

FERAL SWINE SURVEY

OMB No. 0535-0256

The National Agricultural Statistics Service is seeking approval to change a survey that will collect data related to the number of feral swine in the US and the amount and type of damages caused by them. In the previous collection that was conducted in 2021 the primary focus was on the amount of damage that was caused to livestock. The target population was all farmers who raised one or more of cattle (dairy and/or beef), hogs, sheep and/or goats in the States of Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, and Texas.

In 2022, this survey will be conducted in the same 11 States that were surveyed in 2015 (first Tier 1 crop survey). Instead of focusing on damage caused to livestock, the survey will focus on damage to selected field crops that is associated with the presence of feral swine. The selected field crops will be corn, soybeans, wheat, rice, peanuts, and sorghum (a.k.a. Tier 1 crops). The selected States are Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, South Carolina, and Texas. The States were chosen because they had high feral swine densities and a significant presence of the selected crops.

The questionnaire has the following changes from 2021:

- Section 2 "Property" in 2021 is now Section 3 "Property" in 2022,
- Section 3 "Livestock" has been replaced by Section 2 "Crops" focusing on the target crops and damage to those target crops.
- Section 4 "Control" has a new line of questioning for questions 8 and 9 on the acceptability of using toxic bait to control wild pig populations.

A. JUSTIFICATION

- 1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

On December 20, 2018 the Agriculture Improvement Act of 2018 was signed into law (PL 115-334). Section 2408 of the new law addresses the Feral Swine Eradication and Control Pilot Program. Included within this law is the following list of additional duties assigned to the Secretary of Agriculture:

- (1) study and assess the nature and extent of damage to the pilot areas caused by feral swine;
- (2) develop methods to eradicate or control feral swine in the pilot areas;
- (3) develop methods to restore damage caused by feral swine; and
- (4) provide financial assistance to agricultural producers in pilot areas.

This is a follow-up to the announcement made on April 2, 2014 by the Undersecretary for USDA's Marketing and Regulatory Programs, Edward Avalos who announced that the USDA was kicking off a national effort to reduce the devastating damage caused by feral swine. In 2015 the benchmark Tier 1 crop survey was conducted in 11 States (Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, South Carolina, and Texas) to measure the amount of damage, feral hogs caused to crops in these states. The target population within these states consisted of farm operations who had historically produced one or more of the following crops: Corn, soybeans, wheat, rice, peanuts, or sorghum (Texas only).

The results of this benchmark survey showed that in the 11 surveyed States, there were an estimated \$190 million in damage to crops for the six target crops. The published findings from this benchmark survey can be found at <http://www.sciencedirect.com/science/article/pii/S0261219416301557>.

In 2017, this survey was conducted in the following 13 States: Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, and Texas, to measure the damage to livestock that was associated with the presence of feral swine. These States were chosen because they had high feral swine densities and a significant presence of cattle, hogs, sheep and/or goats. The eradication of feral swine remains as a high priority of the Secretary and was originally authorized by the Animal Health Protection Act (Title 7 U.S.C. 8301 *et seq.*) and the 2014 Farmbill.

The 2017 survey shows that in the 13 surveyed States, there was significant damage caused by feral swine. When extrapolated to livestock producers across the 13-state region, APHIS Wildlife Services estimated that damages sum to an annual cost of about \$40 million. The findings from this survey can be found at https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=3249&context=icwdm_usdanwrc.

In 2019 the survey was conducted in 12 States: Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, and Texas. The operators in 11 of the States will be selected from operations that recently produced hay/haylage, tree nuts, melons, sugar cane, sweet potatoes, or cotton. In California, operators will be selected from operations that produced hay/haylage, tree nuts, grapes, sod, carrots, lettuce, or strawberries. APHIS Wildlife Services extrapolated crop damage estimates to the state-level in 12 states with reportable damage yielded an estimated crop loss of

\$272 million/yr. The findings from this Tier 2 crop survey can be found at https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=3308&context=icwdm_usdanwrc.

The 2021 livestock survey was conducted in 13 surveyed States. The findings from this survey will be published in the coming months.

The Agriculture Improvement Act authorizes \$75,000,000 for the period of fiscal years 2019 through 2023. The funds are to be divided up by the following – 50 percent shall be allocated to the Natural Resources Conservation Service (NRCS) to carry out the pilot program, including the provision of financial assistance to producers for on-farm trapping and technology related to capturing and confining feral swine; and 50 percent shall be allocated to the Animal and Plant Health Inspection Service (APHIS) to carry out the pilot program, including the use of established, and testing of innovative, population reduction methods.

The APHIS, Wildlife Services' (WS) National Wildlife Research Center (NWRC) is the only Federal research organization devoted exclusively to resolving conflicts between people and wildlife through the development of effective, selective, and socially responsible methods, tools, and techniques. As increased urbanization leads to a loss of traditional wildlife habitat, the potential for conflicts between people and wildlife increases. Such conflicts can take many forms, including property and natural resource damage, human health and safety concerns, and disease transmission among wildlife, livestock, and humans.

The high reproductive rate and adaptability of feral swine has resulted in populations that have dramatically increased in size and distribution. This invasive animal now occurs across much of the United States where it causes a range of agricultural and environmental damage through depredation, rooting, and wallowing activities. Furthermore, feral swine compete with native wildlife and livestock for habitats, are carriers of exotic and endemic diseases, and transmit parasites to livestock and humans. Feral swine are considered a major emerging threat to American agriculture (Seward et al. 2004). Recent data show that the proportions of U.S. counties with agricultural production that also have feral swine present are increasing.

Findings from the 2019 Feral Swine Survey, found the following levels of damage to Crop Producers.

Table 2

Lost value from feral pigs (1000 US \$).

State	Hay	Tree Nuts	Melons	Sugarcane	Sweet Potatoes	Cotton	Grapes	Lettuce	Strawberry	Total
Alabama	9834	271	NA	NA	642	2746	NA	NA	NA	13,493
Arkansas	13,272	33	(D)	NA	(D)	1110	NA	NA	NA	14,415
California	5918	2065	NA	NA	NA	NA	1909	-	1501	11,393
Florida	2472	271	3062	5809	(D)	1820	NA	NA	NA	13,434
Georgia	12,263	17,873	480	NA	9	17,980	NA	NA	NA	48,604
Louisiana	6335	366	(D)	1232	(D)	-	NA	NA	NA	7932
Mississippi	1212	-	(D)	NA	961	261	NA	NA	NA	2434
Missouri	14,922	NA	-	NA	(D)	-	NA	NA	NA	14,922
North Carolina	272	-	-	NA	5349	319	NA	NA	NA	5939
Oklahoma	15,749	990	(D)	NA	(D)	1330	NA	NA	NA	18,069
South Carolina	1501	-	333	NA	-	3494	NA	NA	NA	5328
Texas	78,875	17,112	8838	-	(D)	11,153	NA	NA	NA	115,978
Total	162,626	38,979	12,714	7041	6960	40,212	1909	-	1501	271,942

General authority for these data collection activities is granted under U.S. Code Title 7, Section 2204. This statute specifies that “The Secretary of Agriculture shall procure and preserve all information concerning agriculture which he can obtain ... by the collection of statistics ... and shall distribute them among agriculturists.”

The eradication of feral swine is authorized by the Animal Health Protection Act (Title 7 U.S.C. 8301 et seq.) and the 2014 Farmbill. Individually identifiable data collected under this authority are governed by Section 1770 of the Food Security Act of 1985, as amended, 7 U.S.C. 2276, which requires USDA to afford strict confidentiality to non-aggregated data provided by respondents. This Notice is submitted in accordance with the Paperwork Reduction Act of 1995 Public Law 104-13 (44 U.S.C. 3501, et seq.) and Office of Management and Budget regulations at 5 CFR part 1320.

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

The purpose of the proposed survey is to develop national and State estimates of the damage feral swine cause to agricultural operations, as well as costs of controls and benefits from feral swine hunting. These estimates will be used by APHIS to determine which areas have the greatest amount of damage and where to focus efforts at dealing with the feral swine problem. Financial costs will be measured because these are easily comparable across different states and commodities.

Given the wide range of damages covered in the survey, and the fact that we are relying on estimates based on human memory, there may be compound problems that are difficult to quantify or to identify a single cause. APHIS representatives and NASS survey methodologists recognize this and took care to design the questionnaire to target only damage and losses directly attributable to feral swine.

- 3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.**

NASS's Survey Design System (SDS) was built to enable the creation of comparable paper and web survey instruments for almost any survey. For the 2022 Feral Swine Survey NASS will develop a Computer Aided Self Interview (CASI), along with a computer assisted telephone interview (CATI) for data collection from non-respondents to the mail or internet questionnaire.

The 2019 Feral Swine survey, which targeted selected crop operators was not available on the internet. However, the survey was available by mail and by computer assisted telephone interviews of non-respondents.

- 4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.**

The National Agricultural Statistics Service cooperates with State Departments of Agriculture and land grant universities to conduct agricultural surveys. These surveys meet both State and Federal needs, thus eliminating duplication and minimizing reporting burden on the agriculture industry. There have been some studies attempting to quantify the damage done by feral swine. In 2018 the US Dept. of the Interior conducted a study of the damages caused by Feral Swine to National Wildlife Refuges in the southeastern US. In 2018 the Arkansas Forest Resources Center conducted a survey of landowners in Arkansas. The other feral swine surveys that were conducted were at a state level only. Other than the surveys conducted by NASS in 2019 of selected crop farmers in 12 targeted states, in 2017 of livestock farmers in 13 targeted states, and in 2015 of crop farmers in 11 targeted states, the next most recent national-level estimates of agricultural losses from feral swine are from 2004 and 2005. APHIS needs current data that is comparable across all affected States.

- 5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.**

This information collection will not have a significant economic impact on small entities. Of the total estimated sample size of 12,000, approximately 6,840 would be classified as small operators, or approximately 57%.

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

This Information Collection Request (ICR) is for a one time survey to be conducted in 2022 with the target population being farm operators who grow corn, soybeans, wheat, rice, peanuts, and/or sorghum on their operation in any of the target states (AL, AR, CA, FL, GA, LA, MO, MS, NC, SC, and TX).

In 2015 NASS conducted the first round of data collection related to damages caused by feral swine. That original survey created a benchmark or baseline to begin measuring the damages caused. The initial survey collected data related to damages to crops, livestock and property (target population was producers of corn, soybeans, wheat, rice, peanuts, or sorghum (Texas only)). In 2017 the second phase was conducted; the survey focused more on damages to livestock and property (target population was producers of cattle, hogs, sheep and/or goats). This third round of data collection, conducted in 2019, focused more on specialty crops (Tier 2) (the target population was producers of hay, tree nuts (pecans), melons (cantaloupe, honeydew, or watermelon), sugarcane, sweet potatoes, or cotton, and in CA the focus was on producers of hay, tree nuts (almonds), grapes, sod, carrots, lettuce, or strawberries). The fifth round of data collection, conducted in 2022 is focused on the same states and crops (Tier 1) as for the 2015 survey. This survey will update the estimates of the first round and provide a more comprehensive estimate of the full range of costs incurred by crop producers.

This survey is necessary in order to fulfill the first task of the original mission of the USDA/Feral Swine Damage Management (FSDM) program, which is to study and assess the nature and extent of damage to the pilot areas caused by feral swine.

APHIS in conjunction with State and local governments will use the data collected through these surveys to focus their efforts on reducing or at least restricting the damages caused by feral swine. In the absence of this survey it would be impossible to measure progress and the value of the services provided by FSDM. This survey needs to be repeated as a component of efforts to evaluate the effectiveness of the FSDM programs.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with the general information guidelines in 5 CFR 1320.5.

There are no special circumstances associated with this information collection.

8. Provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8 (d),

soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments.

The Federal Register Notice soliciting comments for the original request was published on February 8, 2021 on pages 8578 – 8579. NASS received one public comment during that comment period from Ms. Jean Public. The comment is attached to the original submission.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and record-keeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

The National Wildlife Research Center consulted with the following individuals in the development of their survey.

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9. Explain any decision to provide any payment or gift to respondents.

There are no payments or gifts to respondents.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

Questionnaires include a statement that individual reports are confidential. U.S. Code Title 18, Section 1905; U.S. Code Title 7, Section 2276; and the Confidential Information Protection and Statistical Efficiency Act of 2018, Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35 and other applicable Federal laws. All employees of NASS and all enumerators hired and supervised under a cooperative agreement with the National Association of State Departments of Agriculture (NASDA) must read the regulations and sign a statement of compliance.

The following confidentiality pledge statement will appear on all NASS questionnaires:

The information you provide will be used for statistical purposes only. Your response will be kept confidential and any person who willfully discloses ANY identifiable information about you or your operation is subject to a jail term, a fine, or both. This survey is conducted in accordance with the Confidential Information Protection and Statistical Efficiency Act of 2018, Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35 and other applicable Federal laws. For more information on how we protect your information please visit: <https://www.nass.usda.gov/confidentiality>.

All individuals who may access these confidential data for research are also covered under Titles 18 and CIPSEA and must complete a Certification and Restrictions on Use of Unpublished Data (ADM-043) agreement.

11. Provide additional justification for any questions of a sensitive nature.

There are no questions of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information. The statement should indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I. Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.

Burden hour calculations are shown below. The minutes-per-response figures come from cognitive interviews. Cost to the public of completing the questionnaire is assumed to be comparable to the hourly rate of those requesting the data. Reporting time of 6,435 hours is multiplied by \$36.97 per hour for a total cost to the public of \$237,901.95.

NASS uses the Bureau of Labor Statistics' [Occupational Employment Statistics](#) (most recently published on March 31, 2021 for the previous May) to estimate an hourly wage for the burden cost. The May 2020 mean wage for bookkeepers was \$21.20. The mean wage for farm managers was \$36.93. The mean wage for farm supervisors was \$25.25. The mean wage of the three is \$27.79. To calculate the fully loaded wage rate (includes allowances for Social Security, insurance, etc.) NASS will add 33% for a total of \$36.97 per hour.

Feral Pig Survey - Burden Estimate 2022												
Survey	Sample Size	Waves of Data Collection	Responses				Non-response				Total Burden Hours	
			Resp. Count	Waves x Count	Min./ Resp.	Burden Hours	Non-resp. Count	Waves x Count	Min./ Nonr.	Burden Hours		
Questionnaires												
Feral Pig Survey - Mailing	12,000	1	2,400	2,400	30	1,200	9,600	9,600	2	320	1,520	
Reminder Letter - Mailing	9,600	1	1,632	1,632	30	816	7,968	7,968	2	266	1,082	
Phone Enumeration for Non-response	7,968	1	4,382	4,382	30	2,191	3,586	3,586	2	120	2,311	
Total	12,000		8,414	8,414		4,207	21,154	21,154		706	4,913	
Publicity Materials Mailed with Questionnaire												
Cover Letter, Information Brochure, EDR instructions, and a possible postcard reminder	12,000	1	8,414	8,414	10	1,402	3,586	3,586	2	120	1,522	
Total	12,000		8,414	8,414		1,402	3,586	3,586		120	1,522	
Totals	12,000		8,414	8,414		5,609	3,586	21,154		826	6,435	

* This survey will only be conducted once during the three year approval period. Potentially, this survey will be repeated every two to three years.

** States included in the sample are AL, AR, CA, FL, GA, LA, MO, MS, NC, SC, & TX.

*** The target population will ideally have one or more of the following: corn, soybeans, wheat, rice, peanuts or sorghum.

13. Provide an estimate of the total annual cost burden to respondents or record-keepers resulting from the collection of information.

There are no capital/start-up or ongoing operation/maintenance costs associated with this information collection.

14. Provide estimates of annualized cost to the Federal government; provide a description of the method used to estimate cost which should include quantification of hours, operational expenses, and any other expense that would not have been incurred without this collection of information.

The total cost to the Federal Government for the 2021 Feral Swine Survey is approximately \$345,000. Most of which is for Federal salaries and telephone enumeration by National Association of State Departments of Agriculture (NASDA) enumerators (includes overhead),

15. Explain the reasons for, any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I (reasons for changes in burden).

The decrease in burden and responses is due partly to changing the target population from farm operators who raised cattle (dairy and/or beef), hogs, sheep and/or goats over to farmers that grew selected crops. In addition, two fewer States are included in the 2022 survey.

	Responses	Burden Hours
Previous Totals	44,352	9,651
Adjustment		
Completed Surveys	-	-
Non-Responses	-	-
Program Changes		
Completed Surveys	(4,208)	(2,806)
Non-Responses	(10,576)	(410)

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

For publication, examples of previous publications from the 2015 and 2019 crop publications are:

<https://www.sciencedirect.com/science/article/abs/pii/S0261219416301557>

<https://www.sciencedirect.com/science/article/abs/pii/S0261219420300387>

APHIS is also planning on using the 2015 data in conjunction with the 2022 data to estimate the relationship between wild pig density and feral swine damage.

Questionnaires will be mailed to respondents in July 2022. Operations that do not respond by mail or internet within a couple of weeks will be sent a pressure sealed reminder mailing. Non-respondents will then be attempted by phone enumeration. After data collection is complete, the data will be edited for reasonableness and completeness. The data will then be summarized. The summarized data will be shared with The Animal and Plant Health Inspection Service (APHIS), Wildlife Services' (WS) National Wildlife Research Center (NWRC). The data from this survey should be published around June 2023. The data tables and narrative that will be included in the publication will be like the previous publication that targeted crop operations conducted in 2019, which is attached to this information collection request.

- 17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

There is no request for approval of non-display of the expiration date.

- 18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions" of OMB Form 83-I.**

There are no exceptions to the certification statement.

March 2022