

SUPPORTING STATEMENT FOR INFORMATION COLLECTION

UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)

ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS)

VETERINARY SERVICES (VS)

CENTERS FOR EPIDEMIOLOGY AND ANIMAL HEALTH (CEAH),

NATIONAL ANIMAL HEALTH MONITORING SYSTEM (NAHMS)

NAHMS GOAT 2009

Part A

**SUPPORTING STATEMENT FOR INFORMATION COLLECTION BY THE
CENTERS FOR EPIDEMIOLOGY AND ANIMAL HEALTH (CEAH),
NATIONAL ANIMAL HEALTH MONITORING SYSTEM (NAHMS)¹
OMB NUMBER 0579-XXXX
NAHMS GOAT 2009 STUDY**

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A. JUSTIFICATION

This submission is a request for approval to initiate the National Animal Health Monitoring System's (NAHMS')¹ Goat 2009 study, an information collection by the Animal and Plant Health Inspection Service (APHIS). The study will consist of two parts in 21 of the top goat States² in the United States. For producers with less than 10 goats, a questionnaire (NAHMS-216 General Goat Management Report, CATI) will be mailed to producers, with a follow up telephone interview for non-respondents. For producers with 10 or more goats a typical two phase NAHMS study will be conducted. In phase I, a National Agricultural Statistics Service (NASS) enumerator will contact and conduct interviews with producers having 10 or more goats (NAHMS-217 General Goat Management Report, Enumerator). Respondents will be asked to sign a consent form allowing NASS to present their names to APHIS- designated data collectors for further consideration in the study. Phase II (APHIS phase) will consist of completing the producer agreement (NAHMS-218) and two on-farm questionnaires. In addition, biologic sampling will be available to selected participants that complete the Veterinary Services (VS) Initial Visit questionnaire (NAHMS-219).

The collection will support the following objectives:

- 1) Determine producer awareness of Veterinary Services program diseases and describe management and biosecurity practices important for the control of infectious diseases (including Brucellosis, Scrapie, CAE, Johne's, and Caseous Lymphadenitis). Provide a baseline description of animal health, nutrition, and management practices in the U.S. goat industry.
- 2) Estimate the prevalence of
 - Mycobacterium paratuberculosis (Johne's) infection,
 - Internal parasitism and anthelmintic resistance, and
 - Common causes of mastitis.

¹ The National Animal Health Monitoring System is responsible for collecting national data on animal health and productivity from voluntary participants

² Alabama, California, Colorado, Florida, Georgia, Indiana, Iowa, Kentucky, Michigan, Missouri, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Tennessee, Texas, Virginia, Washington, Wisconsin. State selection document can be found in Background Information section.

- 3) Characterize contagious ecthyma (soremouth) in U.S. goats. Determine producer awareness of zoonotic potential and practices to prevent soremouth transmission, and assess producer interest in an improved vaccine for soremouth.
- 4) Examine factors (i.e., genetic and/or management) that correlate with CAE virus levels.
- 5) Provide a genetic resource and serological bank for future research.

The information collected through the Goat 2009 study will be analyzed and organized into descriptive reports. Several information sheets will be derived from this report and disseminated by APHIS to producers, stakeholders, academia, veterinarians, and other interested parties. Participation in this study is voluntary; it is up to the individual producer to decide whether or not it is desirable to participate.

1. Explain why the collection of this information is necessary.

Collection and dissemination of animal health data and information is mandated by 7 U.S.C. § 391, the Animal Industry Act of 1884³, which established the precursor of the APHIS, Veterinary Services, and the Bureau of Animal Industry. Legal requirements for examining and reporting on animal disease control methods were further mandated by 7 U.S.C. § 8308 of the Animal Health Protection Act, “Detection, Control, and Eradication of Diseases and Pests,” May 13, 2002³.

Collection, analysis, and dissemination of livestock and poultry health information on a national basis are consistent with the APHIS mission of protecting and improving American agriculture’s productivity and competitiveness. In connection with this mission, the NAHMS program includes periodic national commodity studies to investigate animal health related issues and examine general health and management practices used on farms. These studies are driven by industry and stakeholder interest, and information collected is not available from any other source on a national basis. Information about health and management practices on U.S. goat operations is useful to various parts of the goat industry as well as many Federal and State partners.

NAHMS staff has completed a needs assessment which was a collaborative effort with producers, researchers, extension veterinarians, Federal and State personnel, and clinicians. Over 1200 stakeholders responded to the needs assessment, and information gathered was used to determine the study objectives.

National Surveys Providing Baseline Information

The Goat 2009 study is the first of its kind. Baseline information about animal health issues, health and management practices and biosecurity practices on U.S. goat operations are useful to many stakeholders, including producers, researchers, extension veterinarians, Federal and State personnel, and clinicians.

³ 7 United States Code § 391, and 7 U.S.C. § 8308, are available upon request.

The 21 states in the Goat 2009 study will represent 85.3 percent of U.S. January 1, 2008 goat inventory and 78.4 percent of U.S. 2007 goat operations.

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

Data collected, analyzed, and interpreted will be disseminated to a wide variety of constituents⁴. Producers will use the information to compare their operation's animal health and productivity with other herds regionally and nationally. Producer groups and veterinarians will use information derived from analyses to improve preventive measures and information outreach efforts. Pharmaceutical and biologics companies will use the information to plan and develop research and marketing strategies for their products. Extension veterinarians will use the information to identify diseases and disease trends. State and Federal officials, responsible for regulatory veterinary medicine, will use the information to gain a more complete picture of animal health as a basis for program planning and to direct priorities to research. State and Federal officials will use the data to make scientifically based decisions. Public health officials will use the information to estimate the magnitude of health conditions which affect public health. Research scientists will use the information to define current and future animal health issues and direct research programming. Veterinary and agricultural students will use these data to determine the occurrence, potential risk factors, and cost of animal disease as a foundation for training in health management, animal welfare, nutrition, and environmental impacts. The benefit to the industry from Goat 2009 study is scientifically valid national estimates of health and management practices of the nation's goat industry.

APHIS will use the data collected to:

- Establish national and regional production measures for producer, veterinary, and industry reference
- Predict or detect national and regional trends in disease emergence and movement
- Address emerging issues
- Examine the economic impact of health management practices
- Provide estimates of both outcome (disease or other parameters) and exposure (risks and components) variables that can be used in analytic studies in the future by APHIS
- Provide input into the design of surveillance systems for specific diseases
- Provide parameters for animal disease spread models.

⁴ A complete list of publications using NAHMS Goat data is available on the web at <http://www.aphis.usda.gov/vs/ceah/ncahs/nahms/>.

Goat 2009 Study Data Collection Forms

NAHMS-216, General Goat Management Report (CATI) – will be mailed to producers in the 21 States with less than 10 goats, with a follow up telephone interview by a NASS enumerator for non-respondents, to collect data on the producer’s goat inventory, goat management practices, and goat disease knowledge. The questions are a small sub-set of those contained in NAHMS-217 for the larger size goat operations, thus providing base line information on goat operations with one or more head. A unique NAHMS identification number is assigned to each operation. NASS will enter and validate data collected and provide the data file to the APHIS NAHMS in Fort Collins, Colorado.

NAHMS-217, General Goat Management Report (Enumerator) – will be administered to producers with 10 or more goats by a NASS enumerator, to collect data on the producer’s goat inventory, goat management practices, and goat disease knowledge. A unique NAHMS identification number is assigned to each operation. NASS will enter and validate data collected. Names of consenting producers who are interested in the next phase of the study will be provided to the APHIS NAHMS coordinators in each of the 21 States. The complete dataset will be sent to NAHMS in Fort Collins, Colorado.

NAHMS-218, Producer Agreement – will be presented to the participant by the APHIS-designated data collector upon entry into the NAHMS study. This form is designed to increase the participant’s understanding of the study focus, highlight confidentiality safeguards, and explain participation requirements. After completing the form with the participant, it will be signed by the participant and the data collector. One copy of this agreement will be left with the participant and one copy will be retained by the data collector.

NAHMS-219, VS Initial Visit Questionnaire - will be administered to consenting producers by an APHIS-designated data collector to collect data on management practices relating to animal health. Upon completion, the form (without producer contact information such as name or address) will be returned to NAHMS in Fort Collins, Colorado for data entry and validation. A copy will be retained by the data collector to facilitate validation.

NAHMS-221, Fecal Parasite Sample Collection Record –will be used by an APHIS-designated data collector or by the producer to collect fecal samples from individual goats, and to record herd deworming history. The fecal samples will be sent to the University of Georgia Department of Infectious Diseases research laboratory for DrenchRite analysis. This test determines parasite resistance to various deworming drugs – parasite resistance is a major concern for the goat industry. Test results will be returned to NAHMS in Fort Collins, Colorado and will be added to the farm record database. The form will be returned to NAHMS for data entry and validation and a copy will be retained by the data collector to facilitate validation. Results of the testing will be returned to the producers.

NAHMS-222, Johne’s Environment Sample Collection Record –will be used by an APHIS-designated data collector to collect environmental samples and to specify the locations from which the environmental samples were taken. The testing for *Mycobacterium paratuberculosis* will be coordinated by the USDA National Veterinary Services Laboratory (NVSL) in Ames,

Iowa. Test results will be returned to NAHMS and will be added to the farm record database. The form will be returned to NAHMS for data entry and validation and a copy will be retained by the data collector to facilitate validation. Results of the testing will be returned to the producers.

NAHMS-223, Blood Sample Collection Record – will be used by an APHIS-designated data collector to collect blood samples from individual goats, and to specify the breed and age of each goat. The blood samples will be sent to the USDA Agriculture Research Service (ARS) Animal Disease Research Unit laboratory for caprine arthritis encephalitis testing. The blood samples will also be tested for Johne’s disease at USDA NVSL in Ames, Iowa. Test results will be returned to NAHMS and will be added to the farm record database. The form will be returned to NAHMS for data entry and validation and a copy will be retained by the data collector to facilitate validation. Results of the testing will be returned to the producers.

NAHMS-224, Milk Sample Collection Record – will be used by an APHIS-designated data collector or by the producer to collect bulk tank milk samples from dairy goat operations. The milk samples will be sent to the USDA NVSL for analysis of mastitis pathogens. Test results will be returned to NAHMS and will be added to the farm record database. The form will be returned to NAHMS for data entry and validation and a copy will be retained by the data collector to facilitate validation. Results of the testing will be returned to the producers.

NAHMS-225, Johne’s Followup Record – will be used by an APHIS-designated data collector to collect individual fecal samples to verify infection in goats that tested positive for Johne’s on the blood test. The fecal samples will be sent to the USDA NVSL for analysis for Johne’s disease. Test results will be returned to NAHMS and will be added to the farm record database. The form will be returned to NAHMS for data entry and validation and a copy will be retained by the data collector to facilitate validation. Results of the testing will be returned to the producers.

NAHMS-226, Scab Sample Collection Record – will be used by an APHIS-designated data collector or by the producer to collect scab samples from goats suspected of having sore mouth infection. The scab samples will be sent to the Centers for Disease Control (CDC) for analysis for sore mouth virus. Test results will be returned to NAHMS and will be added to the farm record database. The form will be returned to NAHMS for data entry and validation and a copy will be retained by the data collector to facilitate validation. Results of the testing will be returned to the producers.

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.

The data collection for the small producers is conducted via Computer Assisted Telephone Interviews (CATI) via NASS. Personal interviews via NASS enumerators for those producers with 10 or more goats are conducted so that questions from the producer about the entire

program might be better answered and also to personally receive the signed producer consent for those producers indicating further interest in the program. In addition, the Veterinary Medical Officers personally visit the producers to discuss the various biological sampling options with the producer will collect, the personal explanation of how to accomplish the task could not successfully be carried out via telephone.

4. Describe efforts to identify duplication.

Literature searches for existing data relevant to the Goat 2009 study have been performed. Available data were reviewed and compiled from all known sources. Sources reviewed include cooperative State research, private industry and professional publications, diagnostic laboratories, other Federal and State agencies, the American Association of Small Ruminant Practitioners (AASRP), and universities such as the Langston University E (Kika) de la Garza Institute for Goat Research. Personnel from Federal agencies and academia were consulted in their area of expertise to identify areas of potential duplication. No other entity/source is collecting and analyzing this type of information on the health of the U.S. goat industry.

5. If the collection of information impacts small business or other small entities, describe the methods used to minimize burden.

This survey is designed to collect the minimum amount of data required from a minimum number of producers with goats to ensure statistically and scientifically valid data. Industry and producer input is solicited to ensure that information collected is relevant and timely. This is a voluntary study; it is at the discretion of the individual producer to decide whether or not it is desirable for them to participate. Small producers (approximately 2,000 or 36%) with less than 10 goats will receive a small sub-set of those questions on the General Goat Management Report (Enumerator) to minimize burden.

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

The type and quality of data collected by the NAHMS through national on-farm collections is unique, no other entity is collecting this type of information in the U.S.

Without this type of national data, the U.S.' ability to detect trends in management, production, and health status, either directly or indirectly, would be reduced or nonexistent. The possibility of assessing the reduction of risk to human health from food borne pathogens and zoonotic diseases due to management changes based on NAHMS data would also be nonexistent. Furthermore, the ability to respond to international trade issues involving the health status and production practices of the U.S. goat population would be severely reduced, potentially impacting the global marketability of animals, meat and byproducts. Disease spread models would not have the necessary parameters to more accurately predict spread of an outbreak.

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

This information collection is consistent with guidelines established in 5 CFR 1320.5.

- 8. 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 recordkeeping, disclosure, or reporting form, and on the data elements to be recorded, disclosed, or reported. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, soliciting comments on the information collection prior to submission to OMB.**

The NAHMS staff is responsible for developing the basic content of the questions and a reasonable flow through the questionnaire. Upon much iteration a draft is sent to NASS who assumes responsibility for the questionnaire thereafter. This includes review and editing for reasonable content, formatting questions into useable, producer and enumerator friendly terms and arranging questions for the best flow of the interview. Several exchanges of version development occur via Word software and then NASS enters the questionnaire into their QRS system which further standardizes the product. Many conference calls are completed between NAHMS staff and NASS in going over the various versions of the questionnaire. Item codes are then assigned and NASS performs the pretests, at least one in conjunction with the NAHMS staff. Pretest results are discussed via conference call and NASS makes the final updates for the enumerator version. For the VMO data collection, NAHMS is responsible for the materials and NASS provides minimal input.

The Agency's notice of information collection activity was announced in the Federal Register on Monday, September 29, 2008, pages 56543-56544. Fourteen comments were received from the public. The majority of them questioned the need for conducting a study of goats which are mostly found on small farms. However, two commenters thought it was a good idea; one of them even wanted to participate in the study.

- 9. Explain any decision to provide any payment or gifts to respondents, other than remuneration of contractors or grantees.**

There will be no payments or gifts provided to respondents.

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

APHIS will only release study results based on summary estimates from the inference population. Only the NASS designated APHIS confidential agents collecting on-farm data will have knowledge of the participant's identity. All forms, data, and questionnaires will refer to the respondent by a numeric code assigned by NASS. This link between participant and numeric code will be destroyed once data collection, entry, validation and report dissemination are complete. All completed survey forms, without names and other identifying personal information, will be stored securely in a limited access records vault. In follow-on phases agreed

to by respondents, no names, addresses, or other personal information is recorded on the questionnaire, therefore eliminating any connection between completed questionnaires or laboratory results and the respondent's information.

NASS has statutory protection, under Title 7, Section 2276 of the U.S. Code, Confidentiality of Information and additionally through the Confidentiality Information Protection and Statistical Efficiency Act (CIPSEA) of 2002 that guarantees NASS's ability to keep individual farm data and associated producer names and addresses confidential. Acting under the capacity granted to government statistical agencies, NASS designates APHIS personnel as confidential agents which allow access to record level data critical to project scope.

Every NASS employee and designated APHIS personnel that may handle a questionnaire, or data coming from a questionnaire, are required to sign a form certifying they understand the restrictions on the use of unpublished data. These documents reference protections provided by the aforementioned statutory and regulatory protections. Access to record-level data files is always restricted and these files are only accessible by NASS employees or designated APHIS personnel. APHIS designated personnel are never provided access to NASS respondents' name and address without producer consent. APHIS data collection is carried out in the field by veterinary medical officers or animal health technicians under the terminology of APHIS designated data collector.

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

There are no questions of a sensitive nature used in this collection activity.

12. Provide estimates of the hour burden of the collection of information.

- A.** A total of 8,349 burden hours are needed to complete the Goat 2009 study information collection activity. A detailed burden estimate has been included on the enclosed APHIS 71 Form.
- B.** Respondent costs: Estimated respondent costs for the information collection proposed is calculated based on an on-farm data collection estimate of \$10.17 per hour⁵. The total respondent cost for the Goats 2009 Study is \$84,909. (8,349 hours * \$10.17).

13. Provide an estimate of the total annual cost burden to respondents or record keepers resulting from the collection of information (do not include any hour burden shown in items 12 and 14).

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

14. Provide an estimate of annualized cost to the federal government.

⁵ NASS Farm Labor, published report for 2006, released May 18, 2007, available upon request.

The estimated cost to the Federal Government is \$639,675. For more specific information, please see the enclosed APHIS 79 form.

15. Explain the reasons for any program changes or adjustments reported in items 13 or 14 of the OMB form 83-I.

This is a new information collection to investigate current issues and examine management practices of the goat industry. The information collected through this study will be used by APHIS to establish national and regional production measures, predict or detect national and regional trends in disease emergence and movement, address emerging issues, examine the economic impact of health management practices, provide estimates of both outcome and exposure variables that can be used in analytic studies in the future, and provide input into the design of surveillance systems for specific diseases.

16. For collections of information whose results are planned to be published, outline plans for tabulation and publication.

Information from this survey will be summarized immediately following the collection, editing, and cleaning of the data. Data will be entered into a database management system utilizing microcomputers or workstations, and statistical calculations will be performed; e.g., descriptive statistics including frequency distribution, prevalence and point estimates. Variance measures and confidence intervals for the point estimates will be calculated in order to describe the precision of the descriptive statistics generated. SUDAAN software from RTI will be used to correctly calculate the standard error to account for the complex study design. Standard errors will be published along with the point estimates.

Considerable effort has been placed on reducing the time between the end of data collection and release of a final publication. Hardcopy information from the study will be made available to producers, universities, researchers, practitioners, animal health related industries, Federal agencies, legislators, and any other interested party. Copies of current and past information from the NAHMS are available at: <http://nahms.aphis.usda.gov>.

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.

APHIS is not seeking approval to not display the expiration date for OMB approval on the forms used in this collection.

18. Explain each exception to the certification statement identified under “Certification for Paperwork Reduction Act.”

APHIS is able to certify compliance with all provisions of the Act.