

NASS Survey Training

Feral Swine Survey - 2022 (Wildlife Services Feral Swine)



**United States Department of Agriculture
National Agricultural Statistics Service**

NOD-Training Group
July 2022



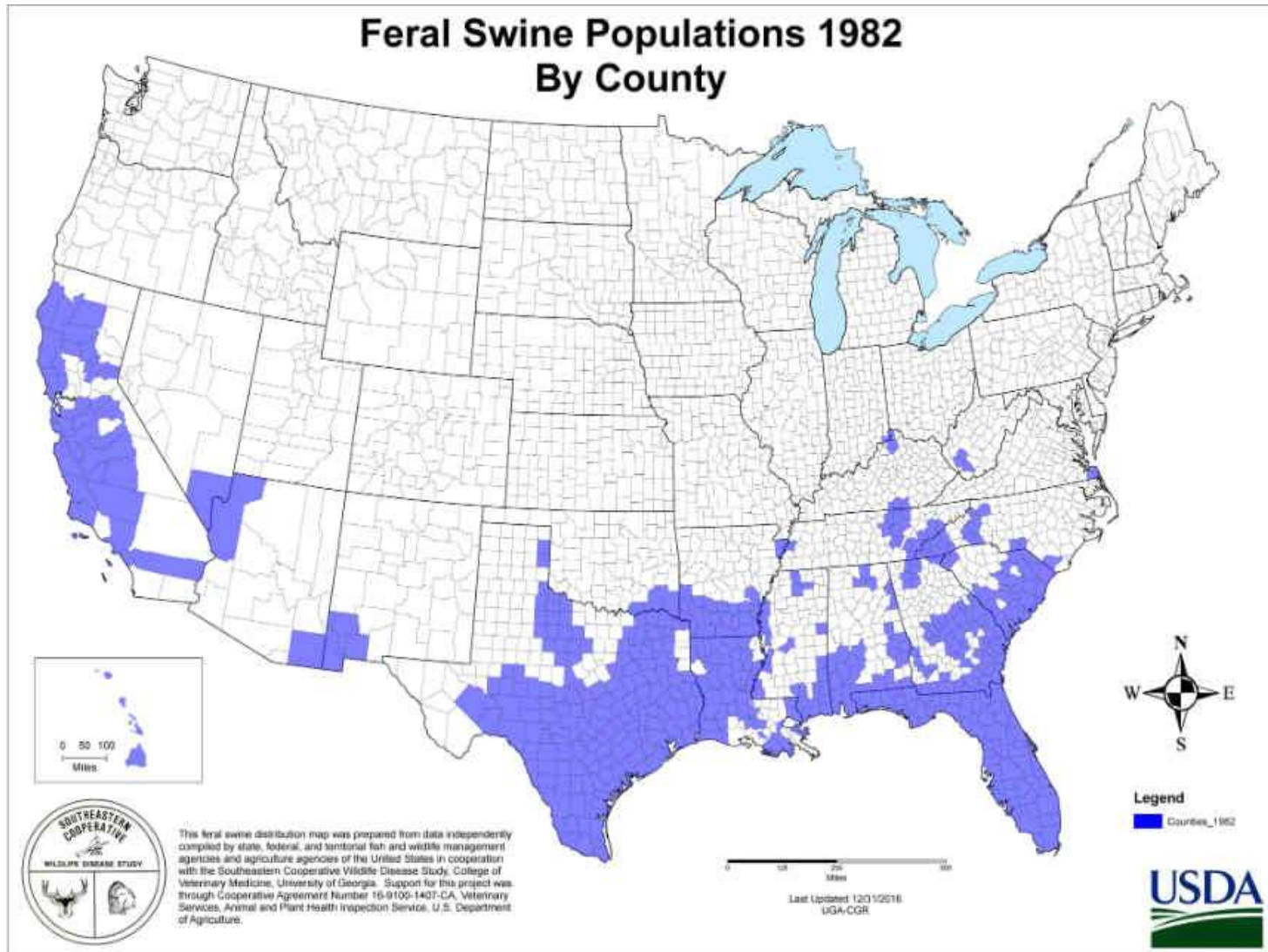
Overview

- Conducting the survey for:
 - Animal and Plant Health Inspection Service (APHIS)
- The purpose is to evaluate the impacts of feral swine in the United States.
 - How much damage to crops and property in 2021?
 - Control methods used during 2021 – are they working?

Feral Swine:

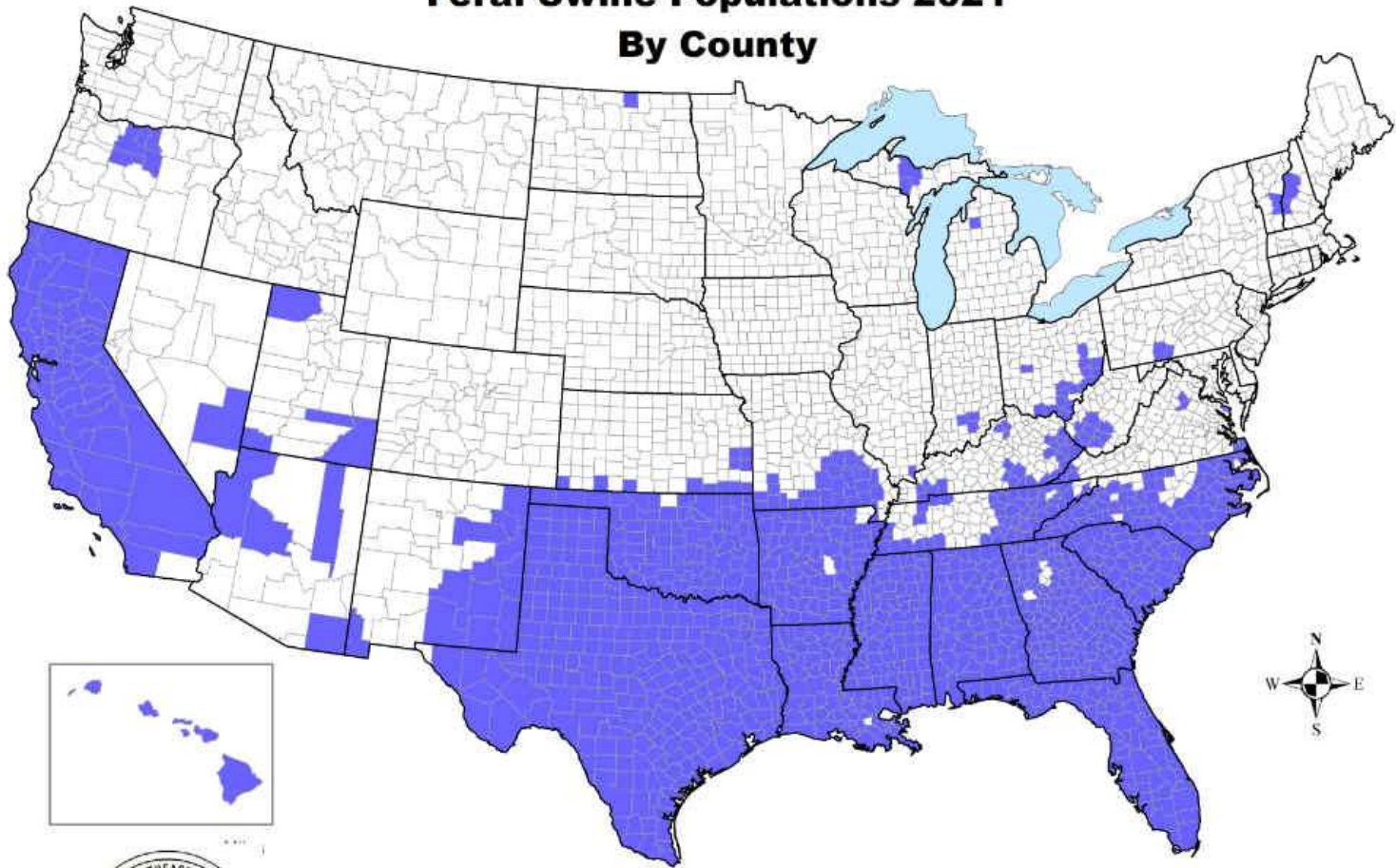
- Feral swine have been reported in at least 35 states
- Nationwide population estimated at about 6 million animals according to APHIS
- Cause an estimated \$2.5 billion in damage each year
- Possible spread of diseases to people, pets and livestock.
 - Known to carry diseases such as swine brucellosis, pseudorabies, porcine reproductive and respiratory syndrome (PRRS), swine influenza virus, trichinosis and leptospirosis.

US Feral Swine in 1982



Look How the Population Has Grown

**Feral Swine Populations 2021
By County**



Legend
■ Counties 2021

0 150 300 600 Miles

Last Updated 1/4/2021
USDA-APHIS



General Survey Information

- Project Code: 931-Wildlife SVC Feral Pig Survey
- Questionnaires:
 - Mailed out June 24
 - Web reporting option available
- Release:
 - TBD. Will be produced by APHIS



General Survey Information

- 11 states involved:
 - AL, AR, CA, FL, GA, LA, MO, MS, NC, SC, & TX
- Sample drawn from operations with positive control data for Corn, Soybeans, Wheat, Rice, Peanuts, and Sorghum

Feral Swine:

- Feral swine can cause damage due to their feeding, rooting, wallowing, grazing, and trampling activities.
 - Leads to damage of agricultural crops, pastures, lawns and landscaping
 - This can also contribute to soil erosion and reduce water quality
 - Can impact sensitive natural areas such as glades and springs

Feral Swine:

- Can deplete natural food sources for native species such as deer and turkeys
- Commonly eat the eggs of ground-nesting birds and anything else they encounter, including reptiles, amphibians and small mammals

Feral hog eating wild turkey eggs



Important things to note:

- For the purpose of this study, feral swine refers to **all species** of wild pigs and hogs, feral pigs and hogs, and wild boar.
 - Does not include peccary (also known as javelina)
 - Peccary are native to southwestern US, Central and South America
 - Not actually a pig
 - smaller than feral swine
- Section 1 asks about acres operated on June 1, **2022** and the rest of the questionnaire asks about **2021**.



Section 1- General

- Acres operated
 - Owned + Rented from – Rented to = Total
- State and County where the majority of your operation is located
- Were wild pigs present in your *county* during the last 3 years?
 - How has the wild pig population changed in the last 3 years in this county
- Were wild pigs present on your *operation* during the last 3 years?
 - How has the wild pig population changed over the past 3 years on your operation

Section 1- General

- Which wild animals do you think have declined in population on this operation in the last 3 years that you attribute to wild pigs

Feral hogs eating a baby deer



- A few “Yes” or “No” type questions about things that may attract wild pigs to this property or surrounding properties, control measures, etc.

Section 2 - CROPS

- Were any crops harvested on your operation in 2021?
 - If “Yes”: Continue with Section 2
 - If “No”: Skip to Section 3 (Property)
- Several general questions about crops planted, cropping decisions made due to presence of wild pigs, economic impacts to the crops, wild pig habitat close by, physical barriers between their crops and wild pig habitat

Section 2 - CROPS

- Were any crops harvested on your operation in 2021?
 - If “Yes”: Continue with Section 2
 - If “No”: Skip to Section 3 (Property)
- Several general questions about crops planted, cropping decisions made due to presence of wild pigs, economic impacts to the crops, wild pig habitat close by, physical barriers between their crops and wild pig habitat

Section 2 - Crops

- Which crops were planted in 2021?
 - Select all that apply
 - List consists of Corn, Soybeans, Wheat, Rice, Sorghum, and Peanuts (can list any other crops planted if not pre-listed)
- Then, rank the selected crops in order of highest value of production (Top 3)

Section 2 - Crops

- Then for each crop:
 - Acres planted & harvested, yield, average price received, certified organic
- Wild pigs present in the crop?
 - If “Yes”, Did you replant any of this crop because of damage caused by wild pigs?
 - If “Yes”, Did you replant any of this crop because of wild pig damage?

Section 2 - Crops

- Then several questions about these replanted acres:
 - How many acres
 - Average yield reduction per acre on the replanted acres compared to the yield of the same crop that was not replanted
 - Average unpaid hours you or your family members spent replanting these acres
 - Estimate of how much it cost to replant

Section 2 - Crops

- Was the crop damaged by wild pigs?
 - If “Yes”,
 - How many acres damaged
 - Average yield on the damaged acres
 - If acres would have not been damaged, what would the yield have been



Section 2 - Crops

- Did the presence of wild pigs make this crop more costly to harvest?
 - If “Yes”,
 - How many extra unpaid hours did you or your family members spend harvesting these acres
 - How much extra money did it cost to harvest this crop



Section 2 - Crops

- Have crop insurance?
 - If “Yes”, does it cover wildlife damage?
 - If “Yes”, did you file a claim for this crop for wild pig damage?
 - If “Yes”, what was the total payment received?



Section 2 Things To Watch Out For

- Planted acres for crops greater than total acres operated
- Harvested acres greater than planted acres
- Damaged acres greater than planted acres
- Damaged yield greater than undamaged yield



Section 3 - PROPERTY

- Did you have any wild pigs on your property in 2021? If “Yes”:
- What was damaged? (16 items to choose from)
- Time and Cost to repair the damage?
 - Cost can be zero if damage was repaired with no cost incurred by the operation
- Severity of the damage?



Section 3 Things To Watch Out For

- Damage is reported but no cost is reported
 - This is possible if the operator was able to repair the damage without any expense paid out.
 - Leave a note

Section 4 - Control

- Did someone from the listed groups **come to this operation** to assist with reducing or preventing damage from wild pigs? (select all that apply)
 - If so, **how many days** did someone from this group come to this operation to help
 - On average, **how many people** from this group came to your operation
- List the agencies, universities, or private companies that assisted you

Section 4 - Control

- What types control methods used, how many unpaid hours of your time was spent, cost of the control methods, and how effective were they
 - Cost can be zero for control methods
- Was fencing (electric/non-electric) used *specifically* to reduce damage by wild pigs?
 - Year installed, cost to install, expected useful life
- Number of wild pigs killed or removed alive
 - If removed alive, were they sold? If yes, what was avg. \$\$?

Section 4 - Control

- What measures did you take to limit the introduction and/or spread of infectious diseases on your operation (select all that apply)
- In 2021, did you increase these measures in response to disease findings in wild pigs in your area

Section 4 - Control

- If a toxic bait was approved by federal and state authorities, how acceptable would the toxic bait in your state be to you?
- What change would you like to see in wild pig population numbers in your state?
 - Answer options range from “completely removed” to “increased greatly”

Section 4 - Control

- How acceptable are other control methods
 - Trap and euthanize by landowner
 - Trap and euthanize by a government agency with permission of landowner
 - Aerial gunning by a government agency with permission of landowner
 - Answer options range from “completely unacceptable” to “completely acceptable”



Section 4 Things To Watch Out For

- Control method is reported but no cost is reported
- Large number of wild pigs removed
- If wild pigs were “sold” there should be a price reported
- High price of wild pigs sold

Section 5 - Hunting

- Did you or anyone else hunt on your operation?
 - Which animals did you/your immediate family hunt?
 - Which animals did anyone other than immediate family hunt without paying?
 - Which animals did anyone pay to be allowed to hunt?
 - Exclude guide/outfitting services
 - Which animals did you provide a guide or outfitting service for paying hunters?
- How much income from hunting wild pigs?
- How much income from all hunting?

Section 5 Things To Watch Out For

- Operator reported “No” to screening for feral pigs on the property in the last three years in Section 1, but hunting of wild pigs is reported

Section 6 - Demographics

- Age, gender, occupation, household income, etc.
 - This information is used to compare and contrast the varying impacts that wild pigs have on different types and sizes of operations





In Conclusion:

- Very important measure of feral swine prevalence and impacts
- Respondents may be hesitant to answer/talk about some aspects of the survey
 - Damages, diseases
 - Different control methods (hunting, shooting, trapping, etc.)
- Any questions, comments?