

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 FEEDLOT 2011

**SUPPORTING STATEMENT FOR INFORMATION COLLECTION BY THE
CENTERS FOR EPIDEMIOLOGY AND ANIMAL HEALTH (CEAH),
NATIONAL ANIMAL HEALTH MONITORING SYSTEM (NAHMS)¹
OMB NUMBER 0579-0079
NAHMS FEEDLOT 2011**

March 2011

Previous Terms of Clearance/Comments:

In accordance with 5 CFR 1320, the information collection is approved for six months. Upon resubmission, the agency must provide a full explanation of the statistical methodology and the practical utility of both pretests and surveys currently in use. They must also determine whether an inherent difference exists between respondents and non-respondents.

APHIS Response

In Part B, 3. Data Collection Steps, APHIS has two paragraphs addressing differences between respondents and non respondents.

APHIS feels that its methodology is explained well and complete. APHIS is not sure what practical utility of both pretests and surveys means – however, In Part B, 3. Data Collection Steps, APHIS talks about the pretesting done in CO and TX and also mentions it again in question 4. APHIS did not include that two DC NASS representatives and one NAHMS representative joined with a NASS field force to observe the pretesting and discuss with the feedlot representatives.

APHIS thinks the list of consultants who have reviewed the questionnaires and provided input is quite extensive and speaks to the practical utility of the pre-tests and surveys.

Data Collection Steps:

- ☐ Pretesting will take place in the States of Colorado and Texas during the week of April 4, 2011.
- ☐ The NASS enumerators will complete NAHMS-264 for the 1,000 or more head capacity feedlot sample, and ask eligible producers to sign the consent form during the period August 1-30, 2011.
- ☐ The NASS telephone interviewer, via CATI, will complete NAHMS-265 for the less than 1,000 head capacity feedlot sample during the period August 1-30.

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

²Iowa, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, Pennsylvania, South Dakota, Texas, Wisconsin. State selection document can be found in Appendix A.

³Arizona, California, Colorado, Idaho, Iowa, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, Washington. State selection document can be found in Appendix A.

- 2 The APHIS-designated data collectors will administer NAHMS-266 to consenting producers from October 3 through December 9.

A. Justification

This submission is a request for a reinstatement of the National Animal Health Monitoring System (NAHMS), a previously approved information collection by the Animal and Plant Health Inspection Service (APHIS). The Feedlot 2011 Study is the third study of the beef feedlot industry with previous studies conducted in 1994 and 1999. The study will consist of two components. The first component is for feedlots with fewer than 1,000 head. NAHMS-265, Feedlot 2011 General Management Questionnaire, will be administered via Computer Assisted Telephone Interviews (CATI) by National Agricultural Statistics Service (NASS) telephone interviewers to feedlot operators in 13 States² that cover 85.39 percent of the feedlots with fewer than 500 head and 90.54 percent of the feedlots with fewer than 500 head inventory.

The second component is for feedlots with 1,000 head or more capacity, using a typical two phase study approach. In phase I, NASS enumerators will contact and conduct personal interviews with producers (NAHMS-264 Feedlot 2011 General Management Questionnaire, (Enumerator)) in 12 States³ that cover approximately 97 percent of feedlots with cattle on feed in the 1,000+ head category. Respondents will be asked to sign a consent form allowing NASS to present the respondent's name to the APHIS- designated data collector for continuation in the study. Phase II (APHIS phase) will consist of a personal visit by a Veterinary Medical Officer (VMO) who will administer the producer agreement (NAHMS 266) and on-feedlot questionnaires (NAHMS 267 and 268). In addition, biologic sampling (NAHMS-269 Feedlot 2011 Fecal Sample Collection and Submission Record) will be available to selected participants that complete the Feedlot 2011 Initial VS Visit Questionnaire. NAHMS-268, Feedlot 2011 Second VS Visit Questionnaire will also be administered to participants. The Feedlot 2011 collection will support the following objectives:

1. Describe changes in management practices and animal health in feedlots.
2. Describe the management practices in feedlots that impact product quality.
3. Identify factors associated with shedding of potential foodborne pathogens or commensal organisms by feedlot cattle.
4. Describe antimicrobial usage in feedlots.
5. Describe biosecurity practices and capabilities in feedlots.

The information collected through the Feedlot 2011 Study will be analyzed and organized into descriptive reports. One of the reports will present information on changes in health and management over time from previous NAHMS Feedlot studies. Several information sheets will be derived from these reports and disseminated by APHIS to producers, academia, veterinarians, and other stakeholders. 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, as 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, 2002².

Collection, analysis, and dissemination of livestock and poultry health information on a national basis are consistent with APHIS’ mission of protecting and improving American agriculture’s productivity and competitiveness. In connection with this mission, the NAHMS program includes periodic national studies of poultry and livestock production systems to investigate animal health related issues and examine general health and management practices used on farms. These studies are driven by industry and other stakeholder interest, and will collect information that is not available from any other source. Without this study, APHIS would be unable to continue trends analyses that 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 feedlot operations through the Feedlot 2011 Study. NAHMS staff has completed a needs assessment which was a collaborative effort with producers, industry, extension specialists, Federal and State personnel, university researchers and the general public. Information gathered through this needs assessment was used to determine the study objectives. Twelve years have now elapsed since the last feedlot study and stakeholders are seeking updated information.

National Surveys Providing Baseline Information

The Feedlot 2011 Study is part of an ongoing series of NAHMS studies on the U.S. beef feedlot population. The first NAHMS beef feedlot study was the 1994 Cattle on Feed Evaluation (COFE). The objectives of the study were to provide baseline information on the production and health levels of the United States’ beef feedlot cattle. Data were collected from both small and large size feedlots.

The second NAHMS feedlot study was the Feedlot ’99 Study. Data were collected on cattle health and health management practices from the top 12 beef feedlot States³. The Feedlot ’99 Study gathered information that described changes in management practices and animal health during the period August 16, 1999 through September 22, 1999 for enumerator baseline collected data and from October 12, 1999 through January 7, 2000 for VMO collected data. Other objectives of the Feedlot ’99 Study were to; identify factors associated with shedding of specific pathogens and describe animal health management practices and their relationships to feedlot cattle health. Approximately 96.1 percent of the U.S. cattle on feed in feedlots with a 1,000 head or more capacity and 84.9 percent of U.S. feedlot operations with a 1000-head or more capacity were represented in the study.

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

³ Arizona, California, Colorado, Idaho, Iowa, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, Washington

For the Feedlot 2011 Study, data will be collected from both large (capacity of 1000 head or more) feedlots and from the small size feedlots (capacity fewer than 1000 head). In the United States on January 1, 2011 there were 14.0 million head of cattle on feed in all size feedlots which totaled 77,140. The 1,000+ head capacity lots had 11.5 million head or 82.1 percent of all cattle on feed which were in 2.8 percent of all feedlots in the US. Individual State-level inventory estimates were published for 11 of the 12 States that will be included in the Feedlot 2011 Study. The 11 States accounted for 96.2 percent of the inventory in feedlots with 1,000+ head capacity; therefore the 12 State coverage for the large feedlot component of the study is approximately 97 percent of cattle on feed in 1,000+ head capacity feedlots. The number of feedlots is no longer published on an individual State basis. NASS no longer publishes State-level estimates for the number of cattle on feed in lots with less than 1,000 head capacity. To approximate coverage of the 13 States in the small capacity feedlot component of the study we used the 2007 Census of Agriculture data for farms reporting less than 500 head of cattle on feed. The 13 States selected represent 85.4 percent of the farms in the U.S. with less than 500 head of cattle on feed and these farms have 90.5 percent of the US inventory on farms with less than 500 head of cattle on feed.

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 stakeholders⁴. Producers will use the information to compare their operation's animal health and productivity with other feedlots 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 target producer education programs. 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 research priorities. State and Federal officials will use the data to make scientifically based policy 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 Feedlot 2011 Study is scientifically valid national estimates of health and management practices of the nation's beef feedlot industry.

APHIS will use the data collected to:

⁴ A complete list of publications using NAHMS Feedlot 1999 data is available on the web at: http://www.aphis.usda.gov/animal_health/nahms/feedlot/index.shtml#feedlot99.

- 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 variables (risks) that can be used in analytic studies in the future by APHIS,

Provide input into the design of surveillance systems for specific diseases.

Feedlot 2011 Study Data Collection Forms

NAHMS-264, Feedlot 2011 General Management Questionnaire (Enumerator) – will be administered at feedlots with 1,000 head or more capacity by a NASS enumerator to collect data on the feedlot inventory, cattle on feed 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-265, Feedlot 2011 General Management Questionnaire (CATI) – will be administered to producers on operations with fewer than 1,000 head capacity of cattle on feed via computer assisted telephone interview by a NASS enumerator in the 13 States. A subset of questions from NAHMS 264 for large feedlots will be used to collect data on inventory and feedlot management practices. The questions will provide baseline information on feedlots with less than one thousand head capacity. 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. Completion of this interview will conclude these operators participation in the Feedlot 2011 Study.

NAHMS-266, Producer Agreement – will be presented to the potential participant that consented to be contacted by the APHIS designated data collector to discuss further participation in the NAHMS study. This form is designed to increase understanding of the study focus, highlight confidentiality safeguards, and explain participation requirements and benefits. 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-267, Feedlot 2011 Initial VS Visit Questionnaire - will be administered by an APHIS-designated data collector to producers on operations with more than 1000 head capacity that signed the producer agreement. The form includes questions about inventory, management practices, animal movement and health problems of the cattle. 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-268, Feedlot 2011 Second VS Visit Questionnaire – will be administered by an APHIS-designated data collector to consenting producers on operations with more than 1000 head capacity to collect data on management practices and productivity. 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-269, Feedlot 2011 Fecal Sample Collection and Submission Record –will be used by an APHIS-designated data collector to collect data on the specific pens of cattle where fecal samples will be collected. The fecal samples will be sent to the USDA Agriculture Research Service (ARS) Bacterial Epidemiology and Antimicrobial Resistance Research Unit for culture and characterization of potential food safety pathogens and commensal organisms. 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.

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 feedlots will be conducted via Computer Assisted Telephone Interviews (CATI) by NASS. The collection of basic, limited feedlot management and health information via this method has proven successful and efficient for previous studies that require information on small size operations which account in total for a relatively small proportion of the total animals in the entire study inference population.

4. Describe efforts to identify duplication.

Literature searches for existing data relevant to the Feedlot 2011 Study have been performed. Available data were reviewed and compiled from known sources. Sources reviewed include cooperative State research, private industry, professional publications, diagnostic laboratories, other Federal and State agencies, the National Cattlemen's Beef Association (NCBA), American Association of Bovine Practitioners (AABP), universities, and others. 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. feedlot industry.

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

Several attempts to reduce the burden on small size feedlots have been incorporated. Only a subset of questions used for the larger feedlots will be asked of the small feedlots. This subset of questions will be collected via a short computer assisted telephone interview. Those completing the questionnaire by computer assisted telephone interview can do so in less than 30 minutes. In addition, many skips within the questionnaire have been incorporated to reduce respondent burden and frustration.

Both the small and large feedlot components of the study are designed to collect the minimum amount of data required from a minimum number of feedlots with cattle on feed for the slaughter market to ensure statistically and scientifically valid data to fill the most critical information gaps identified by the stakeholders. 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 him/her to participate.

Seventy percent of the participants will be small businesses.

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.

Twelve years have passed since the last NAHMS feedlot study and a new look at the health and management practices of U.S. feedlots is needed as evidenced by requests from stakeholders. An update of the key indicators for health, productivity and management practices is needed which will contribute to an evaluation of trends with the studies done in 1994 and 1999. In addition, it is imperative that we continue to track prevalence and characteristics of potential food safety pathogens through biologic sample testing in order to contribute to efforts to protect and improve public health and animal health. 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*, *Campylobacter*, *enterococcus*, or *C. difficile* 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. cattle on feed 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.

- **requiring respondents to report information to the agency more often than quarterly;**

- **requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
- **requiring respondents to submit more than an original and two copies of any document;**
- **requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;**
- **in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- **requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
- **that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**
- **requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

No special circumstances exist that would require this collection to be conducted in a manner inconsistent with the general information collection guidelines 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.

In 2011, APHIS engaged in productive consultations with the following individuals in connection with the information collection activities associated with its programs:

Dr. Dave Smith
 Veterinary and Biological Sciences
 University of Nebraska – Lincoln
 124 Veterinary and Biological Sciences
 Lincoln, NE 6853-0905
 (402) 472-2362.

Dr. Rod Moxley
Institute of Agriculture and Natural Resources
School of Veterinary Medicine and Biomedical Sciences
P.O. Box 830905
East Campus Loop and Fair Street
Lincoln, NE 68538-0905
(402) 472-2952.

Dr. Elizabeth Parker
Chief Veterinarian
National Cattlemen's Beef Association
1301 Pennsylvania Avenue NW, Suite 300
Washington D.C. 20004
(202) 347-0228.

On Thursday, February 17, 2011, pages 9319-9320, APHIS published in the Federal Register a Reinstatement notice of a previously approved collection and request for comment. APHIS received 2 comments. One indorsed the study and the other complained of the work that APHIS does. Neither comment affected the paperwork burden.

CEAH also consulted with the National Agricultural Statistical Service (NASS) during the preparation of this collection.

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 for the inference population. Only the NASS designated 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 under CIPSEA, NASS designates APHIS personnel as their agents which allows 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 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 2,908 burden hours are needed to complete the Feedlot 2011 Study over the three year clearance period for this information collection. A detailed burden estimate has been included on the enclosed APHIS 71 Form.
- B. Respondent costs: Estimated respondent costs for the information collection proposed are calculated based on a data collection estimate of \$10.91 per hour.⁵ The total respondent cost for participating in the Feedlot 2011 study is \$31726.28. (2,908 hours * \$10.91).

\$10.91 is the hourly rate derived from the U.S. Department of Labor, Bureau of Labor Statistics May 2008 Report - Occupational Employment and Wages in the United States. See <http://www.bls.gov/news.release/ocwage.t03.htm>

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.

⁵ NASS Farm Labor, published report for 2006, released November 20, 2009, available upon request.

14. Provide an estimate of annualized cost to the Federal Government.

The estimated cost to the Federal Government to complete the Feedlot 2011 Study is \$211,313.24. The estimated annualized cost to the Federal Government is \$70,437.75 per year (211,313.24/3). 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 reinstatement of collection 0579-0079. There is a program change of -11,430 annual responses and -7,546 burden hours since the last study was conducted in 2000.

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, validation, and editing 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 and measures of association generated. Standard errors will be published along with the point estimates. Measures of association between the outcomes and potential risk factors will be published.

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 stakeholders. All information products will also be available in electronic format via the internet on the USDA website. Copies of current and past information from the NAHMS are available at:

http://www.aphis.usda.gov/animal_health/nahms/index.shtml

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 an exemption to display the expiration date for OMB approval.

18. Explain each exception to the certification statement identified in the Paperwork Reduction Act.”

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