

African Swine Fever Surveillance and Response Planning for an Outbreak in Wild Pigs

Dana Cole, DVM, PhD

National Feral Swine Damage Management Program

ASF Detections Reported to the OIE



Note: The Czech Republic and Belgium reported ASF detections in wild pigs between 2017-2020; both eradicated ASF and regained their OIE status "free from ASF" in 2019 and 2020, respectively.

6th Meeting of the SGE-TSD
Panama City, Panama
September 23-24

Overview

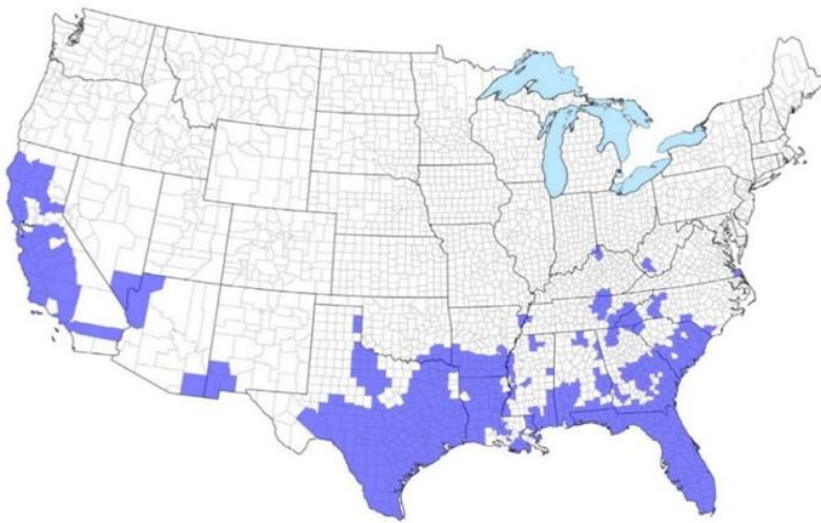
- History of Wild Pigs/Feral Swine in United States
- National Feral Swine Damage Management Program
- African Swine Fever Surveillance in Feral Pigs
- Feral Pig ASF Outbreak Response Planning



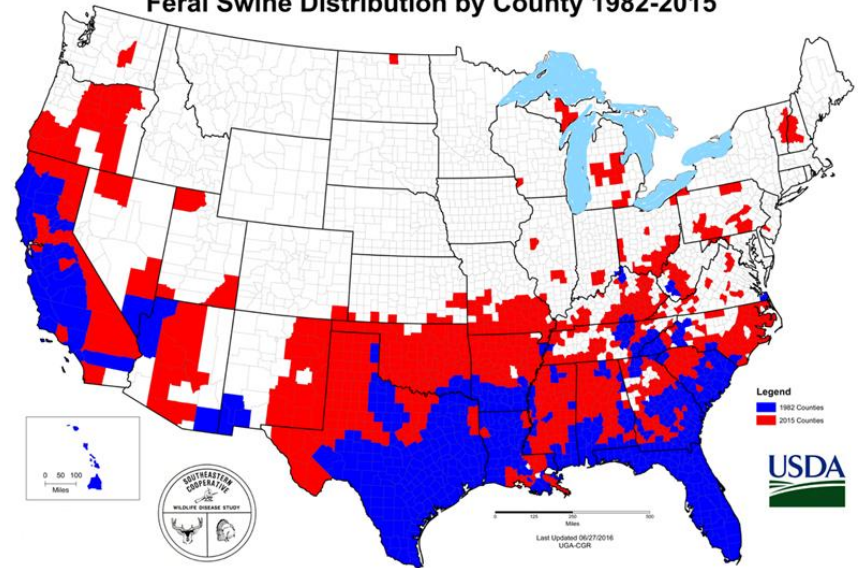
History of Feral Swine in US

Pigs first brought to U.S. in 1500's and repeated introductions followed

Feral Swine Distribution by County, 1982



Feral Swine Distribution by County 1982-2015

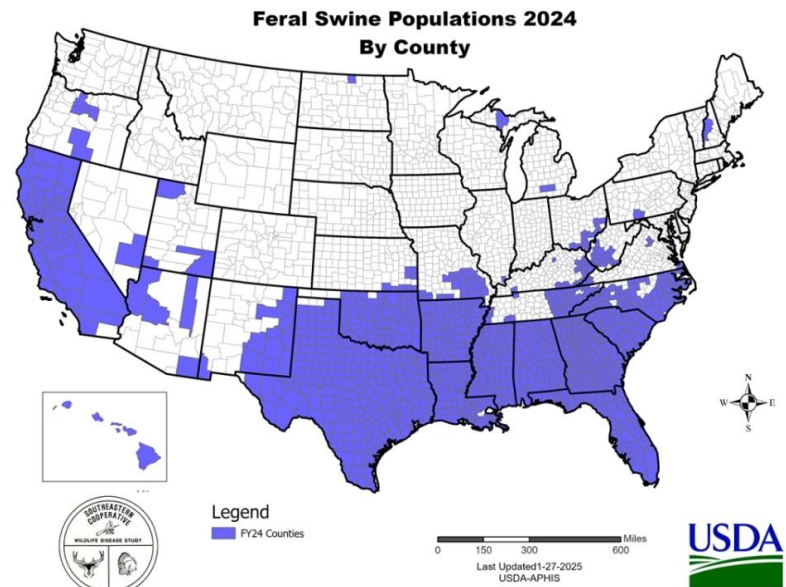


- Natural expansion
- Escapes of domestic swine, Eurasian wild boar, and hybrids
- Intentional movement and release of animals to establish populations for hunting

National Feral Swine Damage Management Program

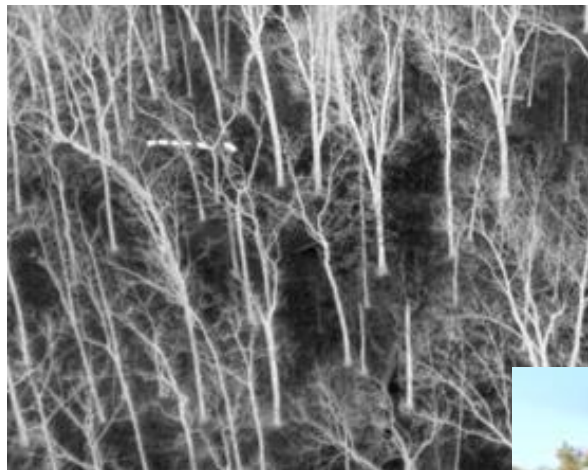
Established in 2014

- **Strategic Goal:** Eradicate feral swine and reduce the invaded range in the United States
 - Eliminate feral swine in states where populations are low or newly emergent
 - Prevent expansion of feral swine from states with large, widely distributed feral pig populations to neighboring states
 - Reduce feral swine numbers to minimize damage in states and territories where populations are large and widely distributed



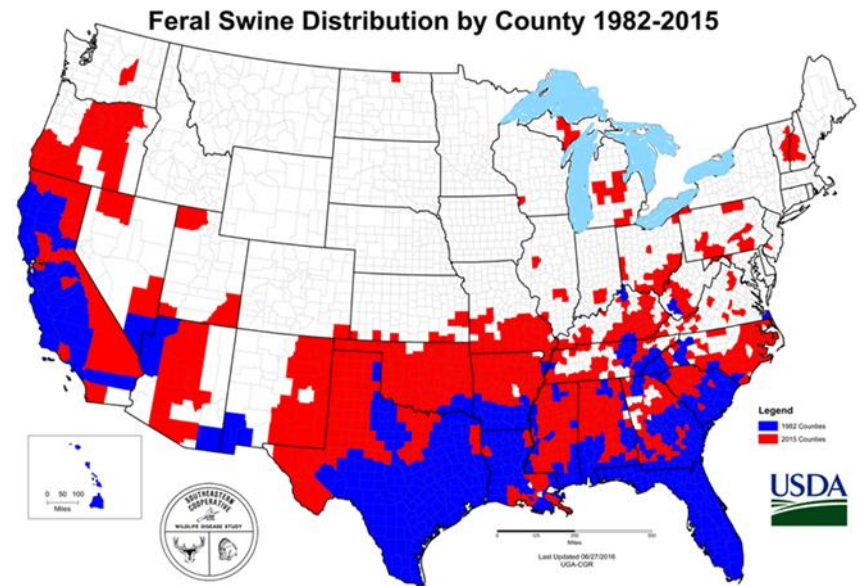
National Feral Swine Damage Management Program

32 states and 3 U.S. territories are working to eradicate feral swine and/or reduce the damage they cause



National Feral Swine Damage Management Program

- Several states have laws limiting hunting of feral swine
 - Feral swine negatively impact other wildlife species
 - Historic role of hunters in moving feral swine



ASF Surveillance: US Protection Zone

- The proximity of Puerto Rico and U.S. Virgin Islands to Dominican Republic increases risk of ASF introduction to the U.S.
 - **Puerto Rico:** Approximately 70 miles/113 km
 - **USVI:** Approximately 230 miles/ 370 km

Pig health Read this article in:  Language ▼

USDA confirms ASF in Dominican Republic

2 comments

The U.S. Department of Agriculture's (USDA) Foreign Animal Disease Diagnostic Laboratory has confirmed African swine fever (ASF) in samples collected from pigs in the Dominican Republic through an existing cooperative surveillance program.

29 July 2021

The Foreign Animal Disease Diagnostic Laboratory of the United States Department of Agriculture (USDA) has confirmed the presence of African swine fever (ASF) in samples collected from pigs in the Dominican Republic. Sample collection is part of a cooperative surveillance program.

The Ministry of Agriculture of the Dominican Republic has reported that the results of the 389 samples belonging to pigs raised in farms and backyard sent to the Laboratory of Animal Diseases of Plum Island, in the United States, indicate the presence of African swine fever in backyard pigs from the provinces Sánchez Ramírez and Montecristi.

In the Sánchez Ramírez province there is a population of 15,000 pigs, while that of Montecristi is approximately 4,600 pigs.

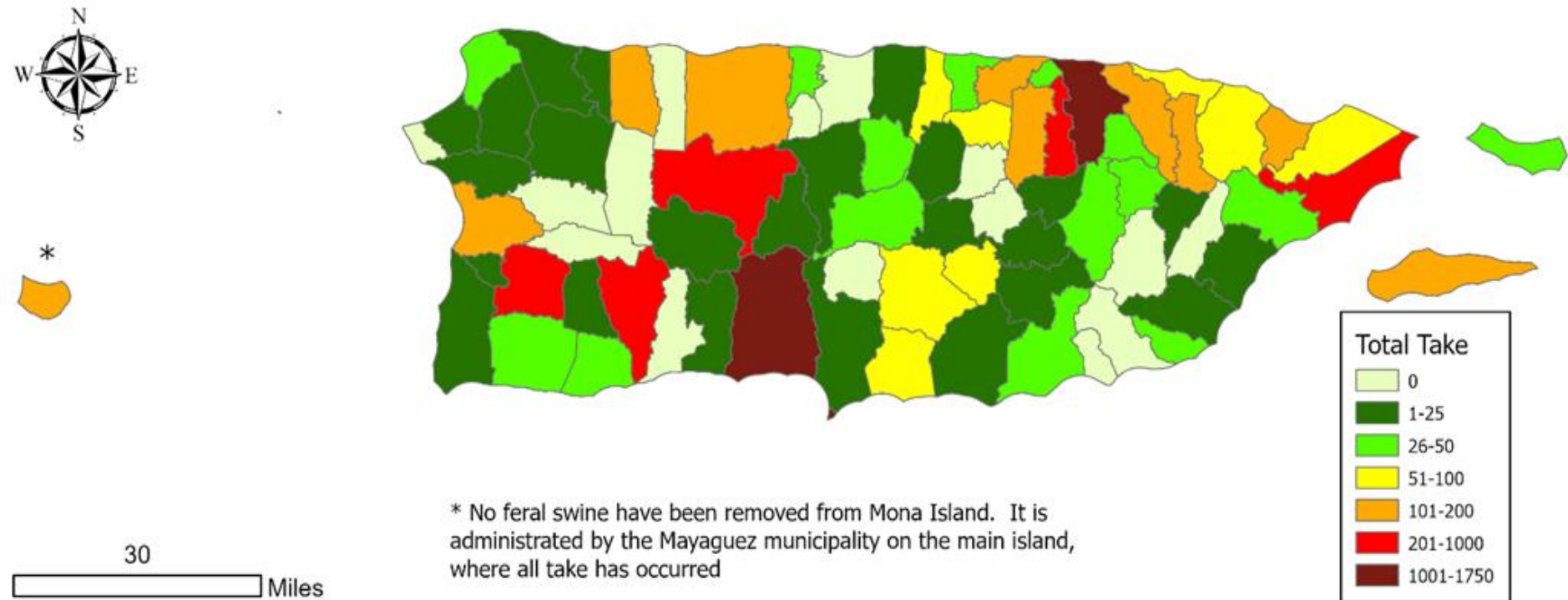
The Ministry of Agriculture, through the Department of Animal Health, has arranged the following preventive measures:

- Transport ban on live and dead pigs to and from the Sánchez Ramírez and Montecristi provinces.
- Implementation of a quarantine in both provinces.
- Cleaning and disinfection of the affected places by staff from the Ministry of Agriculture.
- Periodic epidemiological surveys in the affected provinces.

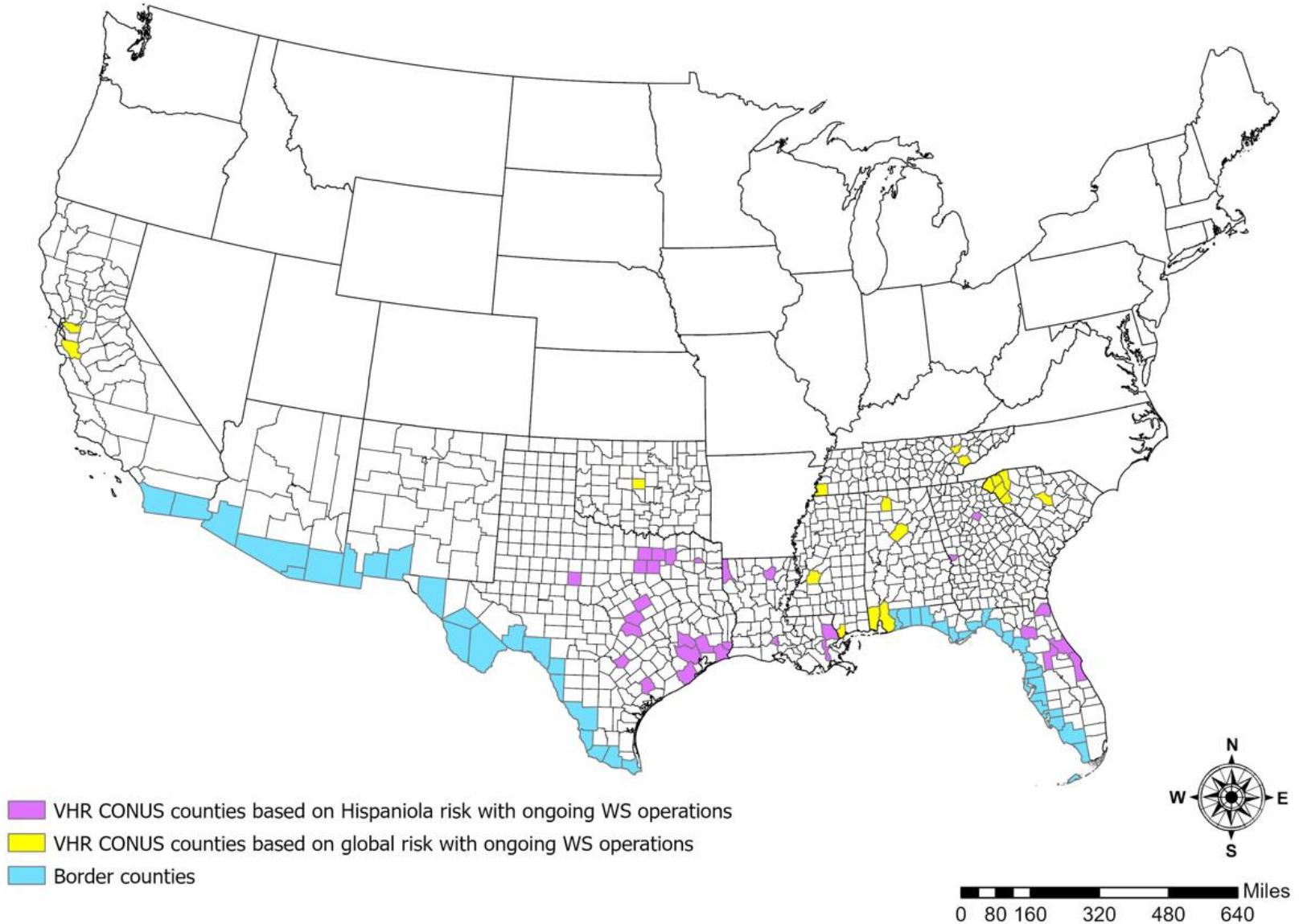


ASF Surveillance: US Protection Zone

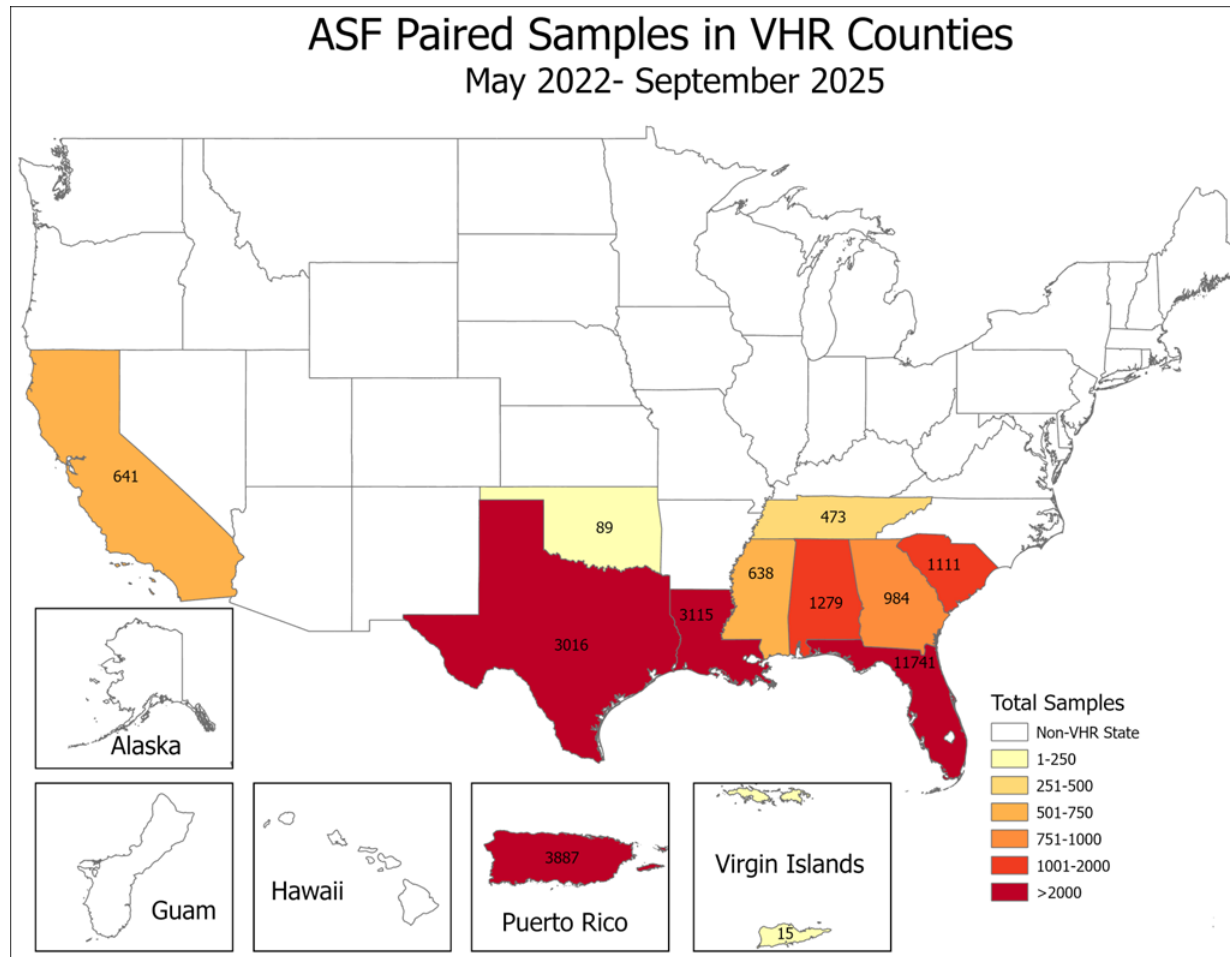
- Between 8/1/2021-09/04/2025, WS removed 6,459 feral swine and sampled 3,887 for ASF (adult and sub-adult animals are tested)
- All samples tested negative



ASF Risk Pathways: Very High Risk Counties

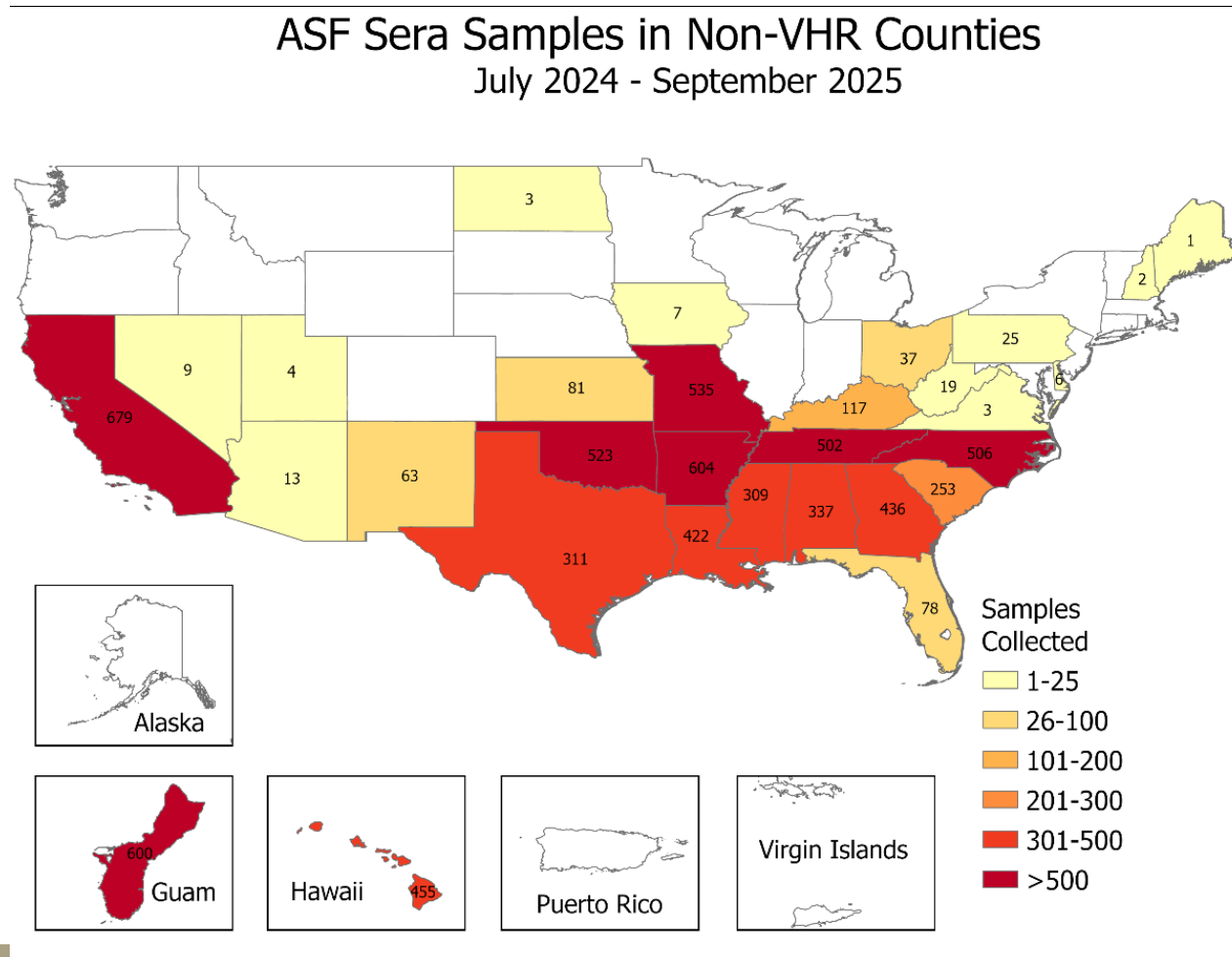


ASF Surveillance in Very High Risk Counties

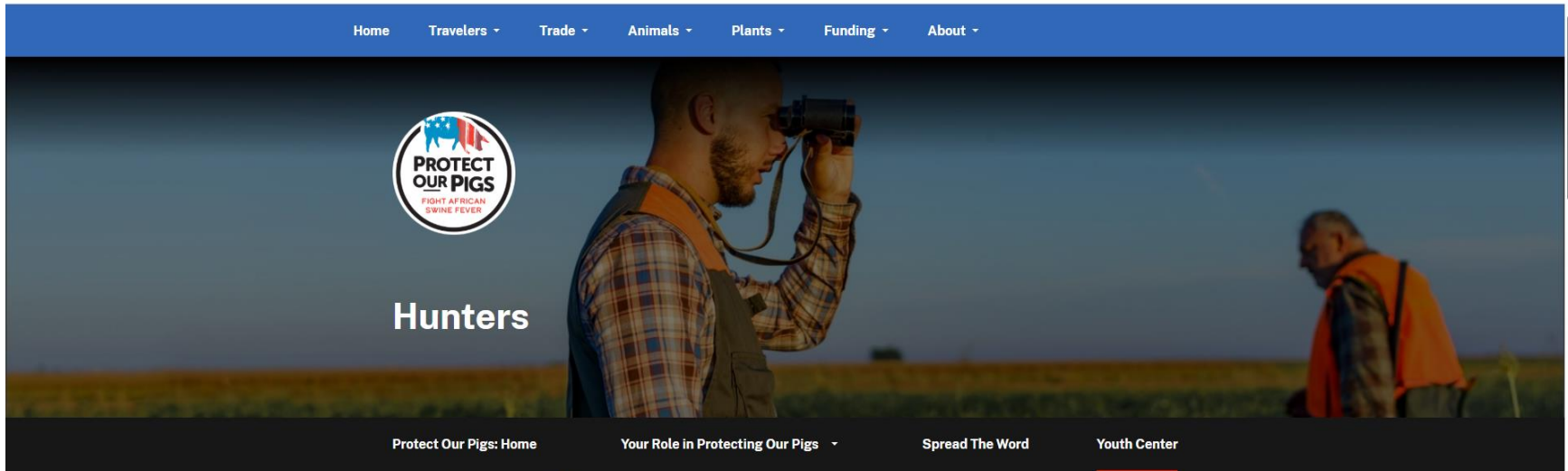


National ASF Sero-surveillance

In April 2024, WS expanded ASF surveillance to include testing of serum from feral pigs in all states and territories controlling feral swine



The Role of Hunters



Last Modified: December 20, 2024

Hunters play a very important role in protecting the American swine herd from African swine fever (ASF)—a highly contagious and deadly viral disease that spreads rapidly and affects domestic and feral swine alike. Even one case of swine fever can wipe out every pig in the area, risking a multi-billion-dollar loss to our economy. You have a unique opportunity to help protect our pigs.

Morbidity/Mortality Reporting: Squeal on Pigs Campaign

REPORT SIGHTINGS



Reported sightings are an **essential** part to understanding the distributions and behaviors of feral swine.

The more sightings reported and verified, the more data available for anyone developing management plans to decrease the damage and disease threats of feral swine.

[REPORT SIGHTING](#) →

DOWNLOAD THE APP



PARTNER WITH US



Partner **involvement** with organizations and agencies in the Squeal on Pigs! campaign is **vital** in order to:

- Create awareness on the threat of feral swine.
- Secure additional resources for management efforts.
- Increase participation from the public.
- Successfully implement tactics to manage the damage and stop the spread of this invasive species.

Feral Pig ASF Outbreak Response Planning

- Trainings for Wildlife Services staff
 - Incident Command System
 - Biosecurity
 - Tabletop Exercise

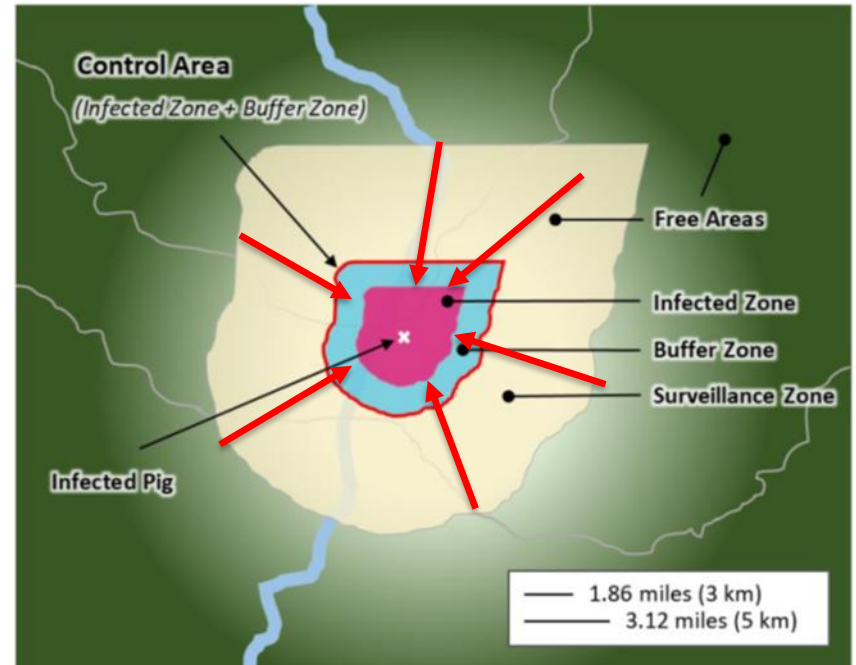


Feral Pig ASF Outbreak Response Planning

Establishing Operational Priorities

Response Priorities:

1. Protect Domestic Premises
2. Contain Outbreak
3. Eliminate Outbreak



Feral Pig ASF Outbreak Response Planning

Meet with other state and federal agencies

- ✓ Fed-state scoping meetings
- ✓ Review operational framework
 - Summary of current surveillance
 - Summary of response priorities
 - Outline of initial communications and coordinated response activities if ASF detected only in feral swine
 - Roles/responsibilities

ASF in Feral Swine: Framework for Response Planning

Overview

African swine fever (ASF) poses a critical threat to both wild and domestic pig populations. The disease is highly contagious, has a nearly 100% mortality rate in naive swine populations, and can persist in the environment and various materials, such as incompletely processed food products, clothing, and infected carcasses for extended periods. This makes ASF exceptionally challenging to manage and contain. The spread of ASF by feral swine—widespread across many parts of the United States—is a major concern based on the role of wild and noncaptive swine populations in ASF dispersal in other parts of the world; and because detection of infection may be delayed due to the elusive behavior of these populations. Once infected, feral swine can act as disease reservoirs, spreading the virus geographically to additional feral swine populations and risking spillover to domestic pigs.

APHIS immediately established ASF prevention activities in 2021 when ASF was detected in Hispaniola. Immediate responses to the increased risk of disease introduction to the US territories of Puerto Rico and the US Virgin Islands included APHIS Wildlife Services (WS) initiating staff deployments to quickly eliminate and conduct surveillance in the free-roaming pigs in urban areas of San Juan. In addition, APHIS Veterinary Services (VS) established a protection zone (PZ) in Puerto Rico and the U.S. Virgin Islands, enhancing surveillance, prohibiting the movement of live swine and restricting the movement of pork products from the PZ to the remainder of the United States. Since the detection in Hispaniola, WS has expanded ASF PCR- and ELISA-based diagnostics in feral swine, increased monitoring and removal of feral swine in counties deemed to be at very high risk of entry, and has included diagnostic testing for ASF in all serum samples collected from feral swine across the invaded range. In addition, the Squeal on Pigs citizen science application¹ was updated to enable collection of reports of morbidity/mortality in feral swine.

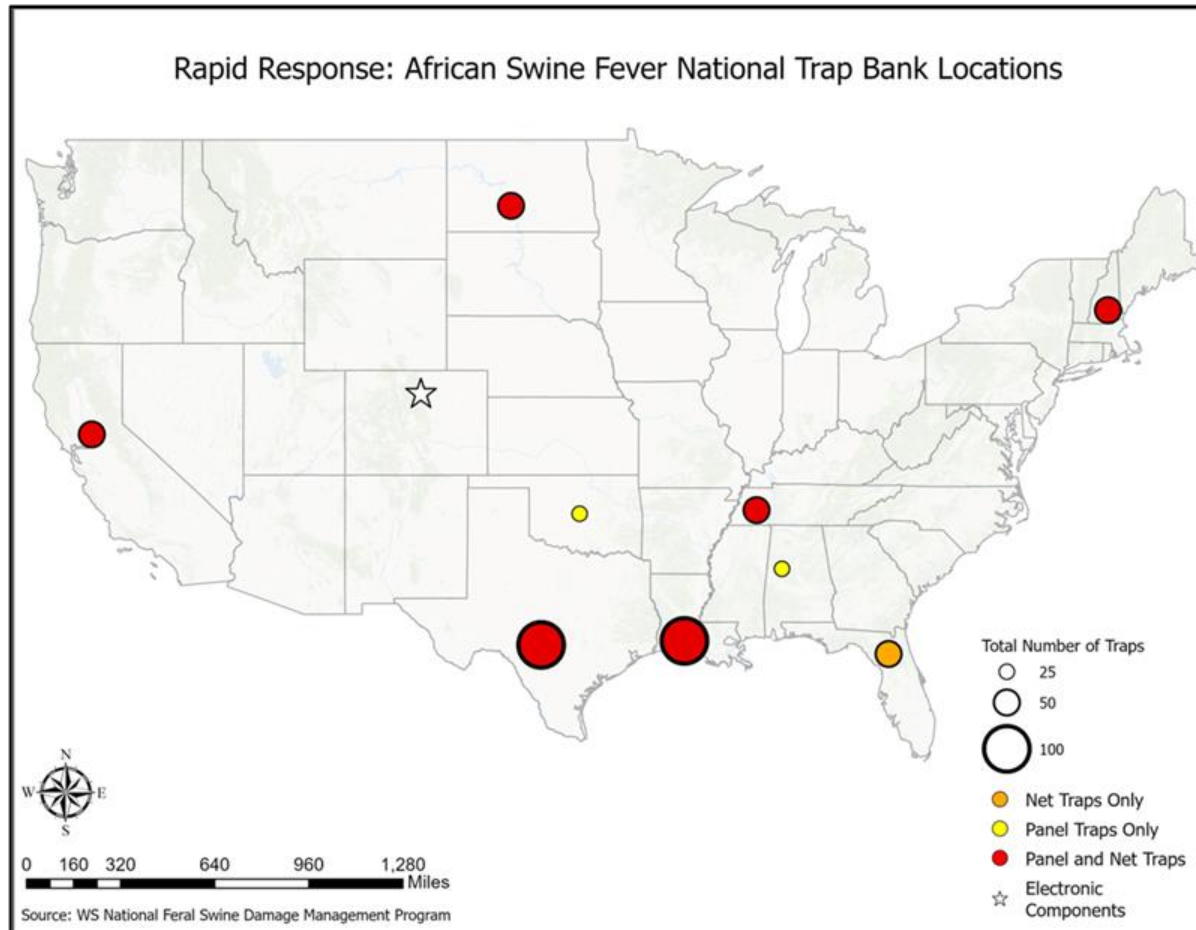
RESPONSE OBJECTIVES

Protect domestic pork supply: identify domestic premises in control area and protect these from disease transmission from infected feral swine.

Contain feral swine outbreak: prevent spatial spread of infected feral swine.

Eradicate ASF in feral swine populations: identify infected feral swine populations and remove them from the landscape. Establish disease freedom.

Building Response Capacity





United States Department of Agriculture

Questions?



Wildlife Services

Protecting People ♦ Protecting Agriculture ♦ Protecting Wildlife