



ASSESSING FERAL HOG DAMAGE

in Terrebonne Parish
a five-year follow-up study

PROJECT STATUS

Project Year:	2017-2018
Status:	Complete
Category:	Invasive Species
Location:	Terrebonne Parish
Project Partners:	University of Louisiana at Monroe, U.S. Fish and Wildlife Service, Louisiana Department of Wildlife and Fisheries

BACKGROUND AND PROBLEM ADDRESSED

Feral hogs (*Sus scrofa*) are an invasive species descended from escaped domestic swine, introduced wild Eurasian boars, and hybrids of the two. They are invasive and causing great ecological harm to multiple habitat types in multiple states including Louisiana. With a statewide feral hog population approaching 700,000, it appears that all coastal parishes in the State of Louisiana are supporting expanding numbers. Most biologists agree that feral hogs pose a greater ecological threat than any other invasive vertebrate today.

The negative impact of feral hogs on habitats and wildlife is well documented. They compete with native wildlife species for food and space; they are significant predators of bird eggs and reptile eggs, newly hatched alligators, turtles, and ground nesting birds; and they destroy wildlife habitat and native plant communities with their rooting and wallowing behaviors. Their effects on aquatic ecosystems include damage to water quality by increasing turbidity and fecal coliform concentrations. Also, by destroying marsh vegetation they affect the water filtration and flood control services provided by a healthy marsh ecosystem. They can turn a swath of healthy marsh into a muddy pond in very short order.



Feral hogs are present in the coastal marshes of Terrebonne Parish. Five years ago, a BTNEP-funded study with the University of Louisiana at Monroe (ULM) established helicopter overflights along transects through Terrebonne marshes as a proof-of-concept for documenting and measuring hog damage. Since then, there have been efforts to control feral hogs in the area. Now with funding assistance from the U.S. Fish and Wildlife Service, BTNEP is working once more with ULM to fly these transects again in a five-year follow-up study to determine the current extent of hog damage, compare it to the previous survey, and see if the control efforts have had an effect.



ASSESSING FERAL HOG DAMAGE

in Terrebonne Parish

PROJECT DESCRIPTION

The purpose of this project was to assess the extent of feral hog damage to wetland habitats in Terrebonne Parish that had occurred since aerial surveys were flown in 2013. A total of 17 transects through fresh, intermediate, brackish, and salt marshes were flown by helicopter in early spring of 2018. These were the same transects flown by researchers in 2013. Data was collected by three individuals in the helicopter: two Louisiana Department of Wildlife and Fisheries biologists and a biology graduate assistant from ULM. If the marsh substrate did not allow for safe helicopter touchdown to conduct ground truthing, the sites were subsequently visited by airboat to confirm and photograph the damage, as well as document plant species impacted and determine the quality of feral hog damage. Based on the study area covered, these data were extrapolated to estimate acreage of feral hog damage within the entire 498,000 acre study area.

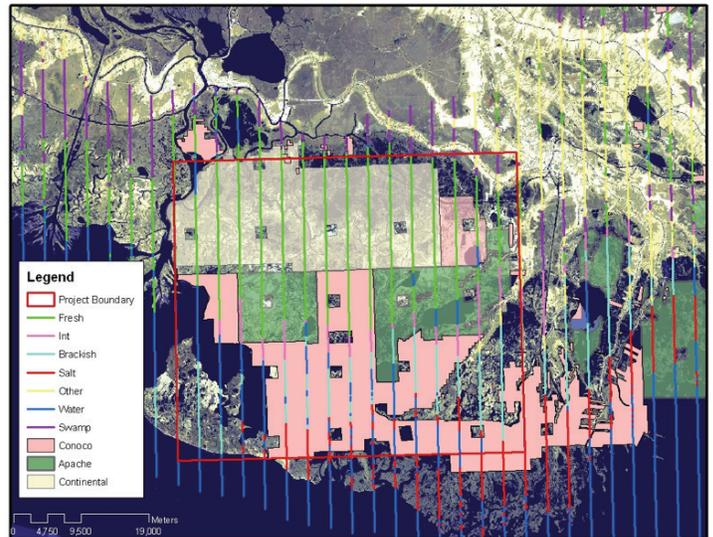
The distribution and arrangement of damage sites within the study area followed a distinct pattern – researchers observed that all damage sites were found within 250 yards of a bayou or manmade canal. Some of the more commonly encountered plants on damage sites were cattails, irises, pennywort, bulltongue, and cordgrass. Willow trees were recorded in close proximity to ten of the 13 damage sites. During the March 2018 helicopter flight, researchers observed a total of 31 feral hogs present on seven of the damage sites; 21 adults and 10 juveniles.

When comparing the data that was collected in 2013 to the data that was collected in the current survey, researchers found a decrease in all variables measured: number of damage sites, observed acres damaged, extrapolated acres of estimated damage, and number of hogs encountered.

So where did the hogs go? Control efforts over the five years most likely had an effect, but an absence of hogs on the study site could be attributed to more than removal by trapping or shooting. Hogs may leave an area for multiple reasons. Increased human activity, availability of food resources and altered environmental conditions are a few of the options being considered.

	SPRING 2013	SPRING 2018
DAMAGE LOCATION	NW Quadrant	NW Quadrant
NO. DAMAGE SITES	17	13
OBSERVED ACRES DAMAGED	227.5	88
EXTRAPOLATED DAMAGE ESTIMATE (Acres)	853	330
HABITAT	Fresh	Fresh & Intermediate
NO. HOGS ENCOUNTERED	83	31

Feral hog damage documented in the years 2013 and 2018.



ABOVE:
Project boundary in Terrebonne Parish showing transect lines, land ownership and marsh types.

LEFT:
Damage sites detected in March 2018.

CCMP ACTION ITEMS ADDRESSED

EM = Ecological Management

EM-16: Reduction of Impacts from Invasive Species