

The purpose of Dakota Lamb Growers Cooperative is to “add value to lamb production for its members”. Marketing is one of the focuses, but we are increasingly exposed to information about efficiency of production. In this newsletter, the production efficiency subject is the process of terminal sire selection, using Estimates of Breeding Value for chosen traits in individual sheep.

Organizations that use this process are known by different names in different countries, but the process is the same, e.g. NSIP in the US, Signet in the UK and Lambplan in Australia.

In the US, many producers have been aggressive in using NSIP for the selection of maternal characteristics with great success. The most aggressive group known for using this technology for terminal sires is the producer of a composite breed called Siremax. The principles of the group are The Sheep Improvement Co. (Cindy Wolf and Kelley O’Neill) and John and Julie Essame. They started in 1993 and use the Lambplan data management program.

The Siremax breed selection pressure has been 60% for weight, 20% for lack of fat and 20% for muscle expression. The economic advantage of this mix of selection pressure is to achieve a larger carcass before the lamb becomes a yield grade 3 or 4. Just a quick reminder, DLGC members receive a \$0.15 per pound of Hot Carcass Weight premium for yield grade 2’s and \$0.09 per pound for yield grade 3’s.

Twenty-five (25) Siremax rams were used by DLGC members last year and their lambs have been coming to market since May. These growers were not able to absolutely identify the Siremax progeny from their other terminal sire progeny, therefore accurate test data are not available from these 25 Siremax rams.

However, another group of 99 head of Siremax progeny marketed through the cooperative by DLGC members Kelley O’Neill and Cindy Wolf produced remarkable carcasses. The group carcass weight average was 76.6 pounds. 2% of the group yield graded 1, 65% yield graded 2, and 35% yield graded 3. There were no other terminal sire breeds to make a comparison.

This performance by far exceeds anything I have seen in six years of reviewing carcass data. Because the data were not scientifically obtained, I wrote Dr. Kreg Leymaster of the Meat Animal Research Center of Clay Center Nebraska and asked him to comment on the data. He wrote:

The index used by Siremax was developed to increase growth, decrease fat depth and increase loin eye depth. Estimates of genetic improvement of Siremax sheep strongly suggest that the expected changes have occurred. An important consequence of these changes is that the carcass weight can be increased while maintaining yield grades. Empirical evidence, based on grid data collected on Siremax-sired lambs, is consistent with these changes. In the absence of one-on-one direct comparison between Siremax and traditional breeds, it seems reasonable that producers consider using Siremax rams on a

larger scale. Direct comparisons of lambs from Siremax and traditional breeds should be organized to provide conclusive evidence about the relative merit of Siremax sheep.

Three things come to mind with this information. One, the Siremax developers cannot supply all the technological terminal sires needed in the industry. More terminal sire breeders are needed to start with their own genetics and adopt a technological program of improvement. Two, commercial lamb producers should learn about the development of advanced terminal sires, and ask their ram breeders to use these programs. To address this, the Siremax developers wrote:

Siremax has spent 13 years using such a system, and has nearly 4000 records in the Lambplan database that prove that changes in Lean Growth performance are real, cumulative and demonstrably valuable.

Producers can find out more about these genetic improvement systems on the internet, or we would be glad to explain how these systems work and what they require, in non-technical terms, to any producer who contacts us.

There is no mystery to it. It works. It just takes a commitment to prioritize economically relevant traits, time and diligence. You, too, can share in the success of improving your seedstock and your market lambs, and help make your entire industry more competitive.

A list of Siremax rams for sale is on the web at: www.siremax.com

Contact: John Essame 507-925-4415 or Cindy Wolf 507-450-5453

The other thing is we need to organize several one-on-one direct comparisons of the performance of high-ranking Siremax rams with our present terminal sires. This requires good identification of ewes bred to which sires and good identification of lambs born to each ewe. Lamb identification would need to be present through slaughter and carcass data gathering. If anyone is interested in one-on-one direct comparisons, please contact DLGC.