# Highlights of a 1996 Sheep Health and Productivity Needs Assessment

The 1996 Sheep Health and Productivity Needs Assessment was a cooperative effort of the American Sheep Industry Association (ASI) and the USDA's National Agriculture Statistics Service (NASS) and Animal and Plant Health Inspection Service (APHIS). Project objectives were to describe the most important health and productivity factors facing the United States sheep industry.

Questionnaires were mailed to a random sample of 19,807 eligible sheep operations in January 1996 with a postage-paid, return envelope and a copy was printed in the February 1996 Woolgrower magazine. Highlights of the study results below are separated by mailed questionnaires received as of March 15, 1996 (5,174 respondents), and a combination of the Woolgrower responses and mailed surveys received after March 15 (315 respondents referred to as the "Woolgrower respondents").

## **Population Demographics**

- Nearly four out of five operations (78.7 percent) planned to have the same number or more sheep in 2001. These operations accounted for over 80 percent of the January 1, 1996, U. S. sheep population.
- -Over 85 percent of the Woolgrower respondents planned to maintain or increase their sheep numbers. Slightly over one-half planned to increase their flock size.
- While herded range flocks accounted for only 1.0 percent of the total operations with sheep in the U.S., they included 18.9 percent of the sheep. Ten percent of the U.S. sheep operations were fenced range flocks containing 37.3 percent of the sheep. Farm flocks comprised 84.9 percent of the operations and 34.6 percent of the sheep.
- There were more operations with primarily black face sheep (32.3 percent) than any other breed category, but they represented only 10.2 percent of the sheep. Fine wool white face accounted for the greatest number of sheep with 41.8 percent of all sheep on 13.0 percent of U.S. operations.

### **Productivity Measures**

-The national lamb crop was 121.3 percent of ewes bred. The lamb crop was slightly higher for flocks containing fewer than 100 sheep than for larger operations. The West North Central and East North Central regions had higher lamb crops than the West South Central and East South Central regions (see regions in Figure 1). Woolgrower respondents reported a lamb crop of 125.5 percent.

## NAHMS Sheep '96 Regions



- Operations utilizing veterinarians as an information source reported the same lamb crop levels as those flocks not using veterinarians.
- Nationally, the stillbirth rate in 1995 was 4 percent of ewes bred, and 9.4 percent of the lambs born alive died before weaning.
- -Woolgrower losses were slightly lower at 3.1 percent for stillbirths and 8.1 percent of lambs born alive died before weaning.
- National death losses in adult sheep during 1995 were 5.1 percent of inventory, and adult sheep were culled at a rate of 16.1 percent of inventory.

The Woolgrower group reported adult sheep death losses of 4.1 percent and culled adult animals at a rate of 12.0 percent.

## **Profitability Limiters**

- The top three factors limiting profitability were price volatility (50.0 percent of operations), feed (42.9 percent), and land (35.2 percent). Access to markets was in the top three limiting factors in the East North Central, East South Central, and Southeast regions. Feed was the most often cited as the top profitability limiter for operations in the Northeast region of the U.S., closely followed by price volatility and land.

### **Health and Management Practices**

- Nearly two-thirds (65.5 percent) of U.S. sheep operations employed some form of predator management practice. The most common practices were fencing (64.7 percent of those using any practice), shooting (57.6 percent), and guard dogs (38.1 percent).
- Top health conditions of moderate or high concern to U.S. sheep producers were stomach/intestinal worms (62.1 percent of operations), mastitis (42.7 percent), footrot (40.5 percent), vitamin E/selenium deficiency (35.7 percent), scours (34.9 percent), coccidiosis (31.7 percent), and pregnancy disease (31.4 percent). Regional differences showed keds were a moderate or high concern to a higher proportion of producers in the Mountain region than other regions. Producers were more concerned about liver flukes in the West Coast and sore mouth in the West South Central region.
- Top health conditions known to be present (suspected or confirmed) on sheep operations in the previous 5 years were stomach/intestinal worms (48.6 percent of operations), mastitis (37.5 percent), footrot (28.1 percent), scours (27.5 percent), sore mouth (20.6 percent), vitamin E/selenium deficiency (20.1 percent), pregnancy disease (19.2 percent), keds (19.1 percent), and coccidiosis (18.2 percent).
- Mastitis was consistently among the top five conditions reported for all regions. As size of operation increased, reports of mastitis also increased to over 55 percent of flocks with 500 or more sheep.
- Top information sources for sheep operations were magazines/newsletters (70.5 percent of operations), other sheep producers (69.4 percent), and veterinarians (63.3 percent).
- Vaccines against clostridial diseases were the most commonly reported vaccines, used by nearly three out of every four producers (72.8 percent).
- Almost 92 percent of operations reported using at least one dewormer in the previous 3 years, although only about one in 10 operations (10.9 percent) used fecal egg counts as a diagnostic practice.
- -Over 85 percent of Woolgrower respondents used at least one dewormer in the previous 3 years and nearly one-third used fecal egg counts as a diagnostic practice.

For more information on the 1996 Sheep Health and Productivity Needs Assessment, please contact:

Centers for Epidemiology and Animal Health USDA:APHIS:VS, attn. NAHMS 2150 Centre Ave., Bldg. B, MS 2E7 Fort Collins, CO 80526-8117

Telephone: (970) 494-7000

E-mail: NAHMSweb@aphis.usda.gov.