An overview of management practices on U.S. goat operations as part of the NAHMS Goat 2019 Study

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Introduction

The goat population in the U.S. totaled 2.6 million head on over 136,000 operations on January 1, 2020. U.S. goat operations represent a variety of production systems including meat, dairy, angora/cashmere, brush control, and show/companion goats. It is important to understand the current animal health and management practices in this diverse agricultural industry.

Materials and methods

NAHMS is a nonregulatory program within USDA APHIS VS, that was initiated in 1983 to collect, analyze, and disseminate data on animal health, management and productivity across the United States. In 2019, NAHMS, in collaboration with National Agricultural Statistics Service (NASS), conducted its second national cross-sectional study of the goat industry.

The NAHMS Goat 2019 study included 24 of the top goat-producing states, representing 76.6% of U.S. goat operations with 5 or more adult goats and 82.3% of U.S. goats on operations with 5 or more adult goats. Participating states were categorized into 2 regions: West (California, Colorado, Oklahoma, Oregon, Texas and Washington) and East (Alabama, Connecticut, Florida, Georgia, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Vermont, Virginia, Wisconsin).

Operations on the NASS list frame with 5 or more goats were interviewed by NASS enumerators from July 1st through August 9th, 2019. This abstract covers select topics from the general goat management questionnaire (GGMQ) regarding management practices.

Results

Overall, 60.0% (n = 1,840) of eligible operations completed the GGMQ. Operations were categorized by herd size, with 30.5% of respondents classified as small (5-19 head), 44.6% as medium (20-99 head), and 24.9% as large (100 or more head). Overall, 39.6% of operations were in the West region and 60.4% were in the East region. Primary production of the operations was divided as follows: 43.9% meat, 33.4% dairy and 22.7% other.

The average number of years an operator had owned or managed any goats increased as herd size increased: 13.5 years for operators on small operations, 16.0 years for operators on medium operations, and 24.8 years for operators on large operations. In 5 years, 53.4% of operations expected to have about the same number of goats and 27.0% expected to have more goats.

Regarding record keeping, 59.3% of operations used handwritten notes as their primary goat production record keeping system and 25.2% of operations did not maintain records.

Overall, 86.3% of all operations bred any goats in the previous 12 months, and 60.4% of these operations had a defined breeding season. A higher percentage of operations in the West region (53.9%) than in the East region (36.7%) left placentas in the field/birthing area and did not remove them. A higher percentage of operations in the East region (15.2%) composted placentas than operations in the West region (5.2%).

In the previous 12 months, 29.9% of operations added any goats. Of these operations, 85.0% required inspections or treatments for new arrivals, either before arriving on the operation or after arriving but before commingling with other goats. Overall, 57.7% of operations that added any goats quarantined them, with goats quarantined an average of 32.2 days.

In the previous 12 months, 68.3% of operations sold or otherwise permanently removed any adult goats or kids. Of the goats permanently removed, 57.8% were culled goats; 43.5% breeding does and 7.2% bucks. Overall, 70.6% of culled goats had any herd identification (e.g., operation name, operation logo, or a number unique to the operation on an ear tag or other device) when they left the operation.

Significance

This study provides beneficial information to the goat industry, small ruminant practitioners and goat researchers. These results benchmark current management practices on goat operations and can be used to identify areas for education, outreach, and research.

