



Highlights of NAHMS Sheep 2011 “Part I: Reference of Sheep Management Practices in the United States”

In 2011, the U.S. Department of Agriculture’s National Animal Health Monitoring System (NAHMS) conducted a study of U.S. sheep operations. The Sheep 2011 study focused on trends in sheep health and management practices, management and biosecurity practices used to control common infectious diseases, estimating the prevalence of gastrointestinal parasites and anthelmintic resistance, estimating the prevalence of *Mycoplasma ovipneumonia* in domestic sheep flocks, collection of information and samples regarding causes of abortion storms in sheep, determining producer awareness of zoonotic diseases, and providing serum to include in the serological bank for future research. Sheep 2011 was conducted in 22 of the Nation’s major sheep-producing States, which were divided into three regions.¹ The States represent 70.1 percent of U.S. sheep operations and 85.5 percent of U.S. ewe inventory (NASS 2007 Census of Agriculture). Following are a few highlights from Part I of the Sheep 2011 study.

Demographics and management

- On 62.2 percent of operations with 20 or more ewes, sheep were managed primarily on pasture (farm pasture, irrigated, or cultivated) [fig. 1]. Over half of small and medium operations (66.7 and 57.5 percent, respectively) managed sheep primarily on pasture, while 50.6 percent of large operations managed sheep primarily on fenced range. In the West and East regions 67.4 and 80.3 percent of operations, respectively, managed their sheep primarily on pasture while this was true for only 39.2 percent of operations in the Central region.

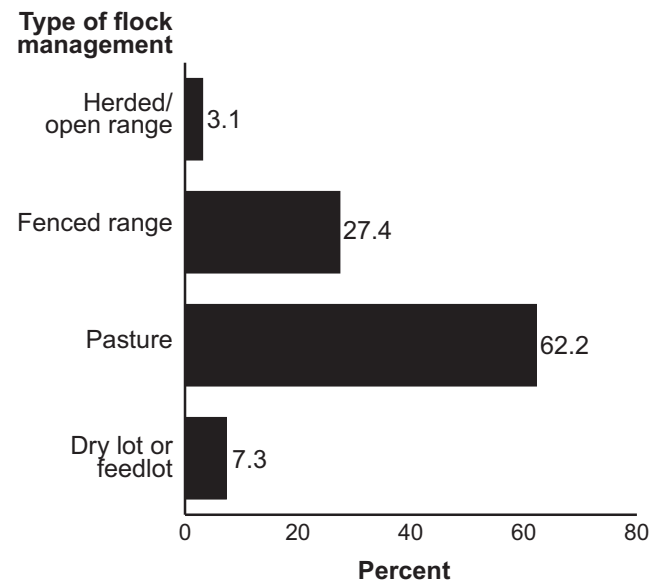
¹ **Regions:**

West: California, Oregon, and Washington

Central: Colorado, Idaho, Kansas, Montana, New Mexico, South Dakota, Texas, Utah, and Wyoming

East: Iowa, Kentucky, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Virginia, and Wisconsin.

Figure 1. Percentage of operations by primary type of flock management used during the previous 12 months

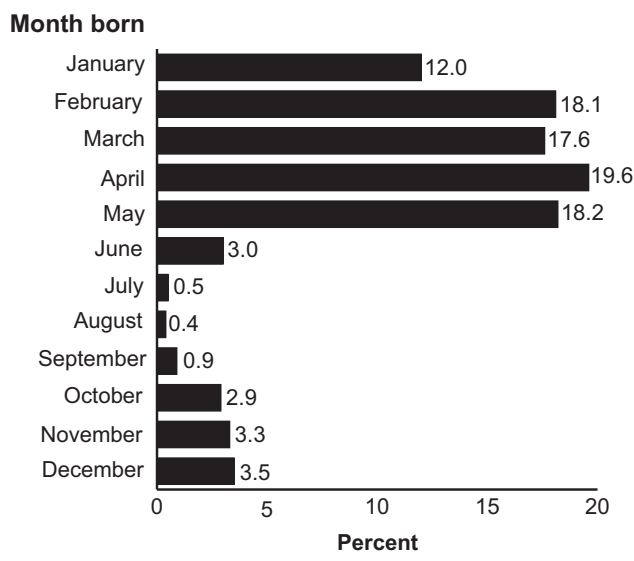


- Over three-fourths of operations with 20 or more ewes (82.9 percent) expected to have either about the same number or more sheep in 5 years. This expectation was consistent across all regions (ranging from 77.3 to 84.6 percent), all flock types (ranging from 75.7 to 87.1 percent), and all operation sizes (ranging from 81.7 to 89.2 percent).
- Across all operations, veterinarians (40.4 percent) and other sheep producers (38.3 percent) were chosen as very important sources of health information.
- Overall, 61.4 percent of operations used some form of flock identification. The use of any flock identification increased as operation size increased. Almost all large operations (96.1 percent) used at least one flock identification method, while less than half of very small operations (39.6 percent) used at least one type of flock identification method.

Breeding management

- Of operations with 20 or more ewes that bred ewes, 24.5 percent bred out of season (February to July). Of operations that bred out of season, the most common method used for out-of-season breeding was placing the ram with the ewes (85.5 percent) followed by genetic selection for ability to breed out of season (33.8 percent).
- Overall, 97.4 percent of operations with 20 or more ewes that bred ewes in 2010 used natural breeding methods by utilizing the operation's rams. Only 1.4 percent used artificial insemination (AI). Of those operations using AI, 79.3 percent used frozen semen and 81.5 percent used semen collected from rams belonging to a different operation.
- Of operations with 20 or more ewes that used rams for natural breeding, the highest percentage of operations responded that visual appearance (77.4 percent), meat production (69.8 percent), and soundness of ram's flock of origin (60.3 percent) were very important characteristics for selecting a ram. Similar characteristics were also chosen as very important for selecting replacement ewe lambs, but with slightly different percentages: visual appearance/conformation (79.7 percent), meat production (69.8 percent), and health status of flock of origin (61.8 percent).
- Overall, 85.5 percent of lambs born during 2010 were born January through May (fig. 2). Only 9.7 percent of all lambs were born during October through December. Over one-fourth of lambs on operations with 20 or more ewes (26.2 percent) were born in a lambing area housed in a barn or shed (covered, but without individual pens).

Figure 2. Percentage of lambs born alive or dead in 2010, by month



- Overall, 68.5 percent of operations castrated ram lambs. As operation size increased, so did the percentage of operations that castrated ram lambs

(60.0 percent of very small operations to 94.9 percent of large operations). The average age at castration was 23.6 days. The primary method of castration across all operations was banding (87.5 percent of operations) followed by using a knife (8.5 percent).

- The average age of lambs at weaning for all operations was 4 months, with an average weight of 65 lb. Large operations weaned the oldest (4.8 months) and heaviest (82.4 lb) lambs, with the average age and weight at weaning decreasing as operation size decreased (table 1).

Table 1. Average age and weight of lambs at weaning in 2010

	Flock Size (number of ewes)				
	Very small (<20)	Small (20–99)	Medium (100–499)	Large (500 or more)	All operations
	Avg.	Avg.	Avg.	Avg.	Avg.
Age (months)	4.1	3.8	4.1	4.8	4.0
Weight (lb)	62.5	64.5	69.4	82.4	65.0

- Overall, on operations with 20 or more ewes, 82.5 percent of weaned lambs were sold in 2010, with 38.4 percent sold from July through September and 34.1 percent sold from October through December.

For more information, contact:

USDA–APHIS–VS–CEAH–NAHMS
 NRRC Building B, M.S. 2E7
 2150 Centre Avenue
 Fort Collins, CO 80526-8117
 970.494.7000
<http://nahms.aphis.usda.gov>

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