



United States Department of Agriculture

Feral Swine at our Northern Border

Feral Swine Management Plan



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National Feral Swine Program

- USDA APHIS serves as the lead federal agency in a cooperative effort with other federal, state, tribal, and local entities that share a common interest in reducing or eliminating problems caused by feral swine.
- Since environmental conditions and laws governing feral swine vary considerably among states, APHIS' strategy is to provide resources and expertise at a national level, while allowing flexibility to manage operational activities from a local or state perspective. In Montana, the Department of Livestock is the lead state agency concerning feral swine.



National Feral Swine Program

- Overall objective of the program is to minimize damage inflicted by feral swine
 - ✓ USDA APHIS Wildlife Services implements activities to reduce problems associated with feral swine in most states where they are present
 - ✓ In states where feral swine are emerging or populations are low, USDA APHIS Wildlife Services cooperates with local and state agencies to implement strategies to eliminate them
 - ✓ In states where feral swine populations are high, the focus is to reduce damages inflicted by feral swine



NFSP – Field Operations

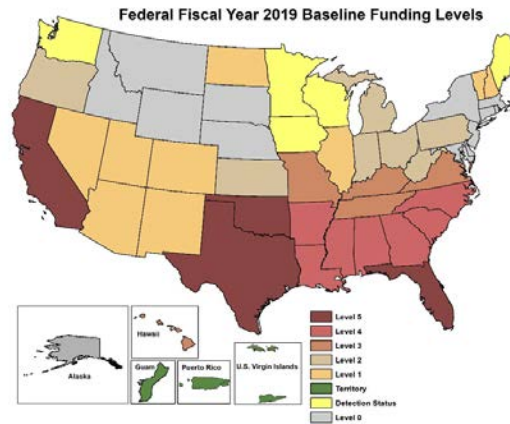
Removing Feral Swine at State Level: FY20 – Status

➤ Eliminated

- ✓ Idaho
- ✓ New York
- ✓ Maryland
- ✓ New Jersey

➤ Detection

- ✓ Colorado
- ✓ Iowa
- ✓ Maine
- ✓ Minnesota
- ✓ Washington
- ✓ Wisconsin



Feral Swine - Background

The term “feral swine/wild pig/feral hog/wild boar” describes all varieties of domestic hogs which have escaped into the wild or have been released, whether purposefully or not, along with all Eurasian wild hog, “Russian boar” x feral hog hybrid crosses.



Feral Swine - Background

Swine first brought over from Spain in the 1500's (Hernando Desoto) and multiple introductions have occurred since.

Not native and a highly effective invasive species

Habitat Generalists

Omnivores

Opportunists

Intelligent

High Fecundity

Adaptable



Feral Swine - Background

How fast are they spreading?

Probably, about 60 to 80 mph!



**Pigs can't fly...
but they can ride!**



Biology of feral swine

- Annual adult survival rate 80%
- Females capable of breeding at 6-7 months of age
- Average litter size 6
- Litter size varies with conditions up to 20%
- Population growth driven primarily by juvenile survival



Indicators

- Rooting
- Rubbing
- Wallows
- Tracks
- Droppings



Feral Swine - Sign

Rooting



Feral Swine - Sign

Rubbing



Feral Swine - Sign

Wallows



Feral Swine - Sign

Tracks



Mississippi State University Extension Service, Bill Hamrick

Wild pig track



Mississippi State University Extension Service, Bill Hamrick

Deer track

Feral Swine - Sign

Droppings



Feral Swine – Damage/Threats

Damage to Natural Resources



The World Conservation Union, Invasive Species Specialist Group has labeled feral swine as “One of the World’s Worst Invasive Alien Species.”



Feral swine consume large quantities of herbaceous vegetation (3-5% of their body weight daily) and have been linked to 95% declines of understory vegetation in some eco-systems.

Understory species (from arthropods to mammals) decline with the absence of the vegetation.

Feral Swine – Damage/Threats

Damage to Crops



Currently, the total aggregate cost of damage caused by feral swine in the U.S. is estimated to be \$1.5 billion annually, with at least \$800 million of this estimate related to direct costs to agriculture.

Field crops commonly reported as damaged by feral swine include corn, grain sorghum, wheat, oats, peanuts, barley, and rice, among others. High value vegetable crops, such as lettuce, spinach, melons, and pumpkins are favorite foods.

Feral Swine – Damage/Threats

Damage to Pasture/Rangelands



In Texas, 72% of county extension agents report damage to ranch facilities, such as fences, water supplies, irrigation ditches and guzzlers.

They consume, contaminate, and destroy supplemental feed and mineral sources targeted for livestock.

Wallowing and rooting leads to soil erosion, weakens levees and earthen dams, and increases siltation of ponds and other water sources.

Feral Swine – Damage/Threats

Predation on Livestock



Feral swine are documented predators of livestock, primarily calves and lambs, but they occasionally kill adult animals that are vulnerable while giving birth.

In Texas, 33% of county extension agents report livestock predation by feral swine as a significant problem.

Feral Swine – Damage/Threats

Disease Transmission to Livestock



Feral Swine – Damage/Threats

Damage to Urban Property



Feral swine in cities, towns, and suburbs often tear up lawns and destroy gardens.

Urban parks and golf courses often receive the brunt of feral swine damage.

Destroyed vegetation and wallows reduces aesthetic value of recreational areas.



Feral Swine – Damage/Threats

Damage to Vehicles

The annual cost of property damage and personal injury associated with feral hog-vehicle collisions in the United States is estimated to be \$36 million.

A number of human fatalities from collisions with feral hogs have been reported in the United States during the past few years.



Feral Swine – Damage/Threats

Direct Threat to Humans?



Feral Swine – Damage/Threats


Disease Transmission to Humans

Disease	Results
Brucellosis	9.8% (13% Culture)
Leptospirosis	48.9%
Toxoplasmosis	9%
Trichinellosis	3.5%
Influenza A	14.1%
Hepatitis	15.7%
M. bovis	Results pending

E. coli outbreaks have been linked to feral swine environmental contamination.



Montana Feral Swine Management Plan

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- 1. Never let feral swine get established in Montana**
 - 2. Conduct surveillance for any reported feral swine incursions into Montana**
 - 3. Eradicate any feral swine found in Montana**

Feral Swine Eradication Methods

- 1. Aerial shooting**
- 2. Ground shooting**
- 3. Corral traps**
- 4. Snares**



Assessing Feral Swine Damage Unmanned Aerial Vehicle (Drone)



Aerial Operations USDA & Dept. of Livestock-owned Aircraft





USDA Contracted Pilots/Fixed-Wing Aircraft



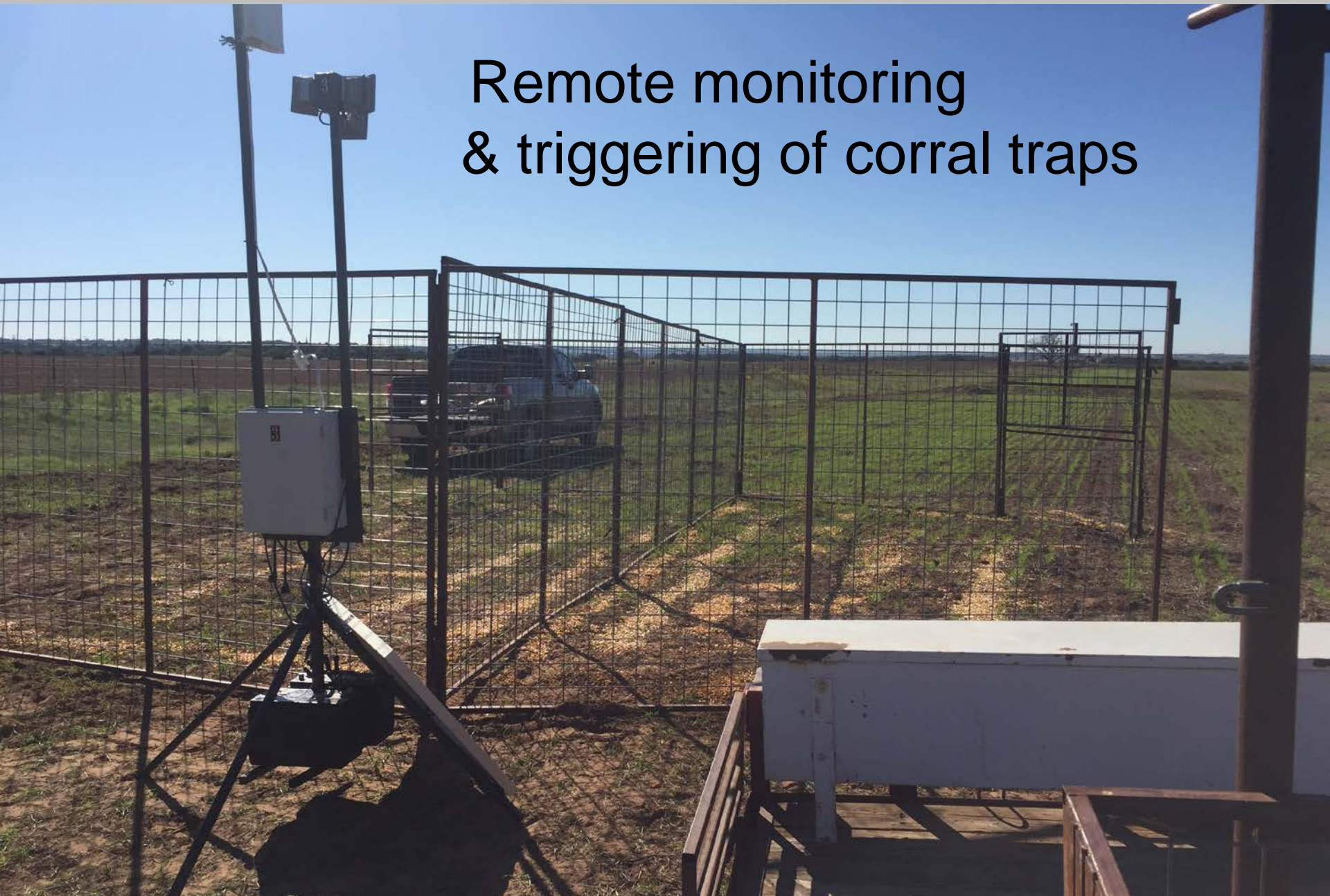
Corral Traps, multiple capture doors



Corral Traps



Remote monitoring & triggering of corral traps



Views from iPhone or computer





Corral Trap
“coming into the trap”



United States Department of Agriculture



Corral Traps



United States Department of Agriculture

Presentation by John Steuber for CMR CWG



Foot Snares

A photograph taken from the perspective of someone in a vehicle, looking out over a gravel road. A large herd of wild boars, including several adults and many piglets, is crossing the road from left to right. The background shows a rural landscape with tall grasses, a fence, and utility poles under a clear blue sky.

Thank You

Questions?