



United States  
Department of  
Agriculture

National Agricultural  
Statistics Service

October 2019



# National Animal Health Monitoring System (NAHMS)

## Goat 2019 Study General Goat Management Questionnaire (GGMQ)

### Interviewer's Manual

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0354. The time required to complete this information collection is estimated to average from .17 – 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

**NAHMS-  
Date**



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# Chapter 1 – General Information

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## BACKGROUND

The Goat 2019 Study is being conducted jointly by the National Agricultural Statistics Service (NASS) and the National Animal Health Monitoring System (NAHMS). NAHMS is an information gathering and disseminating organization within the Animal and Plant Health Inspection Service (APHIS), an agency of the U.S. Department of Agriculture.

The purpose of the NAHMS program is to collect and analyze animal health data to provide scientifically sound and current information on the health status of U.S. livestock and poultry. The information is intended to benefit both livestock Producers (by facilitating efficient production and animal welfare) and the general public (by facilitating a safer and higher-quality food supply). Special emphasis is placed on obtaining valid estimates of management practices, production levels, and disease status of the national herd.

The NAHMS program is not designed to detect, regulate, or eradicate major epidemic diseases, but rather to learn about other less-well-known health problems and food safety and quality issues. As the food-animal industry grows more sophisticated, and production becomes more concentrated in large, confined facilities, demand increases for information on the impact of health problems. These problems are often related to animal genetics, herd management practices, the environment in which the herd is located, and exposure to infectious agents. The NAHMS program attempts to measure the occurrence of these conditions and to report the findings to the livestock industry, as well as to the general public. Additionally, as the livestock industry addresses concerns with food quality and food safety, it needs valid information on which to base decisions.

The NAHMS program compiles some of its information from sources other than surveys of Producers. These sources include other government agencies, livestock industry organizations, and universities. Surveys of livestock Producers are conducted to assemble data that are not available elsewhere.

NAHMS was started in 1983. In the first few years after it was established, animal health and economic data were collected for various types of livestock through several State programs. Since 1989, surveys have been national in scope and have focused on hogs from farrowing to market, dairy cattle, cow-calf operations, cattle-on-feed operations, equids, catfish, poultry, goats and sheep. NASS State offices and NASDA field enumerators were involved in most of these projects.

In 2009, NAHMS conducted its first goat study. The NAHMS Goat 2019 Study will be the second study of the goat industry.

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## HOW NAHMS GOAT STUDY INFORMATION IS USED

Information gathered in NAHMS surveys is used to:

- Provide information to individual goat Producers to enhance goat health and production.
- Help goat Producers and their private veterinarians identify health problems and take early action.
- Recommend changes in goat-management practices that will reduce health problems.
- Identify specific health-care studies and research projects that need to be conducted.
- Provide industry groups with baseline information regarding their industry on a national level.
- Allow small ruminant research funding agencies to understand potential priorities for further investigation of small ruminant health and management.
- Define health-care areas that need more emphasis in veterinary and goat owner education programs.
- Help scientists identify the most costly goat health problems.
- Help drug companies decide which new products to develop.
- Assist government policy-makers in decisions affecting the food-animal industry.
- Benefit consumers by facilitating more efficient production of quality meat, milk, and other products.

**Some of these points (especially the first two) may be useful in persuading a reluctant Producer to participate in the survey.**

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## **PURPOSE OF THE NAHMS GOAT 2019 STUDY**

The NASS component of Goat 2019 focuses on goat health and management practices used on goat operations. It will allow us to evaluate changes in goat health and management as they relate to control of infectious diseases and other management strategies. The cost of gastrointestinal parasite testing is one of the economic aspects of goat health management emphasized in the NASS component of Goat 2019. Background information, including goat inventory, will allow us to evaluate health and management factors at the national and regional level.

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## **OBJECTIVES OF THE NAHMS GOAT 2019 STUDY**

- Describe changes in animal health, nutrition, and management practices in the U.S. goat industry from 2009-2019
- Describe practices Producers use to control internal parasites and reduce anthelmintic resistance
- Describe antimicrobial stewardship on goat operations and estimate the prevalence of enteric microbes and antimicrobial resistance patterns
- Describe management practices associated with, and Producer-reported occurrence of, economically important goat diseases
- Provide a serologic and DNA bank for future research

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## **BENEFITS OF PARTICIPATION IN THE NAHMS GOAT 2019 STUDY**

The information collected will be useful to individual Producers, the goat industry, animal health officials, and veterinary groups.

### **Benefits to Individual Producers**

1. Participating Producers will receive a variety of reports and information sheets that will enable them to compare their operation—including management decisions and practices—with others in the goat industry. These publications will present study data on national, regional, and operation-size basis for general management and production topics as well as specific health-related issues.

2. Participating Producers will receive an educational packet of information:

- “How fecal egg counts can help you fight parasites”
- “What is FAMACHA?”
- “Coccidiosis: Symptoms, Prevention and Treatment”
- “Sore mouth in Humans” from CDC
- “Caseous Lymphadenitis Management”
- “Should I Genotype my Goats?”
- “Keeping Visitors Safe at your Agritourism Business”
- “Veterinary Feed Directive – What does it mean to sheep and goat Producers?”
- “Caprine Arthritis Encephalitis”

3. Receive biological test results for:

- Genetic tests to determine alleles associated with scrapie resistance
- Gastrointestinal parasites and resistance to dewormers
- Fecal microbial (*E coli*, *Campylobacter*, and *Salmonella*) cultures

### **Benefits to the Goat Industry**

1. Enhance awareness of the industry and provide a more thorough knowledge base about goat health and management.

- General management and feeding practices by the type and size of operation.
- Knowledge of current disease prevention and biosecurity practices on goat operations.
- Knowledge of the occurrence of diseases important to productivity.
- Goat and goat-milk marketing strategies used by Producers.
- Types of fiber produced and methods for marketing.

The preceding items will provide goat industry groups the background needed to guide Producer education and ultimately improve the health and productivity of goats in the United States.

2. Increased awareness and knowledge of the industry and diseases important to the industry, which will promote research interest and guidance for topics at veterinary schools.

### **Benefits to Veterinary Services, Universities, and Researchers**

For practitioners, universities, industries, and media involved with the goat industry, descriptive reports summarizing all data along with prevalence data will be available for comparative analysis and interpretation.

- Information collected will provide basic parameters for animal disease models, including those used to plan for handling outbreaks of foreign animal diseases.
- Veterinary Services personnel will have a better understanding of the spectrum of the goat industry and a baseline for industry knowledge in the event of an emergency response.
- The information collected will help to characterize the needs for further research and education.
- Researchers will use the background information provided by this study on the goat industry to support grant applications.
- Describing the use of gastrointestinal parasite prevention methods nationally will provide useable information for the Southern Consortium of Small Ruminant Parasite Control

The following Goat 2019 Information Sheet (project launch sheet) and Goat 2019 Timeline and Biological Benefits Sheet (next 4 pages), produced by APHIS-Veterinary Services, provides more information about the Goat 2019 Study. These sheets were mailed to the sampled operations along with the pre-survey letter.





## When is the study and how is it conducted?

As previously mentioned, goat producers with an inventory of at least 5 adult goats in 25 of the major goat-producing States will be asked to participate. Producers that choose to complete both phase I and phase II of the study will be offered free biologic testing.

Phase I—In July 2019, NASS representatives will contact potential participants. Producers that choose to participate will be administered a questionnaire and asked if they would like to continue to phase II.

Phase II—Beginning in September 2019, goat producers who agreed to continue in the study will be contacted by APHIS or State veterinary health professionals to schedule an in-person interview and collect biologics. Free biologic testing will include pre- and postdeworming fecal parasite egg counts, scrapie resistant genotyping, and *Salmonella*, *E. coli*, and *Campylobacter* culture results. Data collection will end in December 2019.

“Data collection, management practices, research direction, and marketing strategies are all vital for the well being of our goat industry. This NAHMS study is a critical part of the future development and advancement of our industry. Please take the time to accurately complete the study which will provide each participant specific information about the health of their flock as well as providing a quantum leap forward for our entire industry.”

—Tom Boyer  
Producer and Past President of the American Goat Federation

## Benefits to participating

Producers that fully participate in the NAHMS Goat 2019 study will receive free

- Fecal-egg count reduction test results for gastrointestinal parasites,
- Scrapie-resistant genotyping, and
- *Salmonella*, *E. coli*, and *Campylobacter* fecal culture results.

The industry will benefit from

- Current and scientifically valid estimates of management practices and disease prevalence,
- Important information regarding trade and the overall health of the goat industry; and
- Data that will help policymakers and industry to make informed decisions, while at the same time helping researchers and others identify vital issues related to goat health and productivity.

## Confidentiality

Because NAHMS relies on voluntary participation, the privacy of every participant is protected. Only those collecting the data know the identity of respondents. No name or contact information will be associated with individual data, and no data will be reported in a way that could reveal the identity of a participant. Data are presented only in an aggregate manner.

“...in addition to providing useful feedback to participants about the health status of their goats, the information from this study will play a critical role in prioritizing [goat] research needs and justifying research dollars...”

—Joan Dean Rowe, DVM  
American Dairy Goat Association member and breeder

## A scientific approach

NAHMS collects and reports accurate and useful information on animal health and management in the United States. Since 1990, NAHMS has developed national estimates on disease prevalence and other factors related to the health of U.S. beef cattle, sheep, goats, dairy cattle, swine, equine, poultry, and catfish populations.

The science-based results produced by NAHMS have proven to be of considerable value to the U.S. livestock, poultry, and aquaculture industries as well as to other animal health stakeholders.

NAHMS studies are:

- National in scope,
- Science based,
- Statistically valid,
- Collaborative,
- Voluntary, and
- Confidential.

For more information, contact:

USDA-APHIS-VS-CEAH-NAHMS  
NRRRC Building B, M.S. 2E7  
2150 Centre Avenue  
Fort Collins, CO 80526-8117  
970.494.7000  
Or visit NAHMS at <http://www.aphis.usda.gov/nahms>  
#786.1018

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# National Animal Health Monitoring System (NAHMS) 2019 Goat Study Timeline

July - August 2019

## NASS<sup>1</sup> Visit

- **General Goat Management Questionnaire**
- **Consent Form<sup>2</sup>**

September - December 2019

## Veterinary Services (VS) Visit

- **Producer Agreement<sup>3</sup>**
- **VS Questionnaire**
- **Agritourism Questionnaire (if applicable)**
- **Biologic Testing:**

**Internal Parasite Test:** Pre- and post-deworming fecal egg counts and egg count reduction tests will give you information about dewormer resistance on your operation. Do not deworm 60 days prior to VS Visit.

**Scrapie Genetic Test:** DNA based blood test to identify genetic resistance/susceptibility to scrapie.

**Enteric Microbe Test:** Detection of *E. coli*, *Salmonella*, *Campylobacter*, *Giardia*, and *Cryptosporidium* in your goats.

***Mycoplasma ovipneumoniae* (M. ovi) Test:** Nasal swab to test for the bacterium *M. ovi*.

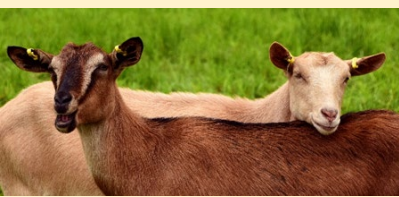
December 2019 -  
onwards

## Reports

- **Producer Reports:** Operation specific biologic results mailed to the producers approximately 3 months post-collection
- **Data Analysis**
- **Descriptive Reports**



To learn more and access reports, visit [www.aphis.usda.gov/naahms](http://www.aphis.usda.gov/naahms) or scan the QR code above.



# NAHMS 2019 Goat Study



## Free Biological Testing Total Savings of up to \$2,467



### Internal Parasite Test\*

You Save: \$532

**Test includes:**

Pre- and post-deworming fecal egg counts and egg count reduction tests will give you information about dewormer resistance on your operation. **Do not deworm 60 days prior to VS Visit.**

### Scrapie Genetic Test\*

You Save: \$450

**Test includes:**

DNA based blood test to identify genetic resistance/susceptibility to scrapie.

### Enteric Microbe Test\*

You Save: \$1,485

**Test includes:**

Detection of *E. coli*, *Salmonella*, *Campylobacter*, *Giardia*, and *Cryptosporidium* in your goats.

\* Biological testing costs includes: Diagnostic testing and an interpretive report of results  
\* Values based on estimated national average cost at diagnostic laboratories for the sampling of 15 goats  
\* Results are confidential



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## OVERVIEW OF NASS DATA COLLECTION (PHASE I)

Goat 2019 NASS on farm interviews will take place from July 1 through August 9, 2019 in 25 major goat States. A random sample of 4,770 operations with five or more adult goats will be taken. State offices will mail a pre-survey letter, the Goat 2019 Information Sheet (project launch sheet), and the Goat 2019 Timeline and Biological Benefits Sheet to sampled operations. The office will provide you with copies of the informational material so that you may refer to them during the interview.

To be eligible to complete the questionnaire, Producers must have had at least five adult goats on the premises on July 1, 2019.

Enumerators will contact these operations to schedule a face-to-face interview with the facility operations (owner or manager).

**The last page of the GGMQ is Section J—Office Use. All operations should have this section filled out, even if they are ineligible for the study, refuse, or are inaccessible.**

***Information provided in this manual will focus on Phase I of the study, the General Goat Management Questionnaire (GGMQ), and your role in the data-collection process.***

At the conclusion of the GGMQ interview, enumerators will ask Producers who complete the GGMQ to sign a consent form that gives NASS written permission to release the Producer's name and contact information to APHIS-VS-NAHMS for possible participation an additional farm visit and biological sampling (see Chapter 3). In trying to obtain the signed consent form, enumerators will briefly talk about the VS phase (Phase II) of the project and will provide the Producer with informational material that explains Phase II and the benefits of participation in this phase of the project. Detailed information is provided in Chapter 3.

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## OVERVIEW OF NAHMS DATA COLLECTION (PHASE II)

Phase II of the NAHMS 2019 Goat Study will take place September 9 through December 15, 2019, and involves a face-to-face interview by a Veterinary Medical Office (VMO) and optional participation in biological sample collection to test for pathogens and genetic resistance to scrapie, collect fecal samples for parasite and microbe testing, and collect blood and DNA for future research.

Operations with 5 or more adult goats on July 1, 2019, that completed the GGMQ (Phase I of the study) are eligible to continue to Phase II. If the Producer is interested in learning more about Phase II of the study and agrees to have a VMO contact them about the option to participate, the enumerator will ask the Producer to sign a consent form to release the Producer's name and individual data to NAHMS.

Participation in the NAHMS 2019 Goat Study is voluntary. A Producer may choose to answer every question, skip certain questions or sections, or end the interview at any time. Producers may also elect to participate in biologic sampling. If they do, test results will be provided to them based on the sampling they elect to participate in.

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## **2019 NAHMS GOAT STUDY COORDINATORS**

NAHMS has designated one (or two in some States) VMO in each State to serve as the State NAHMS Coordinator for Phase II of the Goat 2019 Study. The State NAHMS Coordinator will be available to assist you and the State NASS office. A list of the NAHMS Goat 2019 Study coordinators will be provided to you during training and can also be obtained from your State NASS Office.



# Chapter 2 – Terms and Definitions

Enumerators working on the NAHMS Goat 2019 Survey should be familiar with the following terms and definitions that are used in the questionnaire or are common terms used by goat owners and managers and may be part of the responses given during the interview.

**Abortion:** Expulsion of a dead or non-viable fetus prior to the time of normal kidding. The fetus typically lacks normal hair covering the body.

**Angora/Fiber:** For the purposes of this study, this term refers to goats that are raised primarily for their hair or fiber.

**Antibiotic:** A substance produced by a microorganism that at low concentrations inhibits or kills other microorganisms. For purposes of this manual, antibiotics are synonymous with antimicrobials.

**Artificial Insemination (AI):** Mechanical placement of semen into the female without normal sexual contact.

**Auction:** Refers to an auction sale or auction barn where goats and other animals are sold to the highest bidder.

**Breed (n.):** Animals having a common origin and characteristics that distinguish them from other groups within the same species.

**Breed (v.):** To service by a buck or artificially inseminate. Not all animals that have been bred will be pregnant.

**Breeding Season:** Goats are usually seasonal breeders and typically come into heat (estrus) in late summer as daylight gets shorter. The natural breeding season usually occurs from late summer through early winter, and is the period of time during which female goats are exposed to bucks or artificially inseminated. Operations may have one, two, or more defined breeding seasons, or they might not have a defined breeding season. **To have a defined breeding season, the buck must be kept with the does for no longer than 4 months.**

**Browsing:** The act of feeding on high growing vegetation such as leaves, twigs, or bushes. Goats are considered to be primary browsers although they will graze if necessary, meaning they will eat low growing plants on pasture.

**Brucellosis** (Pronounced ‘broo-se-lo-sis.’): Bacterial disease of mammals that can affect goats, causing abortion in does and inflammation of the testicles in bucks. When *Brucella* (the bacteria that causes Brucellosis) first enters a herd, there is usually an abortion storm. Brucellosis in goats is typically caused by *Brucella melitensis*, which is found in Mexico but not currently in the United States. *Brucella abortus*, which is rare in the United States, typically affects cattle but can also affect goats. Brucellosis can affect humans, causing an illness with recurrent flu-like symptoms and high fever known as “Malta fever.”

**Buck:** An uncastrated male goat.

**Buck Breeding Performance:** A collection of factors can influence a Producer’s decision on whether a buck’s breeding performance is acceptable; these factors include ability to breed a number of does, number of offspring, and profitability of the offspring.

**Central Nervous System (CNS):** The brain and spinal cord.

**Commercial Complete Feed:** A feed that is purchased at a feed store and provides all of the necessary nutrients for the animal. It may be purchased in small bags or in bulk. It will make up a large portion of the animals diet.

**Commercial Warehouse:** Place that sorts and stores fiber before it is sold to processors.

**Cooperative Pool:** A group of Producers that pools their product (animals, milk, fiber) to sell to a buyer.

**Crop Residue/By-Product:** Material that is left after a crop has been harvested is considered a crop residue or by-product. These residues are frequently fed to livestock and may include the stalks, stems, leaves, or seed pods of harvested crops.

**Cull:** Adult animals permanently removed from the herd. Operations cull animals because of disease, to reduce herd size, to improve genetics or desirable phenotypic traits, or to economize during episodes of high feed costs. Operations attempting to enlarge their herds are less likely to cull animals for most of these reasons.

**Dairy Goat:** A goat kept to produce milk for sale. Normally, dairy goats are dairy breeds or dairy-breed mixes.

**Dairy Herd Improvement Association (DHIA):** An organization with programs and objectives intended to improve production of dairy animals and profitability of dairy farming and especially to aid dairy farmers in keeping milk production and management records.

**Direct Sale:** Selling methods by which the Producer's goats are purchased directly off the farm or ranch. Approaches for direct sales include internet or video marketing.

**Disbudding:** A procedure done on young kids to ensure no horns will develop. This is most common on dairy goat operations, but often also done on meat and fiber operations. Pack goat Producers may choose not to disbud their goats so as to provide them with protection from predators. This procedure is typically done on kids three weeks of age or younger. After that age, the developing horn tissue will have attach to the skull and it becomes much more difficult to remove.

**Doe:** A female goat.

**Dry Lot:** An enclosed, unpaved area without vegetation where the animals can move about freely.

**Estrus Synchronization:** Treating does so that they enter estrus and ovulate at about the same time to facilitate artificial insemination.

**Embryo Transfer:** An assisted reproductive method typically performed by a veterinarian which is becoming more widely used in the meat goat industry. It involves surgical collection and transfer of embryos and can be performed both in and out of the normal breeding season. Embryos are collected from donor does, and implanted in recipient does that have been synchronized to be at the same estrous stage as the donor doe.

**FAMACHA® Card:** The FAMACHA® card/eye color score is a method for classifying the level of anemia in animals, which is a good indicator of the animals' internal parasite load for one particular worm (*Haemonchus*).



**Flushing:** The practice of providing does extra nutrition prior to breeding season and perhaps for part of the breeding season to increase the number of ovulations and have a greater proportion of twins and triplets.

**Fresh Goat:** A goat that has recently given birth to a kid(s). The term “freshen” is usually used to designate the act of kidding and the initiation of lactation.

**Genetic evaluation information:** Assessment, for predictive purposes, of productive improvement or conformational characteristics, of the gain to be derived by the use of the animal in question in a breeding program.

**Identification—Herd-Level vs Animal-Level:** Two types or levels of animal identification are necessary to support animal disease management programs: herd (or "group/lot") and individual-animal identification. Herd-level identification is when all members of a herd carry the same marking, such as a typical brand indicating the ranch of origin. Animal-level identification is when each member of a herd has its own unique identifier, such as an eartag with a different number for each animal in the herd.

**Internal Parasites:** Internal parasites (usually worms) are the leading cause of disease in goats. A high parasite burden can cause anemia, watery feces, bottle jaw, and, in severe cases, death. Inappropriate use of anthelmintics (dewormers) is a cause for worms to become resistant to the deworming agents, which is making it much harder to control parasites in herds.

**Jug:** Normally a small pen reserved for a doe and her new kid to bond before they are sent out with the rest of the flock. Most often used for ewe/lamb pens.

**Kid:** A young goat (generally, less than 1 year old).

**Kid Crop:** All kids born during a kidding season. If the operation practices artificial insemination and breeds throughout the year, consider the kid crop to be kids born in a 12 month period.

**Lactation:** Period of time a goat produces milk after kidding. Begins at time of kidding and continues until goat is dried off (stops milking) in preparation for the next kidding.

**Market Goats or Kids:** Animals raised and marketed primarily for sale.

**Mastitis:** Inflammation of the udder, usually caused by bacteria, that reduces milk production and reduces milk quality. Depending on the infectious agent, severe cases can lead to systemic disease and death. Clinical mastitis is detected by visible abnormalities in the milk or udder, such as clots in milk or udder swelling. Subclinical mastitis, which is much more common, is usually detected by increased numbers of somatic cells in milk, referred to as a high somatic cell count (SCC). Economic losses caused by mastitis include decreased milk production and meat production (because of treatments).

**Meat Goats:** For the purposes of this study, this term refers to goats that are raised primarily to produce meat, regardless of their breed.

**Milk Goats:** For the purposes of this study, this term refers to goats that are raised primarily to produce milk, regardless of their breed.

**Mill Buyer:** A person representing a fiber mill who buys fiber from individual Producers.

**Natural Breeding:** Natural breeding is when the bucks and does are turned out together and allowed to breed on their own.

**Neurologic Signs:** Problems associated with the nervous system. Animals with neurologic problems can exhibit odd behaviors such as: circling, tremors, lip smacking, loss of coordination, rubbing against fences. They may be dull, depressed, aggressive, or comatose and can appear weak, stagger, or assume abnormal postures.

**“Off the Operation”:** Refers to sites distinct from the current premises. A site, such as grazing land, that’s “off this operation” might be owned by the same Producer or by someone else.

**Pack Goats:** Goats that carry packs just as horses, donkeys and mules normally do. Goats make great pack animals as they are intelligent and extremely social when trained properly. They can be of any breed and are typically wethers. They often have horns as the horns help them dissipate heat and protect them from predators.

**Pasture:** Areas with plants, such as grass, grown for feeding or grazing animals. Some pastures may include areas with bushes and trees that would allow goats to browse.

**Physical Contact:** Includes nose-to-nose contact or sniffing, touching, or licking each other, including through a fence.

**Pregnancy Toxemia:** A metabolic disease that affects does and ewes in late gestation. It is characterized by partial anorexia and depression, and may include neurologic signs and death. It is seen most frequently in animals carrying multiple fetuses. It may also be referred to as twin lamb disease or pregnancy ketosis.

**Primary Use:** This refers to the primary use of the goat regardless of the breed. For example, a Producer might have a Boer goat that is a pet for his child. This goat would be considered ‘Other’ primary use, and described as a pet.

**Quarantine:** Physical separation of an animal or group of animals from other goats on the operation, with no physical contact allowed.

**Replacement Kids:** Goat kids that are retained to be used for breeding in the herd. If replacement goats are being raised with the intent of becoming dairy goats, they are called Dairy Replacement Goats.

**Reproductive Problems:** Difficulty in conceiving (infertility), which might be caused by metritis (uterine inflammation), not showing visible signs of estrus (heat), scarring of the uterus, cystic ovarian disease, abortions, and other causes. Reproductive problems also include difficulty kidding, or dystocia.

**Scrapie:** Scrapie is a fatal, degenerative disease affecting the central nervous system of sheep and goats. Infected flocks that contain a high percentage of susceptible animals can experience significant production losses. In these flocks over a period of several years the number of infected animals increases and the age at onset of clinical signs decreases making these flocks economically unviable. Animals sold from infected flocks spread scrapie to other flocks. The presence of scrapie in the U.S. also prevents the export of breeding stock, semen, and embryos to many other countries.

**Scrotum Palpation/Evaluation:** Examination of the buck’s testicles for abnormalities and indicators of fertility. Certain characteristics are correlated with fertility of the buck and reproductive traits of the buck’s daughters.

**Seed stock/Breed stock:** Animals that are intended to be used for breeding, most often due to their superior genetics.

**Semen Test:** Semen is collected from a buck and viewed under a microscope. The percentage of normal sperm cells and their motility is correlated with fertility of the buck.

**Somatic Cell Count (SCC):** A measure of the number of white blood cells and secretory cells per milliliter of milk. Each bulk tank of milk is usually tested for SCC as an indication of milk quality. Individual goats can be tested for SCC, usually through routine Dairy Herd Improvement Association (DHIA) monitoring.

**Sore Mouth (Orf, Contagious Ecthyma):** Sore mouth is caused by a pox virus and is highly contagious in goats, especially young kids. Sores caused by the virus usually occur around the mouth and teats but can also occur on the legs, vulva, and face. Scabs, which contain virus, can fall off the animal and remain in the environment, providing a source of infection for other animals. The virus is zoonotic, meaning it can infect people. Infected people can develop sores that may be painful and last for 2 months, but they usually heal without scarring. People do not infect other people.

**Stillborn:** For the purposes of this study, a stillborn kid is one that was already dead when it was born or that died within the first two hours after birth. Respondents might not know if a kid was born dead, or born alive and then died shortly after birth. Likewise, stillborn kids may never be seen if the carcass is removed by predators.

**Teaser Buck:** A teaser buck is used to stimulate estrus and ovulation in the doe, normally after the doe has been isolated from the buck. The buck can be intact or sterile. The physiologic response is due to both smell and sight. The response is variable and is influenced by breed, season of the year, isolation of doe from the buck, nutrition, and length of time after previous kidding event.

**TB (Tuberculosis):** Bovine tuberculosis is a contagious, infectious, communicable disease of animals and humans caused by *Mycobacterium bovis*. It is commonly a chronic, debilitating disease but occasionally may assume an acute, rapidly progressive course. TB is a widespread zoonosis of global magnitude and affects nearly all species of vertebrates. Disease is spread by direct contact, inhalation of droplets expelled from infected lungs, and ingestion of contaminated feed or milk.

**Unweaned Kid:** A kid still nursing a doe or otherwise consuming milk.

**Veterinary Client Patient Relationship (VCPR):** See Item E.16.

**Veterinary Feed Directive:** A form that authorized the owner or caretaker of animals to obtain and use animal feed containing medically important antibiotics (i.e. medically important to humans) to treat their animals in accordance with the FDA approved directions for use.

**Weaned Kid:** A kid that is no longer nursing a doe or otherwise drinking milk.

**Weaning:** Removal of kids from milk (or liquid ration), whether it is from their mother or a teat feeding system.

**Weaning Age (kids):** The age of a kid when it is removed from a liquid ration (or separated from its mother). Dairy-goat kids are often separated from their mothers at an early age and then hand-fed until the time of weaning. Depending on the intended use of the kid or the management practices used, weaning of dairy-goat kids could occur from 2 to 10 weeks of age.

**Wether:** A castrated male goat.

**Withdrawal Period:** Refers to the antibiotic withdrawal period and it the time it takes the body to break down an antibiotic until it is no longer present. This will vary depending on the drug, the animal species, and whether the animal product is milk or meat.

# Chapter 3 – Enumerator Procedures

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## GENERAL

A pre-survey letter has been mailed to the sampled operations requesting their participation and notifying them that a NASS representative will contact them via telephone to set up a convenient time to complete the survey. The NAHMS Goat 2019 Study Information Sheet and the Goat 2019 Timeline and Biologics Benefits Sheet (see Chapter 1) were included with the pre-survey letter to provide background information about the study.

As part of your job on the NAHMS Goat 2019 Study, you must provide Producers with an explanation of the NAHMS program and explain what he/she might expect from and gain by participating in the study. Your explanation should be based on information from your regional training workshop, the NAHMS Goat 2019 Study Information Sheet, training materials, and information from this manual. Producers may ask questions about the NAHMS program based on the pre-survey letter and other materials they received. If they have questions that you cannot answer, Producers can phone either the NASS RFO or the NAHMS Coordinator directly (contact information is available from the Regional NASS office).

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## WHO TO INTERVIEW

Interview the Producer of the goat operation, if possible. Information collected from other people is often less accurate. If the Producer says someone else is more knowledgeable, interview that person. There may be sections of the questionnaire that require the response of a different person who is knowledgeable about that section. Encourage Producers to have the operation records on hand. If records are used, information provided will likely be more accurate and the interview will take less time.

If the Producer is not present when you visit but is expected soon, either wait or make other contacts nearby and return later. If the Producer is too busy to be interviewed at that time, set up an appointment at his or her convenience. Be sure to keep the appointment. If an emergency prevents you from doing so, inform the Producer beforehand and re-schedule the interview.

If the Producer will not be available during the survey period, try to interview someone who is well informed about the operation. A partner, a family member, or an employee may know enough about the operation to give you the information needed.

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## NAHMS GENERAL GOAT MANAGEMENT QUESTIONNAIRE (GGMQ)

The GGMQ asks for information about herd inventory, breeding management, health status/management and biosecurity, milk and fiber production, and movement/marketing. Collection of the GGMQ information is the first phase of the Goat 2019 Study. At the conclusion of the GGMQ interview, you will briefly describe the Phase II of the study and ask the Producer if they agree to be contacted for the NAHMS Phase II that will be conducted by a federal or State Veterinary Medical Officer (VMO). Answer any questions regarding Phase II and attempt to obtain the Producer's signature on the consent form. Please emphasize that signing the consent form does not commit the Producer to participating in the follow-up study; it commits the Producer only to an additional contact and further explanation of the study by a VMO. The Producer can decide at that time whether to participate in the follow-up study. **Producers do need to sign the consent form** if they would like to participate in possible biological sampling.

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## SPECIAL SITUATIONS

### Private Veterinary Practitioners

Some Producers may express concern about the involvement of the Veterinary Medical Officer (VMO) during the second phase of the study. They may feel this will conflict with the services provided by their own veterinarian. Explain that the VMO will be glad to explain the program to the Producer's veterinarian and that Producer and veterinary organizations have participated in the design and review of the questionnaires.

VMOs will not give Producers veterinary advice about their operation. The VMO's job is to provide professional expertise in collecting accurate animal health and production data.

### Serious Diseases

Some Producers may be apprehensive about the VMO's enforcement and quarantine power regarding certain contagious animal diseases. Explain that the on-farm tests are **not** for epidemic or regulatory-type diseases. The VMO will enter the production areas **only** for those optional tests that the Producer agrees to complete. VMO interviews regarding management practices can be done in the Producer's home, office, or at a local coffee shop. The VMO questionnaires are not intended to detect the presence of any regulatory-type diseases.

### "Out of Scope" Operations

APHIS considers certain types of farm operations to be "out of scope" for the GGMQ. This includes university, extension, experimental, and institutional farms whose production is being used primarily for **noncommercial** purposes. **Only complete Section J of the GGMQ for these operations (especially Items J4 and J5).**

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## BURDEN STATEMENT

Federal regulations require that an estimate of the average time required to complete be provided with all questionnaires used by agencies of the Federal government. The burden statement's average time requirement represents the average completion time expected based on the number of OMB-allowed pretests of the questionnaire. The average expected interview time to complete the GGMQ is 60 minutes, although this is expected to vary depending on whether the Producer consults records and the types of records consulted during the interview.

The burden statement time requirement might represent the actual average completion time recorded in previous years of the survey or it might be what NASS and OMB consider an average completion time. If the Producer has problems with a questionnaire or the time required to complete it, these concerns may be conveyed to OMB at the address on the burden statement. Because use of the burden statement is required by OMB regulations, any questions a Producer may have about the burden statement should be addressed in writing to OMB.

**The burden statement is printed on the first page of the GGMQ.** Please present a copy of the burden statement prior to the interview. Producers might ask, "How long will this take?" Reply with the burden statement average time, which is 60 minutes for the GGMQ. You may provide additional information, such as, "The official average for this survey is 60 minutes, but my interviews are averaging 70 minutes."

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## CONSENT FORM AND INFORMATION ABOUT PHASE II

Producers that are interested in participating in Phase II of the NAHMS Goat 2019 Study will be asked to sign a consent form after completing the GGMQ. By signing the consent form, the Producer agrees to let NASS share the producer's contact information with the 2019 NAHMS State Coordinator and be contacted by a VMO that will provide information about participation in the second phase of the study. Please review the goat study consent form on next page of this section.

**Again, please emphasize to the Producer that signing the consent form does not obligate the Producer to participate in NAHMS Phase II.** Producers do not need to make a decision about participating in the follow-up phase of the study until the time of the visit by the VMO. The VMO will explain the purpose and scope of the on-farm study at the time of the initial contact by the VMO, and the Producer can decide then to decline further participation.

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## DELIVERING COMPLETED WORK TO THE FIELD OFFICE

Forward completed GGMQs and consent forms to the Regional office or your supervisor, according to your survey instructions. Mail the forms at a central post office each day to ensure prompt delivery.

If you doubt that the last completed work will reach the State office by the final due date, call your supervisor for additional instructions.



Animal and Plant  
Health  
Inspection Service  
Veterinary Services

## NATIONAL AGRICULTURAL STATISTICS SERVICE 2019 NAHMS GOAT STUDY CONSENT FORM

National Animal Health  
Monitoring System

2150 Centre Ave, Bldg B  
Fort Collins, CO 80526

Form Approved  
OMB Number 0579-0354  
Expires:

For release of information for: \_\_\_\_\_

NOTES: \_\_\_\_\_

EPAID: \_\_\_\_\_

(Consenting Operator: *Hereafter referred to as YOU*)

The USDA's Animal and Plant Health Inspection Service's (APHIS) National Animal Health Monitoring System (NAHMS) is conducting a study of U.S. goat operations. **NAHMS studies are voluntary and nonregulatory.** This study will take an in-depth look at U.S. goat operations and provide new and valuable information regarding animal health and management practices in the U.S. goat industry. To initiate the study, a sample was selected from the confidential list of operations maintained by USDA's National Agricultural Statistics Service (NASS). Your operation was selected for participation and will represent a number of unselected goat operations.

**By signing this Consent Form, you are agreeing to allow USDA–NASS staff to provide the following information to the State NAHMS Coordinator, who is employed by USDA–APHIS: your name, address, phone number, email address, total inventory, and operation type (meat/dairy/other).**

The NAHMS Coordinator will share this information with a Federal or State veterinary medical officer (VMO), who will contact you to administer a phase II questionnaire. You will also have the opportunity to obtain free testing for your goats, including testing for: parasites both pre- and post-deworming, Scrapie resistant genotypes, *Mycoplasma ovipneumonia*, and fecal pathogens. Only the Federal or State VMOs collecting the data know the identity of study participants.

**Confidentiality of your data is crucially important to us. No name or contact information will be associated with individual data, and no data will be reported in a way that could reveal the identity of a participant. Data are presented only in aggregated summaries.**

When you are contacted by a Federal or State VMO and asked to participate in the study, you are free to accept or decline participation at that time. A copy of the questionnaire that will be administered when you're visited by the Federal or State VMO can be found at: [www.aphis.usda.gov/nahms](http://www.aphis.usda.gov/nahms). **If you have been selected but have not been contacted or if you have questions regarding the study, please call: (866) 907-8190.**

1. Number of goats on the operation as of July 1, 2019: \_\_\_\_\_ head
2. Operation Address: \_\_\_\_\_
3. Operation phone #: \_\_\_\_\_
4. Operation Email Address: \_\_\_\_\_
5. Use of goats on operation (check all that apply):  
 Meat  Dairy  Fiber  Agritourism  Other
6. Notes regarding the operation, (e.g. animals located in different state, changes to address or contact information):  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Consenting Operator SIGN DATE \_\_\_\_\_

NASDA/NASS Staff SIGN DATE \_\_\_\_\_

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0354. The time required to complete this information collection is estimated to average 9 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

**NAHMS-450**  
**JUN 2019**



# Chapter 4 – General Instruction, Question, and Response Formats

This chapter provides information about conventions used throughout the questionnaire, instructions, how to enter responses, and examples of different types of questions used in the questionnaire.

Sometimes you will need to probe the respondent in order to get an adequate answer to a question. You should probe when the respondent can't answer the question, when the answer isn't enough to record, when you think the answer may be incorrect because it doesn't fit with other information already obtained, and when you think the respondent didn't understand the question.

Please be careful not to lead the respondent to a particular response. Simply restate the question or the response to encourage the respondent to keep thinking about it.

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## ENTERING RESPONSES

Use a black lead pencil to record data and make notes; never use ink on a questionnaire. Make all entries clear and easy to read. Entries should be entirely inside the boxes.

### IMPORTANT NOTE: UNKNOWN RESPONSE/ DECLINE TO ANSWER

Always enter a response for every question unless you are instructed to do otherwise. **If the respondent declines to answer a question or does not know the answer, record “-1” in the response box and indicate “DK” (don’t know) or “Declined” in the margin.** When the data are analyzed later on, it is very important to know if the respondent declined to answer a question, did not know the answer, or if the answer should have been zero, “no”, or “none”. **By providing a response for every part of every question, you as the enumerator, will improve the quality of the data and the information published as the result of this study.**

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## ENUMERATOR INSTRUCTIONS IN THE QUESTIONNAIRE

Throughout the questionnaire, **enumerator instructions** are printed inside brackets or parenthesis. These instructions provide important information about response coding, question skips, cell references, flow, and question completion. Following these instructions will help you avoid asking unnecessary questions and avoid skipping questions that should be asked.

Some questions have a reference date, such as July 1, 2019. There are also questions that refer to specific groups of goats, such as does, most recent kid crop, breeding does, and breeding bucks.

**When asking these questions, be sure to emphasize the time frame, type of goat, and age category referenced so they are clear in the respondent's mind.**

Throughout the questionnaire there are instructions to the enumerator or the interviewee or both. Questionnaire instructions are of two types. The first are printed within questions inside brackets or parenthesis. These instructions provide important information about response

coding, question skips, cell references, flow, and question completion. The second type is separate from questions. They often indicate a skip or provide context for a series of questions coming up.

**INSTRUCTION EXAMPLE A:** This question has two examples of instructions within a question. First: *[For does bred by more than one method, give method used first.]* may be read aloud to the responder as it could resolve a question when multiple techniques were used to breed the same doe. Second: *[Add items 2a+2b+2c+2d]* Indicates how to fill in the total. This latter instruction should **not** be read aloud while the former may be.

Example: Item D2

2. For the most recent kid crop, how many does were bred by the following methods:
- For does bred by more than one method, give method used first.

		Does
a.	Naturally by this operation's bucks? .....	<input type="checkbox"/> None
b.	Naturally by another operation's bucks? .....	<input type="checkbox"/> None
c.	By artificial insemination (AI)? .....	<input type="checkbox"/> None
d.	By embryo transfer? .....	<input type="checkbox"/> None
e.	Total number of does bred <b>[Add Items 2a, 2b, 2c, and 2d]</b> .....	

**INSTRUCTION EXAMPLE B:** This instruction is a *fill-in*. When a reference to a previous item is enclosed in the "stem" in parentheses, you should FILL IN the data entered in that previous item when you read the question. For example, if the response for item Section D, Item 4a was "35," you should say "35" in place of the "(item 4a)" when you read the question below. A second instruction is for the Total calculation as just previously shown.

Example: Item D5

5. **[If Item 4a=0, SKIP to Item 6]**  
Of those **[Item 4a]** kids born alive, how many:

		Kids
a.	Were sold prior to weaning? .....	<input type="checkbox"/> None
b.	Are not yet weaned? .....	<input type="checkbox"/> None
c.	Have been weaned and have been or will be sold? .....	<input type="checkbox"/> None
d.	Have been weaned and are or will be replacements? .....	<input type="checkbox"/> None
e.	Died before weaning? .....	<input type="checkbox"/> None
f.	Died after weaning? .....	<input type="checkbox"/> None
g.	Have unknown weaning status? .....	<input type="checkbox"/> None
h.	Total <b>[Must equal Item 4a]</b> .....	

**INSTRUCTION EXAMPLE C:** This example indicates a skip and should **not** be read aloud.

Example: Item A1

1. Were **five or more** adult goats, regardless of ownership, on this operation on July 1<sup>st</sup>, 2019? An operation includes all sites with goats under the same management.

<sub>1</sub> Yes-CONTINUE

<sub>3</sub> No-SKIP to SECTION J

**INSTRUCTION EXAMPLE D:** The bolded text provides context for questions coming up. The first sentence is read to the responder, but unless sharing the questionnaire (reading it together) the second sentence question is mostly an instruction to the enumerator.

Example: Item A6

6. Now I have some questions about the breeds of goats and kids on this operation. Of the total goats and kids [Item 3e],

How many goats were (either number or percentage of animals):

- Include each animal only once.

	Head	OR	Percent
a. Alpine? ..... <input type="checkbox"/> None			%
b. Angora? ..... <input type="checkbox"/> None			%
c. Boer? ..... <input type="checkbox"/> None			%
d. Cashmere? ..... <input type="checkbox"/> None			%
e. Fainting goats (Myotonic, Tennessee)? ..... <input type="checkbox"/> None			%
f. Kiko? ..... <input type="checkbox"/> None			%
g. LaMancha? ..... <input type="checkbox"/> None			%
h. Nigerian dwarf? ..... <input type="checkbox"/> None			%
i. Nubian? ..... <input type="checkbox"/> None			%
j. Oberhasli? ..... <input type="checkbox"/> None			%
k. Pygmy? ..... <input type="checkbox"/> None			%
l. Pygora? (specify: _____) ..... <input type="checkbox"/> None			%
m. Saanen? ..... <input type="checkbox"/> None			%
n. Sable? ..... <input type="checkbox"/> None			%
o. Savannah? ..... <input type="checkbox"/> None			%
p. Spanish? ..... <input type="checkbox"/> None			%
q. Toggenburg? ..... <input type="checkbox"/> None			%
r. Crossbred/experimental (more than one breed)? (specify: _____) ..... <input type="checkbox"/> None			%
s. Other? (specify: _____) ..... <input type="checkbox"/> None			%
Total .....	<b>[Must equal Item 3e]</b>		<b>100%</b>

**INSTRUCTION EXAMPLE E:** Prompts such as "includes and excludes" and other instructions for respondents are also enclosed in **parentheses**. Read these to the respondent.

**Example: Item D16**

16. From July 1<sup>st</sup>, 2018 to June 30<sup>th</sup>, 2019, what was the average age (in weeks) when kids were weaned?

- Weaning is when kids no longer receive milk or milk replacer
- Include kids that are weaned upon leaving the operation

	Weeks
a. Doe kids .....	
b. Buck kids .....	

**INSTRUCTION EXAMPLE F:** Optional wording, or term clarification, can be shown in plain print (enclosed in parentheses). Read these to the interviewee as well.

For example, in Section E, Item 5c, you could indicate the type of veterinarian and say “For what purposes were the goats tested for brucellosis? Veterinarian recommendation; this would be a nonregulatory, private practitioner.”

**Example: Item E5c**

5. For what purposes were the goats tested for brucellosis?

- a. Movement requirement ..... <sub>1</sub> Yes <sub>3</sub> No
- b. Show or exhibition requirement ..... <sub>1</sub> Yes <sub>3</sub> No
- c. Veterinarian (nonregulatory, private practitioner) recommendation. .... <sub>1</sub> Yes <sub>3</sub> No
- d. State requirement ..... <sub>1</sub> Yes <sub>3</sub> No
- e. Concern for milk safety ..... <sub>1</sub> Yes <sub>3</sub> No
- f. Other (specify: \_\_\_\_\_) ..... <sub>1</sub> Yes <sub>3</sub> No

The information provided in parentheses in Section B, Item 9 represents a term clarification and can be read to the respondent if you think it helps.

**Example: Item B9**

9. Do goats have access to any surface water (e.g., ponds, irrigation ditches, streams/creeks)? .. <sub>1</sub> Yes <sub>3</sub> No

**INSTRUCTION EXAMPLE G:** Bracketed instructions in the “stem” of a question indicates what is a permissible choice for a response. This can be read or not read to a responder.

Example: Item B2

2. How many goats do you expect to have in 5 years, compared to your July 1<sup>st</sup>, 2019 inventory?  
[Check one]
- <sub>1</sub> None- **CONTINUE**
  - <sub>2</sub> Fewer- **SKIP to Item 4**
  - <sub>3</sub> About the same- **SKIP to Item 4**
  - <sub>4</sub> More- **SKIP to Item 4**

**INSTRUCTION EXAMPLE H:** Parenthetical instruction for “Other (specify\_\_\_\_\_)” tells the responder and interviewer alike that a choice of “Other” **requires** a write in of what specifically they meant by the “Other.” **Occasionally, the “specify” indicates that more than one listed choice was applicable. In the example below, the instructions are to [Check one], if the respondent can’t possibly pick between provided options, the enumerator might write “both ... and ...”**

Example: Item I6

6. From July 1<sup>st</sup>, 2018 to June 30<sup>th</sup>, 2019, which of the following describes the usual treatment of clippers, shears, or combs between goats?
- [Check one]
- <sub>1</sub> Cleaned and disinfected
  - <sub>2</sub> Cleaned only
  - <sub>3</sub> No cleaning or disinfecting
  - <sub>4</sub> Don't know
  - <sub>4</sub> Other (specify: \_\_\_\_\_)

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## GENERAL QUESTION FORMATS

### a. Count or Percent Questions

Respondents will be asked questions that require them to respond in a variety of units (for example number of head, cost in dollars, percent of total, etc.). **Record responses in the units required.** If a respondent answers in a different unit, write the answer outside the printed box, convert it to the required unit, and record the converted data in the box (this can be done at a later time). If the answer is “Zero” or “None,” check the box for “None” if available, otherwise enter “0.” If the respondent declines to answer or does not know, enter “-1.” Always write notes about answers that appear unusual or are outside the expected range.

It’s important in Quantity questions to **always** answer it (**unless** it is part of a skip or has a provision for absent quantity entries like in Example B below) in some fashion. The next example, Question Example A, shows that if there were no goats or kids placed on public land, then “0” would be entered.

**QUESTION EXAMPLE A:** Here the quantity under consideration is **number of months**. Indicate how many months any goats or kids from the operation were placed on state or federal public land (Item 7a) or other land that was not part of the operation (Item 7b) during the last 12 months. **Note:** If none of the operation’s goats or kids were placed on public land or other land during the previous 12 months, skip to Item 9.

Example: Item B7

7. For how many months from July 1<sup>st</sup>, 2018 through June 30<sup>th</sup>, 2018 were any of this operation’s goats or kids placed on:

	Months
a. State or Federal public land? .....	
b. Other land which is not owned, rented, leased, or borrowed by this operation? .....	

[If both Items 7a and 7b equal 0, SKIP to Item 9.]

**QUESTION EXAMPLE B:** This question is primarily a quantity question(s) that asks for number of goats in each category of primary use. If there are no Angora/fiber goats or kids on the operation, and there is a “None” box, check the “None” box for that category. **Don’t forget the “Other (specify...)” if there are goats on the operation that are not primarily used for meat, milk or fiber.**

Example: Item A3

3. Report the total number of goats in 2e by **primary use**.

- Report based on **primary use** regardless of breed.

	Goats
a. Angora/fiber ..... <input type="checkbox"/> None	
b. Milk ..... <input type="checkbox"/> None	
c. Meat ..... <input type="checkbox"/> None	
d. Other (specify: _____). ..... <input type="checkbox"/> None	
e. Total [ <b>Must equal Item 2e</b> ] ..... <input type="checkbox"/> None	

Respondents will be asked questions that allow or require them to respond in a variety of units (for example number of head, percent of total, etc.). **For those questions that require an express unit record responses in the units required.** If a respondent answers in a different unit, write the answer outside the printed box, convert it to the required unit, and record the converted data in the response space (this can be done at a later time). If the answer is "Zero" or "None," check the box for "None" if available, otherwise enter "0." If the respondent declines to answer or does not know, enter "-1." Always write notes about answers that appear unusual or are outside the expected range.

**QUESTION EXAMPLE C** Respond in EITHER number of head (to total to the same total in Question Example D-Question 3e) or 100%. If there are no goats of a particular breed, check the box that says "None".

Example: Item A6

6. Now I have some questions about the breeds of goats and kids on this operation. Of the total goats and kids [Item 3e],

How many goats were (either number or percentage of animals):

- Include each animal only once.

	Head	OR	Percent
a. Alpine? ..... <input type="checkbox"/> None			%
b. Angora? ..... <input type="checkbox"/> None			%
c. Boer? ..... <input type="checkbox"/> None			%
d. Cashmere? ..... <input type="checkbox"/> None			%
e. Fainting goats (Myotonic, Tennessee)? ..... <input type="checkbox"/> None			%
f. Kiko? ..... <input type="checkbox"/> None			%
g. LaMancha? ..... <input type="checkbox"/> None			%
h. Nigerian dwarf? ..... <input type="checkbox"/> None			%
i. Nubian? ..... <input type="checkbox"/> None			%
j. Oberhasli? ..... <input type="checkbox"/> None			%
k. Pygmy? ..... <input type="checkbox"/> None			%
l. Pygora? (specify: _____) ..... <input type="checkbox"/> None			%
m. Saanen? ..... <input type="checkbox"/> None			%
n. Sable? ..... <input type="checkbox"/> None			%
o. Savannah? ..... <input type="checkbox"/> None			%
p. Spanish? ..... <input type="checkbox"/> None			%
q. Toggenburg? ..... <input type="checkbox"/> None			%
r. Crossbred/experimental (more than one breed)? (specify: _____) ..... <input type="checkbox"/> None			%
s. Other? (specify: _____) ..... <input type="checkbox"/> None			%
Total .....	[Must equal Item 3e]		100%

**EXAMPLE D:** Some boxes are outlined with boldface line. These boxes are for totals of previous items or they are for items to be referenced later.

Example: Item A2 and Item A3

2. How many goats and kids on this operation on July 1<sup>st</sup>, 2019, were in the following age groups:

	Number of Goats
a. Less than 1 year old ..... <input type="checkbox"/> None	
b. 1-2 years old ..... <input type="checkbox"/> None	
c. 3-4 years old ..... <input type="checkbox"/> None	
d. 5 years or older ..... <input type="checkbox"/> None	
e. Total .....	

3. Report the total number of goats in 2e by **primary use**.

- Report based on **primary use** regardless of breed.

	Goats
a. Angora/fiber ..... <input type="checkbox"/> None	
b. Milk ..... <input type="checkbox"/> None	
c. Meat ..... <input type="checkbox"/> None	
d. Other (specify: _____) ..... <input type="checkbox"/> None	
e. Total [Must equal Item 2e] .....	

**IMPORTANT NOTE: NUMBER CHECKING RESPONSES**

- Multiple questions will require adding or subtracting various cells for a total. Fill in the total while working on the question, **DO NOT WAIT** to complete the total until you're done with the questionnaire.
- Double check the math to ensure the number being written is correct.
- Confirm the total number with the Producer and clarify any discrepancies.

**b. Yes/No Questions**

Many questions ask for a "Yes" or "No" response.

**"Yes" is always indicated by code "1" and "No" by code "3."**

**"Don't know"** (DK) option will sometimes be indicated by code "2." If a "Don't know" option is not offered, and if the respondent answers with "Don't Know," or if a respondent declines to answer a specific question, enter -1 in the cell and write "DK" or "declined" beside the answer cell.

Sometimes **"Not Applicable"** (NA) option will be indicated by code "4." If a "NA" option is not



offered, and if the respondent answers with "This question doesn't apply to me" or declines to answer a specific question, enter -1 in the cell write "NA" or "declined" beside the answer cell.

**QUESTION EXAMPLE E:** This serves as an initial screening question to determine if you should continue with the interview-that the operation is an active goat farm. If the answer to Item 1 is "Yes," then continue the interview. If the operation did not have at least one goat or kid on hand July 1, 2019, then go to Section J (Office Use). Operations that are still in business but had no goats or kids on hand on July 1 (skip is indicated) should have a response code "1" in Question 3 Section J.

Example: Item A1

1. Were **five or more** adult goats, regardless of ownership, on this operation on July 1<sup>st</sup>, 2019? An operation includes all sites with goats under the same management.

<sub>1</sub> Yes-CONTINUE

<sub>3</sub> No-SKIP to SECTION J

**QUESTION EXAMPLE F:** This Yes/No question has more than one subpart and represents separate questions. The main question or "stem" of the question is attached to an item number (6), and the 8 different endings to the question-the subparts-are identified with a lower-case letter (a, b, c) etc.). Each subpart is a separate question and must be asked separately. You should read the question stem followed by the ending subpart (i.e., "Did this operations synchronize estrus in its does for:"). If there are a lot of subparts, you will probably only need to read the stem for the first two or three subparts. Once the respondent understands that the stem is repeated, though unspoken, you can continue reading only the subparts.

Example: Item C6

6. Did this operation synchronize estrus in its does for:

- a. More uniformly sized or aged kid crop? .....<sub>1</sub> Yes <sub>3</sub> No
- b. Condensed kidding to optimize labor? ..... <sub>1</sub> Yes <sub>3</sub> No
- c. More efficient use of facilities? .....<sub>1</sub> Yes <sub>3</sub> No
- d. Market timing? ..... <sub>1</sub> Yes <sub>3</sub> No
- e. More efficient use of bucks? ..... <sub>1</sub> Yes <sub>3</sub> No
- f. Artificial insemination (AI) ? ..... <sub>1</sub> Yes <sub>3</sub> No
- g. Embryo transfer (ET)? ..... <sub>1</sub> Yes <sub>3</sub> No
- h. Other? (specify: \_\_\_\_\_) .....<sub>1</sub> Yes <sub>3</sub> No

**QUESTION EXAMPLE G:** One question has a subpart that's only required to be answered based on the previous question. If the answer to the question in Column 1 is "No", skip the question in the next column. If the respondent said he or she does not use a Private or company veterinarian (1a), then you would skip the next column and go on to 1b.

Example: Item F1

1. From July 1<sup>st</sup>, 2018 to June 30<sup>th</sup>, 2019, did any of the following visitors come onto your operation? For each type of visitor, also indicate whether or not they touched goats or walked through areas where goats are kept.

	Did the following visitors come onto your operation from July 1 <sup>st</sup> , 2018 to June 30 <sup>th</sup> , 2019?		[IF YES], did the visitors typically touch goats or walk through areas goats are kept on your operation?	
	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
a. Private or company veterinarian . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
b. Federal/State veterinarian or animal health worker . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
c. Extension agent or university veterinarian . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
d. Nutritionist or feed company consultant . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
e. Agricultural tour visitors (school groups, university students, agritourism, etc.) . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
f. Customer (private individual) purchasing goats, milk, fiber, meat, cheese, or other goat products . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
g. Goat wholesaler, buyer, or dealer . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
h. Renderer . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
i. Milk truck driver . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
j. Mobile slaughter team members . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
k. Shearers . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
l. Other agriculture-related visitors (volunteers, feed delivery and service personnel) . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
m. Family, friends and / or neighbors . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No
n. Other visitors (specify: _____) . . . . .	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	<input type="checkbox"/> <sub>3</sub> No

### c. Code Questions

For questions answered with a code number, enter the number that goes with the respondent's answer. If the respondent answers using only the code number, verify that the code is correct by repeating the answer in words. If answers appear unreasonable, but are verified as correct, make explanatory notes in the margins. Do not make notes or unnecessary entries inside response boxes. If the respondent declines to answer or doesn't know, and a "don't know" response is not provided, enter "-1" and write any comments in the margin.

When a question specifies to select ONE answer from a list, the respondent must choose only ONE answer from several possible choices that you offer. Each response category has a code number. When you enter the respondent's answer, you enter the code number if you are required to write the code in a box. In the example below, if the respondent says she usually left placentas in the field/birthing area and did not remove them primarily stored colostrum without refrigeration, you would check code "2".

**QUESTION EXAMPLE H:** This example requires that you check only one box. Like mentioned earlier, there is a possibility that one answer doesn't fit or that two fit as a primary method used to disposed of placentas. Perhaps the respondent buries them in the summer and burns them in the winter. In that case code "7" could be checked and you can explain further in the "Other (specify\_\_\_\_\_)"

Example: Item D11

11. Which of the following best describes how placentas (afterbirths) were usually disposed of from July 1st, 2018 to June 30th, 2019?

**[Check one]**

- 1 Left in the field/birthing area and removed later
- 2 Left in the field/birthing area and **NOT** removed
- 3 Buried
- 4 Burned/incinerated
- 5 Composted
- 6 Disposed of in landfill/dump
- 7 Other (specify: \_\_\_\_\_)

#### **REMINDER: CONFIRM AN "OTHER" IS TRULY AN "OTHER"**

- When completing questions that have an "Other" option ensure that the "Other" answer does not fit any of the provided categories.
- If you think it possibly fits into another category, place it in the most appropriate category and write a note in the margin to explain the logic behind the placement.
- Always attempt to get a specify to the "Other."
- If you a response possibly fits into another category, place it in that category and write a succinct note in the margin to explain the logic behind the placement.

**d. Scale or Category Questions**

These types of questions often involve check boxes grouped under headings that are in some sort of order (i.e., Increasing or Decreasing) as you read across from left to right. Only the box under one heading can be checked per each question or question section.

**QUESTION EXAMPLE I:** The scale response “increases” as you go from left to right. Check the most applicable box for each practice; whether it was “Never”, “Sometimes”, or “Always”.

**Example: Item E2**

2. From July 1<sup>st</sup>, 2018 to June 30<sup>th</sup>, 2019, how often did you use the following practices when handling goats with scabs around the mouth, feet, or udder?

	<b>Never</b>	<b>Sometimes</b>	<b>Always</b>
a. Wore gloves when handling goats with scabs . . . . .	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
b. Washed hands with soap and water after touching goats with scabs .	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
c. Covered your cuts and scrapes when handling goats with scabs . . . .	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
d. Obtained veterinary consultation when goats had scabs . . . . .	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>

**e. Matrix Questions**

These question types are reserved for times when there is multiple bits of information to be collected on different yet related topics. The name “matrix” is used because the information goes into cells at the junction of a row and a column. This type of question is one that should be used sparingly for although a lot of information can be collected at once it can be burdensome to the responder.

**QUESTION EXAMPLE J:** This requires quantity of goats broken out by primary use (across the top) **and** production use (breeding or market) **AND** age categories. When asking questions like these it helps to show the responder the question. **Some enumerators bring along a separate questionnaire for the responder to follow along with and that definitely helps in cases like the question below.** In this case it helps to read the question starting like: “Of the total (read number from 3e above) angora/fiber goats and kids intended for breeding, how many were does 1 year old and older?” You would attack this question one response area at a time until the responder got the gist of what you were asking making the full preamble with the stem unnecessary.

**Example: Item A5**

5. Of the total goats and kids [Items 3e], how many were:

[Enter 0's if “none” is checked for the primary use above.]

	Angora/ Fiber Goats	Milk Goats	Meat Goats	Other Goats
a. Goats and kids intended to remain on the operation (such as for breeding, milking, pets etc):				
i. Does 1 year and older? .....				
ii. Bucks 1 year and older? .....				
iii. Replacement kids under 1 year old? .....				
b. Goats and kids intended for market (including wethers) or otherwise sold/given away:				
i. Market goats 1 year old and older (not used for breeding)? .....				
ii. Market kids under 1 year old? .....				
c. Total [Totals should equal Items 3a-d] .....				

# Chapter 5 – Completing the Questionnaire and Questions of Note

This chapter provides guidance for completing the General Goat Management Questionnaire (GGMQ) by face-to-face interview. The first part covers general information about administering the questionnaire. The second part covers particular questions in the GGMQ questionnaire and provides explanations and helpful information for completing many of the questions.

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## INTRODUCING THE NAHMS GOAT 2019 STUDY TO THE RESPONDENT

Before beginning your work, formulate and practice an introduction that briefly explains the survey and gains the respondent's cooperation. Say it in your own words so it is comfortable to share, and be prepared to answer the respondent's questions. You will be provided with informational materials that explain Phase II of the NAHMS Goat 2019 Study. Familiarize yourself with these materials before the interview by reviewing the Goat 2019 Information Sheet (study launch sheet), and the Goat 2019 Timeline and Biological Benefits Sheet. Please **give** these materials to the respondent and briefly discuss Phase II of the study and the benefits of participating in this phase including the benefits of participating in biologic sampling. Please explain that the data collected in this interview and in Phase II are used to generate summary reports and provide valuable information to the U.S. goat industry, goat operations, researchers, extension service and state and federal policy makers. Summary reports from the previous NAHMS Goat 2009 Study are available at the NAHMS website: [www.aphis.usda.gov/nahms](http://www.aphis.usda.gov/nahms)

**Prior to starting the questionnaire**, ensure that there is a label with a NAHMS ID of the respondent to be interviewed; identification information will be on the envelope. Make changes to the name and address information on the envelope, if necessary. Detailed directions to the operation will help the Veterinary Services (VS) Data Collector locate the operation if the Producer consents to participate in Phase II. Write the directions on the envelope or in the “comments” section of the questionnaire. Do not write anything that could identify the Producer/operation on the questionnaire.

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## ADMINISTERING THE QUESTIONNAIRE

The GGMQ asks for information about goat inventory, management practices, health events and management, animal movement, and operation biosecurity. The majority of questions in the GGMQ require the respondent to select a response from a list of possible answers, or to respond in a variety of units (head, percent, months, etc.). **Therefore, it will be helpful for the respondent to have a copy of the questionnaire during the interview.** You may ask the respondent to follow along in the questionnaire as you proceed. Or, you may direct the respondent to read over the answer choices each time you come to a question with multiple answer choices.

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## GGMQ SECTIONS OVERVIEW

### Section A: Inventory

#### Item A1 Screening Question

The Operation Description is straightforward and serves as an initial screening question to determine if you should continue with the interview. For many operations, it will be obvious from appearance or from your personal knowledge that the operation is an active goat farm.

This question refers to adult goats on the operation on July 1, 2019, regardless of ownership. If the answer to item 1 is “Yes,” then continue the interview. If the operation did not have at least 5 adult goats on hand July 1, 2019, skip to Section J (Office Use).

#### Item A2 – Total Number of Goats and Kids, by Age Group

Enter the total number of goats and kids, by age group.

#### Item A3 - Total Number of Goats and Kids, by Primary Use

Enter the total number of goats and kids on the operation on July 1, 2019, according to each animal’s primary use (**regardless of breed**) on the operation (i.e., Angora/Fiber, Milk, Meat, or Other). Include each goat only once, and count it under only its primary use, or intended or expected use.

“Other” primary use might include pets, pack goats, seed stock (see Item 4).

*What if...*

A Producer of meat goats has a pet goat that she happens to milk to get milk for her daughter?

*Answer: This goat could be considered either a milk goat or a pet goat (which falls in the “Other” category). Ask the Producer what he or she really believes is the goat’s primary use—is it a pet goat that happens to produce milk or a milk goat that happens to be a pet? Please use the goat’s **primary use** to answer this question, not just its breed or type. (If the Producer views this doe primarily as a pet, please count her as an “Other” and be sure to count her in the “Other Goat” column in Item 4e.)*

*What if...*

A Producer who normally buys young kids to sell for slaughter keeps one buck on hand to breed a milk doe to obtain fresh goat’s milk for his family?

*Answer: Again, this buck could be considered either a milk goat or an “Other” goat. Ask the Producer what he or she really believes is the goat’s primary use. In this case, the buck should probably be considered an “Other” goat. A buck who breeds a herd of milk does year ‘round would probably be considered a milk buck and counted in the “Milk” category. (If the Producer chooses to include this buck as an “Other,” please be sure to count it under Item 4f and write in “Breeding of a milk goat.”)*

**[Enumerator Note: If Item 3d=0 (no "Other" goats), skip to Item 5]**

**Item A4 - Number of "Other" Goats and Kids, by Intended Primary Use**

For the goats and kids included in "Other" in Item 3d, report how many are intended for each of the primary uses listed in Items 4a – 4f. Count each goat only once.

Please be sure that the total goats (Sum 4a-4f) equals the number of "Other" goats and kids reported in Item 3d.

**Item A5 – Number of Angora/Fiber, Milk, Meat, and Other Goats used for Breeding and for Market**

- a. Goats and kids intended as replacements (remain on the operation for **breeding, milking, pets, etc**)

For does 1 year old and older, bucks 1 year old and older, and replacement kids less than 1 year old, enter the total number of animals on hand July 1, 2019, according to each animal's primary use (regardless of breed) on the operation (i.e., Angora/Fiber, Milk, Meat or Other). Include each goat only once, and count it under only its primary use (e.g., a doe whose primary use is as a "Milk" goat might have three male kids that will be sold as "Meat" goats).

- b. Goats and kids intended for **market**

For market kids less than 1 year old and market goats 1 year old and older, enter the total number of animals on hand July 1, 2009, according to each animal's primary intended use, regardless of breed (i.e., Angora/Fiber, Milk, Meat or Other). Include each goat only once, and count it under only its primary use (e.g., a doe whose primary use is as a "Milk" goat might have three male kids that will be sold as "Meat" goats).

- c. Total Goats and Kids with Primary Use of **Angora/Fiber, Milk, or Meat**

For Item 5a and 5b, add up the cells for each primary use (Angora/Fiber, Milk, Meat, and Other) to get a total for each primary-use column. Make sure the total matches the corresponding total for Angora/Fiber, Milk, and Meat in Item 3a-d.

**Item A6 – Goat breeds**

Ask the Producer if they know the breed(s) of their goats, for all goats counted in 3e.

*What if...*

A Producer says his goats are a meat breed, but doesn't know which one?

*Answer: If you're familiar with goat breeds, and can identify the breed, fill in the appropriate category. If you have no idea, then fill in "Other" and indicate unknown meat breed.*

*What if...*

A Producer says her goats are not purebred, but are a Saanen cross?

*Answer: Account for these goats in 6r Crossbred, and indicate they are Saanen crosses. If she knows the breed they are crossed with, list that breed as well.*



## Section B: General Management

Questions in this section have a wide range of topics as the name suggests. We ask about record keeping, housing, food and water sources.

### Item B1 - Number of Years Primary Producer has Raised Goats

Enter the year the primary Producer began raising goats. Include a four digit number for the year.

### Item B2 – Expected goat quantity in 5 years

If the Producer expects to have no goats in 5 years, then check “none” and continue, otherwise, skip to B4.

### Item B3 – Main reason for expecting to have no goats in 5 years

Check the primary reason the Producer expects to be out of the goat business in 5 years.

### Item B4 – Association membership

Check “Yes” or “No” for Items 4a and 4b to indicate whether the respondent belongs to national, state, or local goat associations or clubs.

*What if...*

A respondent belongs only to a regional association?

*Answer: Include regional associations under Item 4a, with national associations. Many national associations have regional divisions.*

### Item B5 – Goat and kid production records

Check the primary system use to maintain goat production records in the previous year.

*What if...*

The respondent uses an internet-based herd-management software program, such as DHIA?

*Answer: Check the box for 1 ‘A livestock of goat management software program’ and specify ‘DHIA’.*

## Item B6 – Goat management

Indicate the number of months the **majority** of goats were managed on, or in, the listed accommodations during the previous 12 months. The total should account for all 12 months. If goats are moved indoors at night, answer for daylight hours. Items 6a-6e must be greater than or equal to 12 months.

**Open range** means any unfenced acreage, even if it's a few acres surrounded by residential areas. If the goats are on unfenced land and can wander out amongst homes, they're on open range.

**Fenced range** means any fenced area that is not specifically cultivated to raise forage or browse for the goats.

**Fenced farm** means any fenced area that is specifically cultivated to raise forage or browse for the goats.

**Outdoor dry lot** refers to a pen or fenced area that does not allow grazing but that is also not a feedlot (i.e., it is not meant for finishing goats on a high-energy ration for slaughter).

**Indoors** refers to any building with 4 sides used to house goats.

*What if...*

A respondent has a 10-acre parcel that is fenced on three sides but not on the fourth side, which borders a mobile home park, and the goats occasionally wander through the mobile home park? They are on this parcel all year except for winter when they are moved to a barn.

*Answer: Indicate 9 months in the "Open range" accommodation category. Goats that are not completely contained should be considered to be on open range, regardless of the type of land or its use. And 3 months in the "Indoors" accommodation type.*

## Item B7 - Types of Land Used for Goats and Kids

Indicate the number of months goats or kids from the operation were placed on state or federal public land (Item 7a) or other land that was not part of the operation (Item 7b) during the last 12 months.

**[Enumerator Note: If none of the operation's goats or kids were placed on public land or other land during the previous year (Items 7a and 7b are both NO), skip to Item 9.]**

## Item B8 – Commingling of Goats While on Public or Other Land

Check the appropriate box ("Yes" or "No") to indicate whether goats or kids that were placed on public or other land were mixed with sheep or goats from other operations.

## Item B9 – Access to surface water

Check the appropriate box ("Yes" or "No") to indicate whether goats or kids had access to ponds, irrigation ditches, streams or creeks at any time in the previous year.

## Item B10 – Browsing vs Grazing

Indicate the percentage of time the **majority** of goats spent on each of two feed types from **April through June 2019**.

There could be confusion if most goats are on a range as to whether they would be considered grazers or browsers. You could ask the responder what the range is mostly made up of (pasture or browse) and answer based on that.

**Browsing** – typically refers to land with shrubs or other woody plants.

**Grazing** – this refers to pasture land with grass or similar low vegetation.

*What if...*

A respondent placed their goats on shrub land from April through June, but there was also grass in the area.

*Answer: Indicate 100% browsing since goats will preferentially browse.*

## Item B11 – Feed sources or supplements

For each feed source or supplement, check the appropriate box (“Yes” or “No”) to indicate whether **ANY** goats or kids on the operation were provided this during the last year.

*What if...*

A dairy operation breeds year round and feeds whole shelled corn to does in late gestation?

*Answer: For Item 11c (Concentrate/grain rations), check “Yes” even though each goat receives the concentrate for only part of the time, the operation is feeding it to some goats throughout the year.*

*What if...*

A meat goat operation provides all goats with a 16% molasses lick during the winter?

*Answer: For Item 11g (Other), write “16% molasses lick” on the “specify” line and check the box for “Yes.”*

## Section C: Breeding Management

### Item C1 – Breeding of Goats During Previous 12 Months

Check “Yes” or “No” to indicate whether the operation bred any goats during the previous 12 months (July 1, 2018, through June 30, 2019).

**[Enumerator Note: If “Yes,” continue with Section C. If “No,” the operation did not breed any goats during the previous 12 months, skip to Section D.]**

### Item C2 – Use of Bucks for Natural Breeding

Check “Yes” or “No” to indicate whether the operation used bucks for natural breeding during the last breeding season.

*What if...*

An operation used AI for all does but kept the does in a field with a buck “just in case”?

*Answer: “Yes”. We want to know if an operation used any bucks for any natural breeding, even if that wasn’t the primary breeding method.*

### Item C3 – Defined Breeding Season

Check “Yes” or “No” to indicate whether the operation has a defined breeding season. A breeding season is the period of time during which does are exposed to bucks or artificially inseminated. To have a defined breeding season, **bucks are kept with the does no longer than 4 months**. Producers that allow bucks to remain with the does all year have no set breeding season.

**[Enumerator Note: If “Yes,” continue to Item 4. If “No,” no defined breeding season, skip to Item 5.]**

### Item C4 – Frequency of Breeding to Kid

Check the appropriate box to indicate whether the operation breeds the majority of their does to kid less than once per year, once per year, or more often (such as three times in two years).

*What if...*

An operation breeds most of their does every fall, but has a small group they breed in the summer for show purposes”?

*Answer: “Once a year” since all of the does are bred once a year, even though some are bred at different times throughout the year.*

### **Item C5 – Estrus synchronization**

Check “Yes” or “No” to indicate whether the operation manipulated breeding by synchronizing estrus (treating does so that they enter estrus and ovulate at about the same time) from July 1, 2018 to June 30, 2019.

***[Enumerator Note: If “Yes,” continue with Item 6. If “No,” the operation did not manipulate breeding during the previous 12 months, skip to Item 7.]***

### **Item C6 – Reasons for synchronizing estrus**

Check “Yes” or “No” to indicate which of the listed reasons apply for why this operation used estrus synchronization.

### **Item C7 – Reproductive practices**

Check “Yes” or “No” to indicate whether the listed reproductive practices (Items 6a-6f) were used on the operation from July 1, 2018 to June 30, 2019.

### **Item C8 – Buck performance traits**

Check “Yes” or “No” to indicate whether the operation was improving buck performance traits (usually in reproduction, growth, carcass merit) through genetic selection.

### **Item C9 – Selection of does or buck for parasite resistance**

Check “Yes” or “No” to indicate whether the operation selected does or bucks for breeding based on their resistance to internal parasites from July 1, 2018 to June 30, 2019.

### **Item C10 – Recording breeding history**

Check “Yes” or “No” to indicate whether the operation recorded the breeding history of individual does from July 1, 2018 to June 30, 2019.

## Section D: Kid Crop and Management

This section follows up Section C with questions covering the 12 month period from July 1, 2018 to June 30, 2019.

### Item D1 – Kids born from July 1, 2018 to June 30, 2019

Check “Yes” or “No” to indicate whether any kids were born on the operation from July 1, 2018 to June 30, 2019.

**[Enumerator Note: If “Yes,” continue with Section D. If “No,” the no kids were born, skip to Section E.]**

### Item D2 – Does Bred

**[Enumerator Note: This question refers to the last completed breeding season and the resulting completed kid crop. A kid crop can be considered completed if all does that were expected to kid have kidded. If some does are still pregnant from the last breeding season, please use the previous breeding season to answer the questions—we need information based on a complete kid crop.]**

Indicate in the boxes provided how many **does** were bred by each method for the most recently completed kid crop. If the listed method was not used, check the “None” box. Total the number of does bred in Item 2.e and confirm the total with the producer.

Sometimes a doe will be bred but not become pregnant and will be bred again. In this case, count only the method used for the first breeding.

*What if..*

An operation used AI for all does but kept the does in a field with a buck “just in case?”

*Answer: Please answer for the primary breeding method used for each doe. If the primary approach to breeding for all does is AI, but the does are kept in a field with bucks in case a few does don’t become pregnant by AI or spontaneously abort early in pregnancy, include all those does under Item 2c (AI).*

### Item D3 – Does by Kidding Outcome

Consider the does in Item 2. Indicate in the boxes provided how many of those does had the listed kidding outcomes.

**Item 3a.** Enter the number of does that gave birth, whether the kid(s) was born alive or dead.

**Item 3a.i.** Enter the number of Item 3a does that had a multiple birth (twins, triplets, or more).

**Item 3b.** Enter the number of does that had a known abortion (e.g., the abortion was observed, or the doe had been confirmed pregnant).

**Item 3b.i.** Enter the number of Item 3b does for which this was their first kid.

**Item 3c.** Enter the number of does that either never became pregnant or had an unobserved abortion (i.e., pregnancy had not been confirmed).

**Item 3d.** Enter the number of does that died or were removed before they kidded.

**Item 3e.** Add the entries for Items 3a, 3b, and 3c (excluding 3a.i and 3.b.i) and enter the total in Item 3e.

**[Enumerator Note: Do not include Item 3a.i OR 3b.i in your total.]**

#### **Item D4 – Kids born**

Answer this question for the most recently completed kid crop.

**Item 4a.** Of kids born on the operation between July 1, 2018, and June 30, 2019, record the number that were born alive.

**Item 4b.** Of kids born on the operation between July 1, 2018, and June 30, 2019, record the number that were born dead.

**Item 4c.** Record the total number of kids born, alive or dead, between July 1, 2018, and June 30, 2019.

*What if...*

The Producer found a dead kid in the pasture but doesn't know if it was born alive?

*Answer: Ask the Producer to use his or her best judgment. If the Producer is certain the kid was born alive and healthy, but died because of some cause such as suffocation in the amniotic sac or exposure to the elements, the kid should be counted as "born alive." If the Producer believes the kid was dead at birth or died shortly after, perhaps because of failure to suckle or because of a congenital anomaly (such as familial  $\beta$ -mannosidosis), the kid should be counted as "born dead."*

#### **Item D5 – Weaning Outcome for Kids Born Alive**

Of the kids in Item 4a, indicate their disposition at weaning.

#### **Item D6 – Birth Environment for ALL Kids Born**

Indicate the kidding environment for all the kids born (Item 4c) as a percentage of Item 4c.

**a. Individual kidding pen** (or jug) refers to a special pen dedicated for one doe during kidding. Such pens are usually inside a barn or shed but they can also be outside.

**b. Multiple does indoor pen** refers to a pen indoors that allows for multiple does to kid at the same time. They might or might not be separated from other goats, depending whether any other goats are in the barn at the time.

**c. Multiple does outdoor kidding area that allows increased observation and/or shelter.** This type of environment would be something such as a "close-in" pasture or pen where the does can be seen easily from the Producer's home or usual work areas, allowing close observation. This could also refer to a pasture or pen that has shelter if most of the goat pastures do not have shelter.

**d. Other multiple doe fenced pasture.** If does kid within their usual pasture or pen, without shelter, they should be included in this option.

**e. Open range** means any unfenced acreage, even if it's a few acres surrounded by residential areas. If the goats are on unfenced land and can wander out amongst homes, they're on open range.

**f. Multiple doe dry lot** refers to a pen or fenced area that does not allow grazing.

**g. Other**, please specify.

*What if...*

The Producer typically moves does that are about to kid from their regular pasture to the barn and lets them pick their own spot within the barn for kidding, but one doe kidded in the regular pasture before she could be brought to the barn?

*Answer: Indicate the percentage of kids born in the barn in Item 6b, and write the percentage of kids born in the pasture in Item 6d.*

#### **Item D7 – Total Kids Born from July 1, 2018 to June 30, 2019**

This refers to an entire year, not just the most recently completed kid crop. Although, for many operations, the numbers may be the same as Items 4a-4c.

#### **Item D8 – Total Kids Born by Month**

Indicate the number or percent of kids born by month. If none were born in a particular month, check the "None" box.

#### **Item D9 – Assisted Births**

Indicate the percentage of births that were attended by someone. The person could have been present and not helped, or helped with the birth.

#### **Item D10 – Recorded Information**

Indicate if records were kept for the listed information.

#### **Item D11 – Placenta Management**

Indicate how placentas were usually disposed of from July 1, 2018 through June 30, 2019. Check one box ONLY.



### **Item D12 – First-time Kidding Doe Separation**

Does kidding for the first time can be more susceptible to infectious diseases transmitted by older does as they may not have been exposed to them. This could result in an abortion, so it's good management to separate the does that are pregnant for the first time from the older does.

Check "Yes" or "No" to indicate whether does pregnant for the first time were separated from older does from July 1, 2018 to June 30, 2019.

If there were no first-time kidding does during this time period, check "N/A" and skip to Item 14.

***[Enumerator Note: If "N/A" is checked, skip to Item 14]***

### **Item D13 – First-time Kidding Does: Doe-kid Management**

Answer this question for the practice done with the majority of first-time kidding does. If

Item 13.1 is checked, provide the **number of days** post kidding the pairs are kept separate.

### **Item D14 – Older does: doe-kid management**

Answer this question for the practice done with the majority of does that have previously kidded.

If Item 14.1 is checked, provide the **number of days** post kidding the pairs are kept separate.

### **Item D15 – Kid access to water and feed**

Provide the age of kids (in days) when they were first offered water, creep feed, and hay or other roughage. Answer for the majority of the kids.

Enter "0" if housed with doe and enter "1" if offered on the day of birth.

### **Item D16 – Weaning Age**

Indicate at what age (**in weeks**) the kids are no longer allowed to nurse, or provided milk or milk replacer. Write in the age for both doe and buck kids as they may differ. Some kids are nursing or being fed milk replacer up until they leave the operation. In that case, indicate how old they are when they leave the operation.

### **Item D17 – Record keeping for weaning information**

Check "Yes" or "No" to indicate whether records were kept for the listed information.

### Item D18 – Weaned kids sold, traded or given away

Check “Yes” or “No” to indicate whether any weaned kids were sold from the operation during July 1, 2018 to June 30, 2019.

**[Enumerator Note: If “No,” skip to Item 21]**

*What if...*

The Producer sold one weaned kid to a neighbor for a 4-H project but typically doesn't sell any goats until they're adults?

*Answer: “No” for Item D18 and skip to Item D21. We want information on what operations usually did, so we want only those operations that typically sold weaned kids during the previous 12 months to proceed to Item D19 and provide information on the usual weight and age at which the weaned kids were sold.*

*What if...*

All kids were weaned as they were sold off the operation?

*Answer: “Yes” for Item D18 and continue.*

### Item D19 – Age of weaned kids when sold, traded or given away

Indicate the average age at which kids were sold.

### Item D20 – Weight of kids when sold, traded, or given away.

Indicate the average weight of kids when they were sold.

### Item D21 – Checking for horns prior to disbudding

Answer “Yes” if the Producer **actively checked** to see if there were horn buds on their kids prior to disbudding them. If the operation does not disbud any kids, then check N/A.

### Item D22 – Disbudding

**[Enumerator Note: Disbudding occurs at 3 weeks of age or younger. After about 3 weeks of age, the procedure would be considered dehorning. Ensure the producer knows that disbudding should usually occur prior to 3 weeks of age.]**

Item D22a. Indicate how many kids developed horn buds or were expected to develop horns.

**[Enumerator Note: If Item 22a is none, skip to Item 26.]**

Item D22.a.i. Of the kids in Item D22a, how many were or will be disbudded on this operation. Answer in either “Head” **OR** “Percent.”

**[Enumerator Note: If Item 22a.i. is none, skip to Item 26.]**

Item D22.a.ii. Indicate the average age kids were disbudded on this operation. Answer in either “Days” **OR** “Weeks.”

**Item D23 – Primary method for disbudding**

Check one of the listed options for the primary method used for disbudding kids on this operation. If what is used is not listed, check “Other” and write in the method used.

**Item D24 – Analgesics or anesthetics for disbudding**

Check “Yes” or “No” to indicate whether any analgesics (pain relief) or anesthetics were provided to kids either during the disbudding procedure or afterwards.

Typically, a nerve block will be used during the procedure and a longer-acting pain control drug is provided to reduce pain after the procedure.

**Item D25 – Person that typically disbuds kids**

Check the appropriate box to indicate who most often performs the disbudding procedure.

**Item D26 – Castration**

Check the appropriate box. Select “None” if no buck kids were castration from July 1, 2018 to June 30, 2019.

***[Enumerator Note: If “None” is checked, skip to Section E]***

**Item D27 – Age at Castration**

Report the average age at which buck kids were castrated. Select the appropriate unit (days, **OR**, weeks, **OR**, months) and enter one response.

**Item D28 – Castration method**

Check the appropriate box for the primary method used to castrate buck kids on this operation. If “Other” is selected, write in the type of castration used.

## **SECTION E – Health Management**

The purpose of Section E is to better understand current health management techniques and to assess Producer knowledge regarding animal health resources and animal diseases. We also ask about the use of a veterinarian on this operation and whether a “valid veterinarian-client-patient relationship” (VCPR) exists.

### **Item E1 – Sore Mouth Signs**

Check “Yes” or “No” to indicate whether any goats on the operation had exhibited signs of sore mouth (also known as orf) between July 1, 2018 and June 30, 2019.

***[Enumerator Note: If “No,” skip to item 3]***

### **Item E2 – Sore mouth management practices**

For each listed practice check one box to indicate whether this was “Never,” “Sometimes” or “Always” done.

### **Item E3 – Contact for Goats with Neurologic signs**

Check “Yes” or “No” to indicate whether the Producer would reach out to each of the listed contacts if any of their goats were circling, or lip smacking, or constantly rubbing against fences, or exhibited lip smacking or loss of coordination behaviors.

### **Item E4 – Brucellosis Testing Within the Previous 3 Years**

Check “Yes” or “No” to indicate whether any of the Producer’s goats were tested for brucellosis during the previous 3 years.

***[Enumerator Note: If Item E4 = No, skip to Item E8]***

### **Item E5 – Purposes for Testing Goats for Brucellosis Within the Previous 3 Years**

For goats tested for brucellosis during the previous **3 years**, check “Yes” or “No” for each purpose listed in Items 5a through 5f to indicate whether the goats were tested for that reason.

### **Item E6 –Brucellosis Test Types Used Within the Previous 3 Years**

Check “Yes,” “Don’t know,” or “No” to indicate which types of tests were used when goats were tested for brucellosis during the previous 3 years. If “Other” is “Yes,” then specify which test was used.

### **Item E7 – Certified Brucellosis-Free**

Check “Yes” or “No” to indicate if the goat herd is certified Brucellosis-Free. If the herd is certified Brucellosis-Free, it will have a herd certification number and know the date of the last herd test.

#### **Certified Brucellosis Free**

This is a State administered herd certification program that involves a documented surveillance program and includes records of the supporting required testing. The operation will have a written certification from the State Veterinarian documenting their brucellosis-free status and the certification should be retained on file with the State regulatory agency.

### **Item E8 – TB Testing**

Check “Yes” or “No” to indicate whether any of the Producer’s goats were tested for TB (tuberculosis) during the previous 3 years.

***[Enumerator Note: If Item E8 = No, skip to Item E11]***

### **Item E9 – Purposes for Testing Goats for Tuberculosis (TB) Within the Previous 3 Years**

For goats tested for TB during the previous **3 years**, check “Yes” or “No” for each purpose listed in Items 9a through 9e to indicate whether the goats were tested for that reason.

***Note: The Producer would not have done this testing themselves as diagnosing TB in live animals depends on using an effective testing technique with an intradermal (within the skin) injection of tuberculin obtained through the State animal health official or APHIS –VS District Office.***

### **Item E10 – Accredited TB (Tuberculosis)-Free**

Check “Yes” or “No” to indicate if the goat herd is accredited Tuberculosis-Free. If the herd is accredited, it will have a herd accreditation number and know the date of the last herd test.

#### **Accredited TB (Tuberculosis) Free**

This is a State administered herd certification program that involves a documented surveillance program and includes records of the supporting required testing. The operation will have a written certification from the State Veterinarian documenting their tuberculosis-free status and the certification should be retained on file with the State regulatory agency.

### **Item E11 – Health Information Record Keeping**

For each of the listed health management practices, indicate whether the information was “Never,” “Sometimes,” or “Always” recorded. If the practice wasn’t done from July 1, 2018 to June 30, 2019, then indicate “N/A”.

## Item E12 – Antibiotic Use and Withdrawal Times

“Withdrawal period” refers to the **antibiotic** withdrawal period and is the time it takes the body to break down an antibiotic until it is no longer present. This will vary depending on the drug, the animal species, and whether the animal food product is milk or meat. The period specifies the number of days that must pass after the last antibiotic treatment was given before any meat or milk can enter the food supply.

Indicate which of the listed options is how the Producer usually determines the withdrawal period for a given antibiotic. **Check one only.**

## Item E13 – Use of a Veterinarian

Check “Yes” or “No” to indicate whether the Producer consulted a veterinarian for any reason related to goat health, productivity or management from July 1, 2018 to June 30, 2019.

“Consulted” would include a phone call, on- or off-farm in person discussion, or email/text question.

***[Enumerator Note: If “No” vet consultation, skip to Item 15]***

## Item E14 – Reason for Veterinary Consultation

Check “Yes” or “No” to indicate whether the Producer consulted a veterinarian for any of the listed reasons.

**[If Item 13 = “Yes” (did consult a veterinarian), SKIP to Item 16]**

Indicate which of the listed reasons best described why a veterinarian was not consulted. **Check one only.**

## Item E15 – No Private Veterinarian Used

***[Enumerator note: If Item 13 = “Yes” (did consult a veterinarian), SKIP to Item 16]***

Indicate which of the listed reasons best describes why a veterinarian was not consulted from July 1, 2018 through June 30, 2019. **Check one only.**

## Item E16 – Veterinarian-Client-Patient Relationship (VCPR)

Ask the respondent how familiar they are with the term “Veterinarian-Client-Patient Relationship” and check one of the listed options. The FDA definition of a *valid veterinarian-client-patient relationship* (VCPR) is described below. States can have their own definition of a VCPR as well.

1. A veterinarian has assumed the responsibility for making medical judgments regarding the health of (an) animal(s) and the need for medical treatment, and the client (the owner of the animal or animals or other caretaker) has agreed to follow the instructions of the veterinarian;
2. There is sufficient knowledge of the animal(s) by the veterinarian to initiate at least a general or preliminary diagnosis of the medical condition of the animal(s); and
3. The practicing veterinarian is readily available for follow up in case of adverse reactions or failure of the regimen of therapy. Such a relationship can exist only when the veterinarian has recently seen and is personally acquainted with the keeping and care of the animal(s) by virtue of examination of the animal(s), and/or by medically appropriate and timely visits to the premises where the animal(s) are kept.

## Item E17 – VCPR relationship for This Operation

***[Enumerator Note: Show the VCPR reference card to the Producer]***

Select the option that best describes the Producer’s VCPR with his or her veterinarian.

## SECTION F – Biosecurity

The purpose of this section is to understand the level of biosecurity present on the operation. Knowledge regarding biosecurity practices on goat operation across the U.S. will help researchers and the livestock industry better understand risks for disease occurrence within operations and better prepare for possible disease outbreaks across operations. We ask about what types of visitors come onto the operation, what procedures they follow to enter and if they have with the goats present. Next, we ask if the operation's workers have their own livestock at home and whether they visit venues like slaughter facilities. Finally, we attempt to find out the degree of contact goats on this operation have with other animals.

### Item F1 – Visitors

[Column 1] Check “Yes” or “No” to indicate whether the listed visitor types came onto the operation in the last 12 months.

***[Enumerator Note: All sections of this question need to be answered. That is, we need at least a response of “No” for every 1a-1n in Column 1.]***

[Column 2] If Column 1 was “Yes,” then go to Column 2 and indicate if visitors touched goats or walked through areas where goats are kept.

One way to ask this question for the first section could be, “During the previous 12 months, did any Federal or State veterinarian or animal health worker make any visits to the operation and, if so, did they have direct contact with animals on this operation?”

*What if...*

A friend, who happens to be a veterinarian, visited the operation during the previous 12 months?

*Answer: “If the friend visited the operation strictly as a friend and not in a professional capacity as a veterinarian, count the visits under Item 1m, “Family, friends and/or neighbors.” If the Producer asked the veterinarian to check out a few kids, count those visits under Item 1a, “Private or company veterinarian.”*

### Item F2 – Visitor Access to Facilities

Check “Yes” or “No” to indicate whether any visitors accounted for in F1 had access to areas or facilities that house or contain animals, feed, manure, or farm equipment.

***[Enumerator Note: If “No,” skip to Item 4]***



### Item F3 – Biosecurity Measures for Visitors

For each measure listed (Items 3a – 3g), check the answer that best describes how often the Producer required the measure for visitors entering the goat production areas during the previous 12 months.

*What if...*

The private veterinarian, who handled the goats, always had to change into clean coveralls, but the feed company consultant, who walked through the goat production area to check the feed-storage bins and equipment, never had to change into clean coveralls?

*Answer: “Sometimes” for Item 3a. We are interested in measures required of visitors in the goat production areas, regardless of whether the visitors actually touched the goats.*

*What if...*

The goat buyer drives his truck into the goat production areas to ease loading, but other visitors’ vehicles are not allowed into the goat areas?

*Answer: “Sometimes” for Item 3g.*

### Item F4 – Goat or Other Livestock Ownership of Goats by Paid or Unpaid Workers (Including Family Members)

Check “Yes” or “No” to indicate whether any paid or unpaid workers (including family members) who live off the operation had goats or other livestock at their home during the previous 12 months. If the operation did not have any workers who lived off the operation, check “N/A” for “Not Applicable.”

*What if...*

The Producer’s daughter, who does the operation’s accounting, lives off the operation and her son has one beef calf for 4-H?

*Answer: “Yes” for Item 4.*

## Item F5 – Domestic Animals on This or Adjacent Properties

### *[Answer both columns]*

Check “Yes” or “No” (Column 1) to indicate whether the animal types listed in Items 5a - 5k were **on the operation** at any point during the previous 12 months.

Check “Yes” or “No” (Column 2) to indicate whether the animal types listed in Items 5a - 5k were on **adjacent properties** at any point during the previous 12 months.

#### *What if...*

The neighbors’ beef cattle got out of an open gate one day and had fence-line contact with the goats, but normally the goats wouldn’t have fence-line contact or be commingled with beef cattle?

*Answer: “Yes” for Item 5c. We want to know about any episode of contact, even if it happened only on one day.*

## Item F6 - Wild Animals on This or Adjacent Properties

### *[Answer both columns]*

Check “Yes” or “No” (Column 1) to indicate whether the animal types listed in Items 6a - 6f were **on the operation** at any point during the previous 12 months.

Check “Yes” or “No” (Column 2) to indicate whether the animal types listed in Items 6a - 6f were on **adjacent properties** at any point during the previous 12 months.

## Item F7 – Cats on the Operation

Check “Yes” or “No” to indicate which of the listed types of cats were present on the operation.

IF the Producer has never seen wild cats (such as mountain lions, bobcats) on their property, but knows they are in the area, check “Yes” to 7c.

#### *What if...*

The Producer’s family, who lives on the operation, has a cat but it never goes outdoors?

*Answer: “No” for Item 7a.*

## Item F8 – Litter Box Disposal

Check “Yes” or “No” to indicate whether the contents of a cat litter box were discarded into goat-raising areas. This is sometimes done by Producers to expose their goats to toxoplasmosis before they are pregnant.

## Item F9 – Rat and Mouse Control

Check “Yes” or “No” for each of the listed methods if they were specifically used to control rats and mice.

## SECTION G: Movement and Marketing

### Item G1 – Goats or Kids Added (**NOT BORN**) to the Operation

Check “Yes” or “No” to indicate whether any goats or kids were permanently added to the operation (July 1, 2018, through June 30, 2019). Do not include kids that were born on the operation or goats or kids that were visiting.

If “No,” in what year were goats last added to this operation (other than through births)?

*What if...*

The Producer brought on a buck for a few months during breeding season but then sent the buck back to his owner?

*Answer: “No” for Item 1. We want to know about any goats that were meant to be permanently added to the operation’s herd.*

**[Enumerator Note: If Item 1 = No, skip to Item 14]**

### Item G2 – Required Prevention Practices for Added Goats

**[Answer both columns]**

Check “Yes” or “No” to indicate whether the listed disease prevention practices were **ALWAYS** required either PRIOR TO arriving or were performed ON THE OPERATION before newly added goats were commingled with the rest of the herd.

Answer the first column before answering “Yes” or “No” in the second column. Answer for all listed preventative practices.

If the practice was sometimes performed and sometimes not performed, answer “No” for that practice

### Item G3 – Quarantine of Newly Added Goats

Check “Yes” or “No” to indicate whether the newly added goats were quarantined (physically isolated from other goats) after arrival on the operation.

If “Yes,” ask the respondent for how many days, on average, pregnant goats were quarantined (Item 3a), and how many days were non-pregnant goats quarantined (Item 3b).

**[Enumerator Note: If “No,” skip to Item 4]**

### Item G4 – Newly Added Kids (not born on operation)

How many kids were added to the operation from July 1, 2018 to June 20, 2019? Do not count kids that were born on the operation.

**[Enumerator Note: If “None,” skip to Item 7]**

### Item G5 – Sources of New Kids Added

For Items 5a – 5i, enter the number of kids added from the listed source, and how many shipments were received for those kids.

Please be sure the sum of kids added (Item 5a-5i) equals Item 4.

*What if...*

The Producer saw and bought a buck kid at the state fair but picked him up later directly from the buck's original premises?

*Answer: Count this buck under "Kids Added" for Item 5c. We want to know where the animals came from most recently before they were added to the operation.*

### Item G6 – Kids Added, Not Yet Weaned

Indicate how many of the kids added in Item 5 were not yet weaned.

### Item G7 – Adult Goats Added

Check "Yes" or "No" to indicate if any ADULT goats were added to the operation from July 1, 2018 to June 30, 2019.

***[Enumerator Note: If "No," skip to Item 14]***

### Item G8 - Newly Added Adult Does

How many adult **does** were added to the operation from July 1, 2018 to June 20, 2019?

***[Enumerator note: If "None," skip to Item 11]***

### Item G9 – Source of Newly Added Adult Does

For Items 9a – 9i, enter the number of adult does added from the listed source, and how many shipments were received for those goats.

Please be sure the sum of adult does added (Item 9a-9i) equals Item 8.

In Column 2, for the does added, indicate how many shipments were received.

### Item G10 – Newly Added Adult Does; Pregnant

Indicate how many of the newly added adult does were pregnant.

### Item G11 – Newly Added Adult Bucks

How many adult **bucks** were added to the operation from July 1, 2018 to June 20, 2019?

### **Item G12 – Newly Added Adult Wethers**

How many adult **wethers** were added to the operation from July 1, 2018 to June 20, 2019?

***[Enumerator Note: If both Item 11 and Item 12 are '0', skip to Item 14]***

### **Item G13 – Source of Newly Added Adult Bucks and Wethers**

For Items 13a – 13i, enter the number of adult **bucks and wethers** added from the listed source, and how many shipments were received for those goats.

Please be sure the sum of adult does added (Item 13a-13i) equals the sum of Items G11+G12.

In Column 2, for the bucks and wethers added, indicate how many shipments were received.

### **Item G14 – Goats Leaving and Returning to the Operation**

Check “Yes” or “No” to indicate if any goats or kids on the operation left the operation to attend an event from July 1, 2019 to June 30, 2019, and the return to the operation.

***[Enumerator Note: If “No,” skip to Item 16]***

### **Item G15 – Isolation of Returning Goats**

Check the appropriate box to answer whether returning goats were isolated from other goats after returning from an event.

***[Enumerator Note: If box #1 “Never isolate” or box #2 “Only isolate for a specific reason...” is checked, skip to Item 16.]***

If, box #3 is checked, continue to answer Item 15.a. Indicate the minimum number of days returning goats were isolated from goats in the rest of the herd after returning from an event.

### **Item G16 – Permanent Removals**

Check “Yes” or “No” to indicate whether any live goats or kids were sold or otherwise permanently removed from the operation during July 1, 2018, through June 30, 2019. Do not include goats or kids that died or were home-slaughtered for your own consumption.

***[Enumerator Note: If Item 16 = No, skip to Section H]***

### **Item G17 – Final Destination of Removed Goats**

Indicate the number of removed goats and kids by their destination (In-state, Out-of-state, or Don't Know).

For Item 17d, sum Items 17a and 17c and record the total number of goats and kids permanently removed by their destination.

### Item G18 – Number of Live Goats and Kids Permanently Removed From the Operation

For Items 18a and 18b, enter the number of goats (1 year and older) and kids (less than 1 year old) that were permanently removed from the operation during July 1, 2018, through June 30, 2019. Do not include goats or kids that died or were home-slaughtered for personal consumption.

For Item 18c, sum the entries for Items 18a and 18b and record the total number of goats and kids permanently removed from the operation.

### Item G19 – Channels for Permanent Removal of Goats from the Operation

For Items 19a – 19h, enter the number of live goats or kids that were permanently removed from the operation through each of the listed channels.

For Item 19i, sum the entries for Items 19a, and 19b – 19h and record in the appropriate column the total number of adult goats and kids permanently removed from the operation.

***[Enumerator Note: Do not include Item 19.a.i. in your total.]***

Please be sure the total for “Goats Removed” equals Item 18a and the total for “Kids Removed” equals Item 18b.

*What if...*

The Producer takes two cull bucks to the sale barn, where they are purchased by a dealer?

*Answer: Count these bucks under “Goats Removed” for Item 19f, “Auction/sale barn.” We want to know who or which kind of establishment the Producer dealt with directly.*

### Item G20 – Type of Adult Goat Culled

For Items 20a, 20b and 20c, enter the number of breeding does, breeding bucks and other goats permanently removed from the operation that were considered to be cull animals. Culling refers to the permanent removal of goats or kids from the herd for reasons such as poor health or poor production. It does not include goats that died on the operation.

For Item 20d, sum the entries for Items 20a, b and c and record the total number of culled bucks and does.

***[Enumerator Note: If 20d = “0,” skip to Section H]***

### Item G21 – Reasons for Culling: Does

***[Enumerator Note: If 20a = "0," skip to Item 23]***

Enter the number of does that were permanently removed from the herd for each of the listed reasons (Options 21a through 21i). Choose the **primary** reason if more than one applies. Please record the answer as number of head; if the Producer gives you percentages, write them down and calculate back to number of head from the total number of does culled given in Item 20a.

**Count each doe only once.**

### Item G22 —Average Age in Years of Culled Does

Enter the average age of culled does, in years. Round up or down to the nearest whole year.

### Item G23 – Reasons for Culling: Bucks

***[Enumerator note, if Item 20b="0," skip to Item 25]***

Enter the number of bucks that were permanently removed from the herd for each of the listed reasons (Options 23a through 23g). Choose the **primary** reason if more than one applies. Please record the answer as number of head; if the Producer gives you percentages, write them down and calculate back to number of head from the total number of bucks culled given in Item 20b. **Count each buck only once.**

### Item G24 —Average Age in Years of Culled Bucks

Enter the average age of culled bucks, in years. Round up or down to the nearest whole year.

### Item G25 —Herd Identification

Enter the number of head or percent of adult goats that were removed from July 1<sup>st</sup>, 2018 to June 30<sup>th</sup>, 2019, that had a herd identification when they left the operation.

## SECTION H - Identification

In this section we ask about different individual animal IDs and herd IDs used on this operation.

### Item H1 - Individual and Herd-Level Goat identification

If any of the goats on the operation currently have an individual or herd ID, such as a tattoo, collar, ear notch, brand, microchip, or ear tag, check “Yes” and continue to Item 2. If no goats have any kind of identification, check “no” and skip to Section I.

It is not important that the Producer actually uses the identification for management purposes, only that one or more goats have it.

***[Enumerator Note: If no goats have individual animal-level identification or herd-level identification (Item 1 equals “No”), skip to Section I.]***

### Item H2: Methods of Identification

Use the code list in the box for each identification type to indicate whether the ID type was used for individual ID, as a Herd ID, for both, or not used.

With individual identification, each animal has its own unique identification. With herd-level identification, all goats in the herd have an identifier that indicates they belong to the herd (so all goats have the same ID, in this case). Each goat can have individual identification only, herd-level identification only, or both types of identification. Goats can have more than one type of identification or no individual identification.

A way to ask this question for 2b could be, “Was a collar or leg band used to identify goats individually? Was the same method used to identify goats as a member of the herd?”

***[Enumerator Note: All boxes of this question must be answered. If the ID was not used, place a ‘4’ in the appropriate box]***

What if...

Only one goat that was purchased a few years back has a tattoo, and none of the other goats have individual or herd-level ID?

*Answer: Write “1” (Individual Goat ID) for Item 2a.*






What if...

A couple of goats bought from the neighbor have ID, but no other goats have ID and the Producer doesn’t use the ID for anything?

*Answer: Please mark the appropriate answers for the types of ID the goats have. We want to know if any goats have any ID, regardless of whether the Producer uses the ID for management practices.*



**Example Ear Tags:**

<p>Plastic flock tag (official)- <b>Classified under Plastic Scrapie Program Ear Tag</b></p> 	<p>These are probably the most common type of tag that those people conducting the survey will encounter. Tag has both Herd ID and individual animal ID, plus shield. Tags that, in the past, were provided at no-cost to producers, were white. Producers can order others colors directly from manufacturers, at their own expense.</p>
<p>Metal flock tag (official) <b>Classified under Metal Scrapie Program Ear Tag</b></p> 	<p>Format is the same as for plastic flock tags. Less commonly used, due to problems when used in goats. Tag color - white.</p>
<p>Plastic serial tags (official) <b>Classified under Plastic Scrapie Program Ear Tag</b></p> 	<p>Tags often preferred by markets for easy reading, but no longer provided to markets at no-cost. Unlikely to be found on producers animals, unless animal was purchased through a market. Format is State postal code/one alpha character/5 numeric characters, no spaces – XXA12345; plus shield.</p>
<p>Metal serial tags (official) <b>Classified under Metal Scrapie Program Ear Tag</b></p> 	<p>Currently, this is the only tag provided by USDA at no cost to producers. New tags are orange (see picture below); older tags were white; blue is also available for animals in slaughter channels. Format is State postal code/two alpha characters/4 numeric characters, no spaces – XXAB1234; plus shield.</p>
<p>840 tags <b>Classified under Plastic Scrapie Program Ear Tag</b></p> 	<p>15 digits 840 sequence, with or without RFID; plus shield; round button or strip (SET).</p>
<p>Official Non-Scrapie Tags <b>Classified under Other Official Ear Tag with a USDA Shield</b></p>	<p>These are cattle or swine tags that have the USDA shield, but are not part of the Scrapie program.</p>
<p>Farm/owner tags <b>Classified under Other Plastic Ear Tag</b></p>	<p>Generally, any other unofficial tag used by producer. Unofficial tags do not have the USDA shield.</p>

### **Item H3 – Scrapie Premises Identification**

Check “Yes,” “No,” or “D/K” to indicate whether this operation has been assigned a unique herd ID (scrapie PIN) as part of the National Scrapie Eradication Program.

A Scrapie Premises Identification Number (scrapie PIN) is assigned to a premises by the USDA to identify the goat herd of origin.

## SECTION I — Fiber Production

### Item I1 – Goats Shorn, Clipped, or Combed for Fiber from July 1, 2018 to June 30, 2019

Check “Yes” or “No” to indicate whether the Producer sheared, clipped, or combed any goats for fiber from July 1, 2018, through June 30, 2019.

*What if...*

The Producer has a couple “accidental” Angora-Boer hybrids and normally doesn’t comb any goats for fiber, but shears these few for the hot Texas summer and just gives or throws away the hair?

*Answer: “No” for Item 1. We want to know about goats that were kept to produce fiber and whose fiber was sold or traded.*

***[Enumerator Note: If Item I1 = No, skip to Section J]***

### Item I2 – Number of Goats Clipped and Total Pounds Clipped, by Fiber Type, from July 1, 2018 to June 30, 2019

For Items 2a – 2d, by type of fiber, enter the number of goats clipped **and** the total pounds of fiber clipped (July 1, 2018, through June 30, 2019) in the respective column.

For Item 2e, sum the entries for Items 2a – 2d in each column and record the total in the bottom box of the column.

*What if...*

The Producer clipped goats in the fall and again in the spring? Should the goats and the fiber be counted twice?

*Answer: No, the number of goats clipped and the amount of fiber clipped should only be counted once, so use the numbers from the most recent clipping. We want to estimate the usual amount of fiber obtained per goat.*

### Item I3 – Selling or Trading of Fiber from July 1, 2018 to June 30, 2019

Check “Yes” or “No” to indicate whether the Producer sold or traded any of the fiber obtained from the operation’s goats (July 1, 2018 through June 30, 2019).

If “Yes,” indicate how many pounds of Item 2e were sold or traded.

***[Enumerator Note: If Item 3 = “No,” skip to Item 5]***

#### Item I4 – Percentage of Fiber Sold or Traded by Marketing Method

Enter the percentage of fiber sold or traded by each of the marketing methods listed in Items 4a – 4f.

Add the percentages given for Items 4a – 4f and be sure the total equals 100%.

**a. “In person”** refers to sales at farmer’s markets, or other local means such as by word-of-mouth, advertising in local newspapers or magazines, a shop at the operation, etc.

**b. “Internet”** is for fiber products that are sold or traded over the internet.

**c. “Commercial warehouses”** are places that sort and store fiber before it is sold to processors.

**d. “Direct sales to mill buyer,”** a representative of a fiber mill who buys fiber from individual Producers.

**e. “Cooperative pools”** are groups of Producers who pool their product (animals, milk, fiber, etc.) to sell to a buyer.

#### Item I5 – People Who Sheared, Clipped, or Combed Goats

Check one box (“Yes” or “No”) for each item (Items 5a – 5d) to indicate whether the people listed sheared, clipped, or combed any of the operation’s goats. We want to know all the people who helped shear the goats, not just the one who did the majority of the work.

*What if...*

The owner did most of the clipping, but a few kids from the 4-H club did a few goats for a project?

*Answer: “Yes” for Items 5a and 5d (specify “4-H club members”) and “No” for Items 5b and 5c.*

#### Item I6 – Usual Treatment of Clippers, Shears, and Combs between Goats

Check the box for the one answer that best describes how clippers, shears, and combs were usually treated between goats. **Check one only.**

*What if...*

The Producer left the shears out in the sun for 15 minutes between goats to ‘sterilize’ them?

*Answer: Check the box for “No cleaning or disinfecting” because putting them in the sun doesn’t clean them.*

## SECTION J: Office USE

Section J provides the conclusion for the interview. It has two major purposes: (1) determining if the operation qualifies for Phase II of the study and, if so, providing follow-up information and obtaining a signed Consent form; and (2) obtaining interview response codes for completion of the interview. **All operations should have this section filled out, even if they are ineligible for the study, refuse, or are inaccessible.**

**Item J1:** At the conclusion of the interview, the enumerator will ask the respondent if they are willing to sign the **Consent form** to be contacted for participation in Phase II of the study. An operation **qualifies** for the Phase II if it completed the GGMQ, **and** if on July 1, 2019, they had **5 or more ADULT goats** (Section A, Item 1).

If they complete Phase II of the project, they will be eligible to have biologic testing conducted at no charge.

It may be helpful to explain that the sample of goat operations for the NAHMS Goat 2019 Study was selected from the **confidential** list maintained by the NASS. To meet confidentiality requirements, NASS must obtain the Producer's written permission to release information that the Producer reported to NASS to another agency such as APHIS. Please explain to the Producer that APHIS will continue to uphold the confidentiality requirements.

To complete the consent form, print the Producer's name on the top line, just above "Hereafter referred to as the Cooperator." Let the Producer read the Consent form, then instruct him to sign and date the form on the line designated "Cooperator." The enumerator should then sign and date the form on the line designated "NASDA Field Enumerator." The signed Consent form must be delivered to the State office along with the completed GGMQ. The State office will provide enough extra Consent forms for you to leave a copy with the respondent.

**Item J2:** If the consent form is signed, complete the rest of the consent form and fill in details about the respondent location, number of goats, phone, email, and add other comments that will be helpful for future contact. These comments could include the best phone number, contact name and best times to call to schedule follow-up visits.

**Item J3:** Check "Yes" or "No" to indicate whether the respondent had heard of the NAHMS Goat 2019 Study prior to being contacted by NASS for this survey.

**Item J4:** Next, check the correct box next to the response that applies to the outcome of this interview and status of the operation.

***[Enumerator Note: If box #1 (Complete, Consent Form signed), box #3 (Zero goats on hand July 1st, 2019), box #4 (Out of business), box # 6 (Out of scope), box #7 (Office hold), or box #8 (Inaccessible), skip to Item 7.]***

**Item J5:** If the interview response code for item J4 is **2 or 5** then check the reason that best fits why the operation refused consent for Phase II of the study or why the operation refused to complete the GGMQ.

**Item J6:** If the interview response code form **item J4** is **1 or 2** meaning the operation completed the GGMQ, check the box that indicate if the respondent used written or computerized records to assist in answering any of the survey questions.

**Item J7:** Please record any comments regarding the GGMQ here.

**Ending Time:** Enter the time when the interview ended.