Lambing Management Practices on U.S. Sheep Operations, 2011

For the Sheep 2011 study, the U.S. Department of Agriculture's National Animal Health Monitoring System collected data on sheep health and management practices from a representative sample of operations in 22 of the Nation's major sheep-producing States, which were divided into three regions.[1] These operations collectively represented 85.5 percent of the U.S. ewe inventory and 70.1 percent of U.S. farms with ewes.

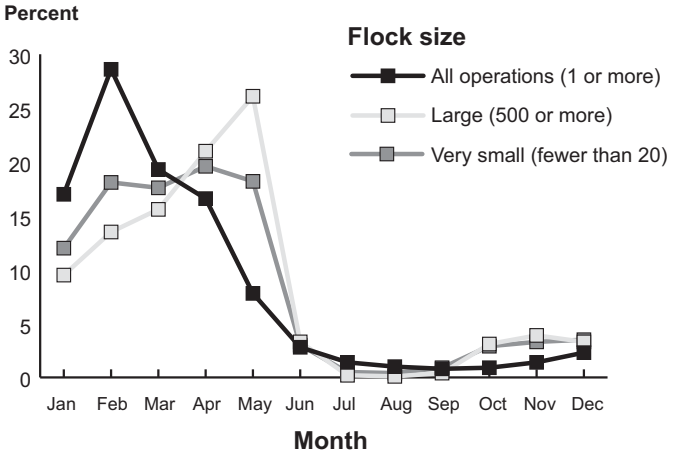
One objective of the Sheep 2011 study was to examine lambing management practices. Understanding commonly used lambing management practices can help producers identify problems on their operations and provide ideas for improved production.

Overall, 96.0 percent of lambs were born alive during 2010. The average number of live lambs born per exposed ewe was 1.3 for all operations. Operations in the East region had the highest average rate of live lambs per exposed ewe (1.5); lambing rate decreased as operation size increased. Very small operations[2] and small operations averaged 1.4 live lambs per exposed ewe, while large operations (500 or more ewes) averaged 1.2 live lambs per exposed ewe. A higher percentage of lambs were born dead in the East region (5.2 percent) than in the West or Central regions (3.4 and 3.5 percent, respectively). Feedlot and dry lot operations were not included in lambing data calculations.

Lambing season

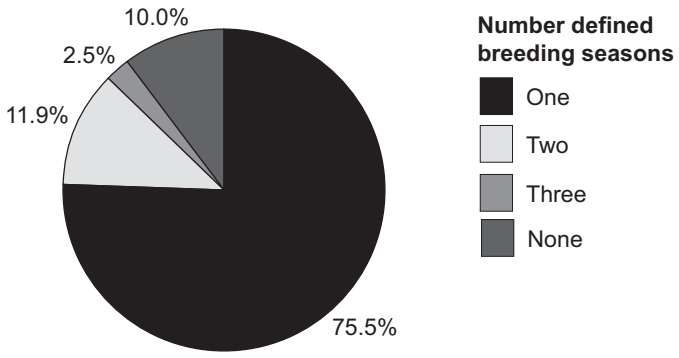
The highest percentage of all lambs born (alive or dead) were born in February through May for all operations (figure 1). Very small operations had the highest percentage of lambs born in February (28.6 percent), while large operations saw the highest percentage of lambs born in May (26.1 percent). A much smaller increase in the percentage of lambs born per month occurred during October through December on all operations sizes, except very small operations. Lambs born during this period can be marketed during the Easter season, when lamb prices are generally highest. Overall, 24.5 percent of operations bred at least some of their ewes for out-of-season lambing (September through December). A low percentage of herded/open range operations (5.6 percent) bred ewes out of season compared with the other operation types.

Figure 1. Percentage of all lambs born (alive or dead), by month and by flock size



Over three-fourths of all operations had one defined breeding season per year, while 10.0 percent had no defined breeding season (figure 2). Designating a specific breeding season allows producers to monitor the reproductive efficiency of their flocks and allows them to concentrate their labor during their busiest lambing times.

Figure 2. Percentage of operations by number of defined breeding seasons



[1] **Regions:**
West: California, Oregon, Washington
Central: Colorado, Idaho, Kansas, Montana, New Mexico, South Dakota, Texas, Utah, Wyoming
East: Iowa, Kentucky, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Virginia, Wisconsin

[2] **Flock sizes:**
Very small (fewer than 20 ewes); small (20–99); medium (100–499); large (500 or more).

Lambing location

A higher percentage of lambs in the East region (46.8 percent) were born in a barn or shed, compared with lambs in the West and Central regions (15.2 and 19.9 percent, respectively) [see table below]. The Central region accounted for the highest percentage of lambs born on the open range (28.4 percent). The use of an individual lambing pen was more prevalent in the East region (26.8 percent of lambs born) than in the West and Central regions (7.9 and 14.6 percent, respectively). Increased monitoring afforded by more confined lambing areas may influence the average number of live lambs born to exposed ewes, since administering assistance to ewes and lambs is more easily achieved when the animals are confined. However, there are a number of other factors, in addition to lambing observation, that influence the average number of live lambs born per ewe exposed.

Percentage of lambs born in 2010, by lambing location and by region

	Percent Lambs Born		
	Region		
Lambing location	West	Central	East
Individual lambing pen	7.9	14.6	26.8
Barn or shed	15.2	19.9	46.8
Special lambing pasture	31.8	8.3	7.5
Other fenced pasture	29.2	22.7	15.4
Open range	8.4	28.4	0.7
Dry lot	7.5	5.9	2.5
Other	0.0	0.1	0.4
Total	100.0	100.0	100.0

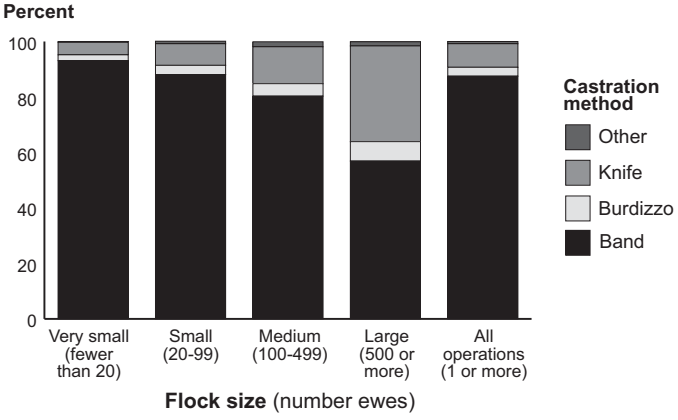
Lamb supplementation

Feeding lambs high-quality colostrum following birth helps ensure the transfer of antibodies needed to protect lambs against disease. Usually, lambs receive adequate colostrum from their mothers but, for a variety of reasons, not always. At these times, it is necessary to supplement newborns using other colostrum sources. Just over half of operations (54.5 percent) gave lambs colostrum at birth from a source other than their mother. The majority of these operations (73.2 percent) used sheep colostrum from other ewes on their own operation. In addition, 73.2 percent of all operations supplemented lambs with milk or milk replacer. The most commonly used source of supplementation, however, was dried milk or milk replacer (74.6 percent of operations) followed by sheep milk from own operation (27.9 percent).

Castration and docking management

Of operations with ram lambs born on the operation, 68.5 percent castrated ram lambs; a higher percentage of large operations castrated ram lambs than small operations. The operation average age of ram lambs when castrated was 23.6 days. On herded/open range operations, ram lambs were castrated at an average age of 34.7 days, while rams on fenced range and pasture operations were castrated at an average age of 28.8 and 22.1 days, respectively. The majority of operations castrated ram lambs using a band (87.5 percent). The percentage of operations that used a band to castrate ram lambs decreased as flock size increased, while the percentage of operations that used a knife for castration increased as flock size increased. On very small operations, 93.1 percent used a band for castration and only 4.5 percent used a knife. On large operations, 56.9 percent used a band for castration and 34.5 percent used a knife.

Figure 3. Percentage of operations by primary castration method and by flock size



Overall, 81.5 percent of lambs born alive were docked. Operations in the Central region docked a higher percentage of their lambs born (84.4 percent) than operations in the East region (74.9 percent). The choice of docking or not docking a lamb depends on many factors, including the projected use for the lambs, breed, and other reasons.

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