of their presence has spread throughout the state. With the exception of a few areas in the northern panhandle and far western Texas, this invasive species successfully exists in almost every county; and evidence of their exponential population growth and the damage they cause is no longer confined to rural areas. Feral hogs affect farmers, livestock producers, private and public industry, and individuals living in suburban and urban areas. Wildlife, agriculture, property owners, animal and public health interests are all experiencing feral hog issues at different levels. Surveys indicate that the presence of feral hogs impact Texans in a variety of ways including: damage to croplands, predation of livestock, destruction of natural resources and urban landscaping and the threat of disease transmission to domestic livestock and people. The perspective most often heard in Texas is one of disdain for the feral hog. However, there are some that enjoy the sporting and economic opportunities that feral hogs provide. The consensus however is, that there is much to learn about this adaptable species. Continued research is needed to understand the biology and behavior of feral hogs to better manage this species and how their presence impacts all parties involved. The perspective of the feral hog in Texas is one of differing viewpoints and priorities. This paper will seek to explore some of the issues surrounding this invasive species.

**Key words:** feral hog, feral hogs diseases, invasive species, issues, perspectives, Texas

Proceedings of the 12th Wildlife Damage Management Conference (D.L. Nolte, W.M. Arjo, D.H. Stalman, Eds). 2007

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### Texas Wildlife Services, TWSP

Once hogs (*Sus scrofa*) were domesticated, they became an important part of early civilization around the world. Because of that, hogs were often carried along on expeditions by early explorers to the New World including Texas. Domestic hogs were first introduced into the state by Spanish explorers as early as the 1680s but it is doubtful that these animals established any wild populations. It was most likely stock brought by early settlers that is mainly responsible for the ancestry of feral hogs in Texas.

Significant numbers of domestic hogs did not appear in the Lone Star state until the early 1800s. Settlers and colonists brought hogs with them as hogs were an important part of their livelihood. During those early times, livestock were allowed to roam freely in the woods and fields and many animals escaped or ran off. From these domesticated roots, feral hogs got their start in the Texas landscape.

In more recent times, the feral hog population across the state of Texas has grown and continues to grow at an exceptional rate. Once seemingly confined

to the eastern and southern portions of the state, hogs now inhabit nearly every Texas county with the exception of a few counties in the northern panhandle and far western Texas. Reasons for this dramatic increase include but are not limited to high reproductive rate, adaptability of the species, hunter or landowner introductions of feral hogs, changing land management, improved livestock management, supplemental feeding of wildlife, animal disease eradication and water conservation.

Along with their geographic expansion has also come growing concern regarding the damage and disease issues represented by feral hog presence. Wildlife, agriculture, property owners, animal health and public health interests are all experiencing feral hog issues at different levels. Feral hogs affect farmers, ranchers, livestock producers, private and public industry and most recently individuals living in suburban and urban areas.

In addition to the variety of issues that feral hogs cause is the range of perspectives that these animals elicit from the public. The perspective most often heard from around the state is one of disdain for the feral hog. Others however, enjoy the sporting and economic opportunities that feral hogs provide. Perspectives are largely decided by whether or not feral hogs are causing economic damage or are providing economic benefit to an individual or entity.

To gain a better understanding of feral hog issues in Texas, a survey about regional perspectives on feral hogs was conducted by Dr. Clark E. Adams of Texas A&M University in 2003. The survey response area included 111 of Texas' 254 counties representing the South Texas, Edwards Plateau, Rolling Plains, Trans Pecos, Piney Woods, Blackland Prairie and Post Oak ecological regions of the state. Conclusions from this survey indicated that respondents viewed feral hogs more as a

“negative aspect of the landscape” rather than a positive (Adams et al. 2005).

Responses showed that 89% of the respondents considered feral hogs to be an agricultural pest, 34% a disease hazard, 45% an environmental liability and 50% an economic liability. Of these same respondents, 30% considered feral hogs to be a “recreational asset” for hunters (Adams et al. 2005).

Most state and federal animal health and public health interests view the feral hog as a liability due to the disease threat that these animals present. Officials have a concern for the spread of such endemic diseases as pseudorabies and swine brucellosis within the areas feral hogs inhabit and travel. There is also concern for the spread of foreign animal diseases such as classical swine fever and foot and mouth disease should they appear in this country. The gravest livestock disease concern surrounds the incidence of feral hogs near domestic swine rearing facilities.

Just such a concern prompted the Texas Animal Health Commission (TAHC) to establish movement restrictions on feral hogs in Texas during 1992 (TAHC 1992). TAHC is responsible for preventing, controlling and eradicating disease in livestock. With the TAHC restrictions, feral swine are required to test negative for brucellosis and pseudorabies before being moved and released at another site. Any feral swine kept for breeding or feeding purposes must be held in quarantine for at least 60 days from any infected or other free-roaming swine. All feral swine can be taken directly to slaughter or to market for sale to slaughter (TAHC 2006).

These restrictions are still in effect today. Since feral swine do not fall under the definitions of native wildlife or livestock, no state entity has regulatory jurisdiction over them. This unclear statutory authority inhibits the ability of

TAHC to actually regulate the *movement* of feral swine (TAHC 2006).

Public health may also be at risk due to feral hogs. Though reports of diseases transmitted from feral hogs to humans in the United States is not common, it can happen. Cysticercosis, trichinosis, toxoplasmosis, yersiniosis, salmonella, *E. coli* and leptospirosis are examples of just a few diseases that can be transmitted directly or indirectly by feral hogs to people if precautions are not taken. This is evidenced by the recent *E. coli* outbreak attributed to feral hogs in California.

Due to an estimated \$52 million worth of feral hog damage occurring in Texas each year to agriculture, the 79<sup>th</sup> State Legislature appropriated funding for the Texas Department of Agriculture (TDA) to implement a feral hog abatement program. TDA is currently funding a 2-year pilot project with the assistance of Texas A&M University /Texas Cooperative Extension (TCE) and USDA, APHIS, Wildlife Services (WS) to study the economic impacts of feral hog damage, damage control and feral hog abatement in Texas in 3 ecological regions: East Texas, Central Texas and the Coastal Bend region.

Included in this project is an educational outreach component for individuals located outside of the "cooperator zones" (Higginbotham 2006). Information that is gathered during this project will be used to determine baseline data for feral hog economics including cost/benefit ratios. This baseline data will then be used as a comparison for future surveys regarding economic impacts of feral hogs.

While feral hogs can cause severe economic damage throughout the state, or can serve as potential disease vectors for numerous diseases, they also serve as a source of revenue for many landowners. Landowners often derive income from

hunters and trappers that are willing to pay for feral hog hunting and/or trapping opportunities on the landowner's property. Income can be realized by the landowner or trapper through the sale of feral hogs that have been captured. Feral hogs that are caught can be sold to commercial meat markets who in turn offer feral hog meat for sale either nationally or abroad. According to one of the largest feral hog buyers in Texas, feral hogs can bring a price of 10 to 60 cents a pound live weight for hogs 80 pounds or larger plus an incentive of \$5.00 per animal.

Landowners with feral hogs are often overrun with requests from hunters and trappers wishing to assist them with feral hog control. This provides an additional economic incentive to landowners due to the hunter and trapper's willingness to pay for this recreation. As a side benefit, for those landowners who are suffering feral hog damage, or those who just do not want feral hogs on their property, this creates an opportunity for them to derive income while alleviating current losses and/or minimizing future damage.

The recreational aspect provided by having feral hogs on a property can not be overlooked. Hunting is a very popular and big business in Texas. With an estimated 1,039,709 hunting licenses sold in Texas during 2005, Texas ranks number one for hunting license sales nationally (National Shooting Sports Foundation 2007). Since feral hogs are considered exotics, they may be hunted year long with no bag limits placed on them. This year-round hunting opportunity provides an additional recreational aspect for hunters and trappers during times when no other game animals may be legally taken.

Feral hogs represent a dilemma for resource managers. The income potential provided by feral hogs to landowners often creates a difficult situation for many

resource managers. Due to the economic benefits derived from feral hogs, some landowners/resource owners and hunters/trappers want feral hogs conserved. Natural resource managers are concerned about the biological implications that feral hogs represent. Feral hogs compete with native wildlife species for food and other natural resources and may be actual predators of many wildlife species. Feral hogs also cause ecological damage due to their feeding, rooting and wallowing habits. As previously mentioned, feral hogs may also be vectors of many diseases. All of these factors are of concern to resource managers.

The earliest record of human/feral hog conflict reported to the Texas Wildlife Services Program (TWSP) dates back to the late 1970s. During 1980, the program began providing direct control assistance to individuals requesting help in managing feral hog damage. During that time, 5 target animals were removed in response to livestock predation losses. Since fiscal year 1982, the level of assistance provided to a variety of resource managers and landowners to alleviate human/feral hog conflicts has steadily increased. This increase in conflicts and the associated damage to rural, suburban and urban resources is directly related to the highly prolific nature of feral hogs as well as the natural and human-induced movement of this species across the state. With more and more Texas residents seeking relief from feral hog damage and/or their presence, the requests for assistance received by TWSP have greatly increased. In most areas of the state inhabited by feral hogs, TWSP employees now routinely incorporate feral hog damage management efforts into their daily activities. These activities may already include the protection of livestock, agricultural crops and property as well as the protection of human health and safety from

a diversity of wildlife species other than feral hogs. Consequently, the demands placed upon TWSP employees to respond to these additional requests, the level of effort needed to effectively manage feral hog damage and the monetary resources required to address these requests has risen over time.

With an estimated nearly 2 million feral hogs roaming Texas, these animals are going to continue to have a significant impact on the state's rural, suburban and urban resources. Due to the feral hog's innate reproductive capability, their adaptive behavior and survivability, as well as the recreational opportunities afforded to hunters and the income derived by landowners and trappers from feral hogs, the feral hog population will continue to grow. Existing feral hog control options and practices are not enough to manage this complex problem. Additional resources are needed and more control options made available to effectively manage feral hogs and their damage. Research is needed to learn more about the dynamics and economics of feral hogs and how to more effectively manage their damage and population. Without these tenets occurring, no complete or satisfactory solution to the myriad of issues surrounding this invasive species feral hogs will be achieved.

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