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# Effect of Sire Selection on Lamb Growth and Carcass Traits: Progress Report

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## Summary

A study has been initiated to determine the production advantage of using selected rams on commercial ewes with several producer cooperators. The progeny of eight rams were evaluated in 1994 for growth performance and carcass merit. Eight additional rams were used to produce lambs for evaluation in 1995. Results will be presented following analysis of the 1995 data.

Key Words: Lamb Growth, Carcass Traits, Sire

## Introduction

Since 1975, the average finished lamb weight in the U.S. has increased from 104 to 126 pounds. Lambs have been fed to heavier weights to meet changes in merchandising practices and the consumer's demand for larger cuts of lamb. However, the increase in live weight and subsequently heavier carcasses has not uniformly led to leaner carcasses. Many lambs are simply just too fat. For the U.S. sheep industry to be competitive for the consumer's retail dollar, the cuts of lamb must be leaner than ever before. To meet the demands of the packer and consumer for leaner and larger cuts of lamb, the sheep industry must produce muscular, larger-framed lambs. Terminal sires that will produce lambs with these desirable traits can benefit producers due to the rapid growth rate and greater feed efficiency associated with lean body weight gain. Genetic improvement through the use of rams selected for rapid pre- and postweaning average daily gain (ADG) is the best resource producers have available to meet the demands of today's lamb production. Recent changes in the USDA lamb grading system provide the sheep industry with an objective method to evaluate the progress achieved in the production of leaner, heavy lambs.

The objective of this study is to determine the production advantage for growth and carcass traits in lambs sired by rams selected for rapid pre- and postweaning average daily gain (ADG).

## Experimental Procedure

Four Suffolk ram lambs from each of two purebred producers will be selected using a combination of growth data (ADG) to 150 pounds and visual appraisal of muscling. Two rams from each location will be selected as average (M) and two will be selected from the higher ADG (H) ram lambs.

A pair of rams (1 M and 1 H) from the same ram producer will be selected for mating within cooperator flocks. Sixty ewes at each location will be assigned at random to each pair of rams (30 ewes per ram) at the time of mating in order to equalize ewe effect on subsequent lamb performance. Production records will be kept on all lambs produced from birth to slaughter. Carcass data will be collected at slaughter.

## Results

The first set of eight rams were mated to cooperator ewes in the fall of 1993 with lambs slaughtered during the summer of 1994. Lambs from eight rams used in the fall of 1994 are on the ground now at four locations. Results will be made available following collection and analysis of the 1995 lamb crop data.

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