

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 BEEF 2007-08

**SUPPORTING STATEMENT FOR INFORMATION COLLECTION BY THE
CENTERS FOR EPIDEMIOLOGY AND ANIMAL HEALTH (CEAH),
NATIONAL ANIMAL HEALTH MONITORING SYSTEM (NAHMS)¹**

REINSTATEMENT OF OMB NUMBER 0579-NEW

NAHMS BEEF 2007-08 STUDY

September 2007

A. JUSTIFICATION

This submission is a request for approval to initiate the National Animal Health Monitoring System's (NAHMS') Beef 2007-08 study, an information collection by the Animal and Plant Health Inspection Service (APHIS). The study will consist of two phases. In phase I, a National Agricultural Statistics Service (NASS) enumerator will contact and conduct interviews with producers (NAHMS-201 General Beef Management Report). Respondents in the top 24 beef States² 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 and two on-farm questionnaires. In addition, biologic sampling will be available to selected participants that complete the Veterinary Services (VS) Initial Visit questionnaire. The collection will support the following objectives:

- 1) Describe trends in beef cow-calf health and management practices
- 2) Evaluate management factors related to beef quality assurance
- 3) Describe record-keeping practices on cow-calf operations
- 4) Determine producer awareness of bovine viral diarrhea (BVD) and management practices used for BVD control
- 5) Describe current biosecurity practices and producer motivation for implementing or not implementing biosecurity practices
- 6) Determine the prevalence and antimicrobial resistance patterns of potential food-safety pathogens

The information collected through the Beef 2007-08 study will be analyzed and organized into descriptive reports. One of the reports will present change over time from previous NAHMS Beef studies. Several information sheets will be derived from this report and disseminated by

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

² Alabama, Arkansas, California, Colorado, Florida, Georgia, Idaho, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Tennessee, Texas, Virginia, Wyoming. State selection document can be found in Background Information section.

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 will collect information that is not available from any other source. Without this study, APHIS would be unable to continue the trends analysis that began with the Cow-calf Health and Productivity Audit (CHAPA) in 1993 that various parts of the industry as well as many Federal and State partners have come to rely on.

NAHMS will initiate the third national data collection for beef cow-calf operations through the Beef 2007-08 study. NAHMS staff has completed a needs assessment which was a collaborative effort with producers, industry, extension specialists, Federal and State personnel, and university researchers. Information gathered through this needs assessment was used to determine the study objectives. The first two studies, four years apart, showed relatively minor changes in practices. Ten years have now elapsed since the last study and stakeholders are seeking updated information.

National Surveys Providing Baseline Information

The Beef 2007-08 study is part of an ongoing series of NAHMS studies on the U.S. beef cow-calf population. The first NAHMS beef cow-calf study was the 1993 Cow-Calf Health & Productivity Audit (CHAPA). The objectives of the study were to provide information on the production and health levels of the United States’ beef cow-calf herd and to suggest factors that may affect morbidity and mortality.

Beef ’97 was the second national on-farm monitoring activity focusing on the beef cow-calf population. Data were collected from the top 23 beef cow States. Beef ’97 obtained information on all phases of production and management on beef cow-calf operations. The APHIS phase of Beef ’97 included the collection of fecal samples which were tested for the presence of *Salmonella*. Blood samples were also collected and evaluated for presence of antibodies to *Mycobacterium avium* subspecies *paratuberculosis* and bovine leukosis virus and levels of

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

copper and zinc. Water samples collected during the study were evaluated for levels of sulfate and other components.

Beef '97 gathered information that described changes in management practices and animal health in cow-calf operations from 1993-97. Beef '97 also identified factors associated with shedding of specific pathogens and described animal health management practices and their relationships to beef cow-calf health. Approximately 85.7 percent of the U.S. beef cow inventory and 77.6 percent of U.S. beef cow-calf operations were represented in the study.

The 24 states in the Beef 2007-08 study will represent 87.8 percent of U.S. beef cows and 79.4 percent of U.S. beef cow-calf 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 specialists 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 the Beef 2007-08 study is scientifically valid national estimates of health and management practices of the nation's beef industry.

APHIS will use the data collected to:

- Establish national and regional production measures (such as average weaning age) 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

⁴ A complete list of publications using NAHMS Beef 1997 data is available on the web at <http://www.aphis.usda.gov/vs/ceah/ncahs/nahms/>.

- 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

Beef 2007-08 Study Data Collection Forms

NAHMS-201, General Beef Management Report – will be administered by a NASS enumerator to collect data on the producer’s cattle inventory, beef cow-calf management practices, and preventive care practices. A unique NAHMS identification number is assigned to each operation. NASS will enter and validate data collected and provide consenting producer reports to the APHIS NAHMS coordinators. The complete dataset will be sent to NAHMS.

NAHMS-202, 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-203, VS Initial Visit Questionnaire - will be administered to consenting producers by an APHIS-designated data collector to collect data on management practices. Upon completion, the form (without producer contact information such as name or address) will be returned to NAHMS for data entry and validation. A copy will be retained by the data collector to facilitate validation.

NAHMS-204, VS Second Visit Questionnaire – will be administered to consenting producers by an APHIS-designated data collector to collect data on management practices and productivity information for the first six months of 2008. Upon completion, the form (without producer contact information) will be returned to NAHMS for data entry and validation. A copy will be retained by the data collector to facilitate validation.

NAHMS-205, Ear Notch Sample Collection Record –will be used by an APHIS-designated data collector to collect information on the animals from which ear notches are being collected. Ear notches will be frozen prior to shipment for overnight delivery to the USDA APHIS NVSL for analysis of bovine viral diarrhea (BVD). Test results will be returned to NAHMS and will be added to the farm record database. Results of the testing will also be returned to the producers.

NAHMS-206, Fecal Sample Collection Record –will be used by an APHIS-designated data collector to collect fecal samples from the environment. The fecal samples will be sent to the USDA Agriculture Research Service (ARS) Bacterial Epidemiology and Antimicrobial Resistance research laboratory for analysis of food safety 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.

NAHMS-207 Parasite Sample Collection Record –will be used by an APHIS-designated data collector to collect information on the animal groups from which fecal samples are being collected. The samples will be submitted to a collaborating laboratory to be tested for parasites. The testing will be coordinated by USDA ARS Bovine Function Genomics research laboratory in Beltsville, MD. Test results will be returned to NAHMS and will be added to the farm record database. 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.

No automated, electronic, or mechanical techniques will be used to collect information for the Beef 2007-08 study. Since biological samples will be collected, an on-farm visit is required and provides an opportunity for the data collector to administer the questionnaire.

4. Describe efforts to identify duplication.

Literature searches for existing data relevant to the Beef 2007-08 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 National Cattlemen’s Beef Association (NCBA), American Association of Bovine Practitioners (AABP), and universities. 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. beef industry.

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

All producers with one or more beef cows in inventory during the NASS visit are eligible for participation in the APHIS data collection phases. This survey is designed to collect the minimum amount of data required from a minimum number of producers with beef cows 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.

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.***

Ten years have passed since the last NAHMS beef cow-calf study and a new look at the health and management practices is needed. In addition, it is imperative that we continue to track disease levels through biologic sample testing. The type, quality, and frequency 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 *E. coli*, *Salmonella*, or *Campylobacter* 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. beef cow population would be severely reduced, potentially impacting the global marketability of animals, meat and byproducts.

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 Agency's notice of information collection activity was announced in the Federal Register on Friday, July 13, 2007, pages 38551-38552. One comment was received but it did not pertain to paperwork.

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 (except in those cases where the producer consents to participation in follow-on studies). 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 12,258 burden hours are needed to complete the Beef 2007-08 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 Beef 2007-08 Study is \$124,664 (12,258 hours * \$10.17).

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

- 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.**

The estimated cost to the Federal Government is \$826,641. 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 collection resulting in a program change of +12,258 hours

- 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. 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://www.aphis.usda.gov/vs/ceah/ncahs/nahms/>.

- 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 in Item 19 "Certification for Paperwork Reduction Act."**

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