

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 DAIRY HEIFER RAISER 2010

**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 DAIRY HEIFER RAISER 2010 Study**

December 2010

A. JUSTIFICATION

This submission is a request for approval to initiate the National Animal Health Monitoring System's (NAHMS) Dairy Heifer Raiser 2010 Study, an information collection by the Animal and Plant Health Inspection Service (APHIS). The study will be conducted with the assistance of State Animal Health Officials. The study has 3 objectives that will be addressed using a farm-level questionnaire administered to dairy heifer raisers in participating States.

The collection will support the following objectives:

1. Provide the first comprehensive information on animal health and management practices for heifer-raising operations
2. Evaluate the biosecurity risks associated with heifer-raising operations (e.g. commingling cattle from multiple operations, exposing young cattle to Mexican cattle) and
3. Assist in the development of a biosecurity assessment that can be used to evaluate the risk of disease transmission (e.g. Tuberculosis, Bovine Viral Diarrhea, etc)

The information collected through the Dairy Heifer Raiser 2010 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 heifer raiser 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 1884,² which established the precursor of 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.

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

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

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.

The Dairy Heifer Raiser 2010 Study is unique in that a 'list' of dairy heifer raisers does not exist at a National level. NAHMS is partnering with State Animal Health Officials in identifying and surveying these producers. Information about health and management practices on dairy heifer raising operations is useful to the dairy industry as well as many Federal and State partners. In fact, in 2004, the U.S. Animal Health Association Tuberculosis strategic planning committee recommended conducting a descriptive analysis of the dairy heifer-raising industry:

"This information is critical if education efforts regarding risk factors and practices that promote spread of bovine tuberculosis and other disease are to be focused toward this segment of the industry."

National Surveys Providing Baseline Information

The Dairy Heifer Raiser 2010 Study is part of an ongoing series of NAHMS studies on the US dairy population. The first NAHMS dairy study, which provided a dairy health and management baseline, was conducted in 1991. The National Dairy Heifer Evaluation Project (NDHEP), 1991-92, provided an overview of dairy herd management practices, morbidity and mortality concentrating on the preweaned heifer. The objectives of the study were to provide information on the production and health levels of the United States' dairy herd, and to suggest factors that may affect morbidity, and mortality in preweaned heifers. Subsequent studies, focusing on all ages of animals, were performed in 1996 and 2002.

Dairy 1996: NAHMS' second national on-farm dairy monitoring activity. Data were collected from operations in 20 of the largest dairy-producing states. Dairy '96 obtained baseline information on all phases of dairy production and management. The sub-sampling phase of Dairy '96 collected fecal and blood samples which were tested for the presence of *Mycobacterium avium* subspecies *paratuberculosis*, *Salmonella*, *Escherichia coli*, and other dairy pathogens which have an economic impact on dairy operations.

Dairy 2002 gathered information that described changes in management practices and animal health in dairy operations from 1991-92 and 1996 to 2002. Data were collected from operations in 21 states to describe management practices on dairy operations. Dairy 2002 also identified factors associated with shedding of specific pathogens, described antimicrobial usage, and described animal health management practices and their relationships to dairy health.

The Dairy 2007 study focused on issues important to the dairy industry. Calf health, including colostrum management and passive transfer of immunity were objectives of the study. Additional topics included an evaluation of cow comfort, including measuring hygiene and hock scores on dairy operations. Additionally, diseases of concern that were evaluated included Bovine Viral Diarrhea, paratuberculosis, and contagious mastitis pathogens. The study included an update on antimicrobial use and the prevalence of potential food safety pathogens while reproductive practices were evaluated for the first time.

The Dairy 2007 study was conducted in 17 of the Nation's major dairy States³ and provided participants, stakeholders, and the industry as a whole with valuable information representing 79.5 percent of U.S. dairy operations and 82.5 percent of the U.S. dairy cows. These 17 States will be included in the targeted for participation for the Dairy Heifer Raiser 2010 Study. Since the number of heifer raising operations is not known, National estimates will not be generated. However, this survey will generate the first comprehensive estimates on the health and management of heifer raising 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 constituents.⁴ Producers will use the information to compare their operation's animal health and productivity with other operations 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 research priorities. 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 Dairy Heifer Raiser 2010 Study is the availability of information on health and management practices of the Nation's dairy industry.

APHIS will use the data collected to:

- Provide the first comprehensive information on animal health and management practices for heifer-raising operations

³ Major U.S. Dairy States are California, Idaho, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, New Mexico, New York, Ohio, Pennsylvania, Texas, Vermont, Virginia, Washington, and Wisconsin

⁴ A complete list of publications using NAHMS dairy data is available on the Web at <http://nahms.aphis.usda.gov>

- Evaluate the biosecurity risks associated with heifer-raising operations (e.g. commingling cattle from multiple operations, exposing young cattle to Mexican cattle)
- Assist in the development of a biosecurity assessment that can be used to evaluate the risk of disease transmission (e.g. Tuberculosis, Bovine Viral Diarrhea, etc)
- Assist in the development of the USDA-APHIS-VS TB Program

DAIRY HEIFER RAISER 2010 Study Data Collection Form

NAHMS-242, Dairy Heifer Raiser Questionnaire, will be administered to heifer raisers via personal interview by a State or APHIS-designated data collector. The questionnaire will collect information on health and management practices of heifer raising operations. Data will be collected directly via the form. The form will be returned to NAHMS for data entry, validation, and analysis. Respondent burden for each heifer raiser is estimated to be 1.5 hours.

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.

Respondents will complete the Dairy Heifer Raiser Questionnaire using the form.

4. Describe efforts to identify duplication.

Literature searches for existing data relevant to the Dairy Heifer Raiser 2010 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 Bovine Practitioners (AABP), and universities. Personnel from Federal agencies and academia were consulted in their areas of expertise to identify potential duplication. No other entity/source is collecting and analyzing this type of information on the management and health of dairy heifer raising industry on a national scale.

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

These surveys are designed to collect the minimum amount of data required from heifer raisers. 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 heifer raiser to decide whether or not it is desirable to participate. This study will not have a significant economic impact on small entities and will affect only 10 percent of the participants surveyed.

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 NAHMS is unique; no other entity is collecting this type of information in the U.S.

Without this type of data, the 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 foodborne 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. dairy 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 predict more accurately the 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

- **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.**

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 Thursday, August 26, 2010, pages 52504-52505. No comments were received.

Experts who were consulted:

Dr. Tom Earleywine, Director of Nutritional Services, Land O'Lakes Animal Milk Products, P.O. Box 64404, MS 5710, St. Paul, MN 55164-0404, 608-206-7264

Dr. Don L. Gardner, 1751 Gardner Farm Rd., Huddleston, VA 24104, 540-297-7444

Dr. Jud Heinrichs, Professor of Dairy Science, Penn State University, 324 Henning Building University Park, PA 16802, 814-863-3916

Dr. Ernest Hovingh, Extension Veterinarian, 111 Henning Building, University Park, PA 16802, 814-863-8526

Dr. Pam Hullinger, Associate Professor, Clinical Epidemiology, University of California, Davis Department of Veterinary Medicine and Epidemiology, One Shields Avenue, Davis, CA 95616 530-752-5273

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 State or APHIS-designated data collector 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 the individual State. 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 and the respondent's information.

Access to record-level data files is always restricted and these files are only accessible by designated APHIS personnel.

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 752 burden hours are needed to complete the Dairy Heifer Raiser 2010 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 are calculated based on a data collection estimate of \$10.83 per hour. The total respondent cost for the Dairy Heifer Raiser 2010 Study is \$8,144.16. (752 hours * \$10.83). Costs were derived from the NASS Farm Labor published report for 2009, released May 20, 2010, and 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 \$63,919.77. 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.

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, or transferred if captured electronically via web-based instrument, 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. Publications from this study are expected in late 2011. 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 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 form 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.