

# Lambing Systems - 1998 Sheep Day Report

## A PRELIMINARY LOOK AT THE ECONOMIC RESULTS OF THE LAMBING SYSTEMS STUDY.

Dan Nudell and Tim Faller

Data from the first three years of the lambing systems study was compiled and analyzed with the Sheepbud computer program. The results are interesting and challenge conventional thinking about maximizing economic return from a sheep flock.

Table 1 summarizes the results of the first look at the economics of the various systems. Results shown are averages of the three years results compiled and then entered into the budget program as a single years results. For example ewe numbers were smaller in 1995, ewes were added to the trial in 1996. In 1997 ewe numbers begin to decline due to attrition. The number of ewes listed in Table 1 is simple average number of exposed ewes for the first three years of work.

Table 1. Three year average economic results, HREC, 1995-1997.

|                           | Jan Conf   | Jan Out    | May Conf   | May Out    | May Past |
|---------------------------|------------|------------|------------|------------|----------|
| Ewes <sup>1</sup>         | 68         | 64         | 58         | 59         | 59       |
| Lambs <sup>2</sup>        | 79         | 73         | 54         | 59         | 56       |
| Wean Weight <sup>3</sup>  | 40.6       | 43         | 42.9       | 41.8       | 49.9     |
| Gross Return <sup>4</sup> | \$57.00    | \$59.00    | \$50.00    | \$51.00    | \$60.00  |
| Feed Cost <sup>5</sup>    | \$47.57    | \$47.51    | \$47.50    | \$47.47    | \$36.65  |
| Other Variable            | \$10.37    | \$9.51     | \$8.90     | \$8.53     | \$4.57   |
| Fixed Costs               | \$6.52     | \$6.69     | \$6.99     | \$4.74     | \$2.43   |
| Breakeven <sup>6</sup>    | \$123.98   | \$118.90   | \$140.52   | \$130.14   | \$81.96  |
| Net Per Ewe <sup>7</sup>  | \$ (13.62) | \$ (11.08) | \$ (20.08) | \$ (15.50) | \$10.81  |

<sup>1</sup>This is the three year average number of ewes in the trial.

<sup>2</sup>This is the three year average of lambs born in each trial.

<sup>3</sup>This is the three year average weaning weight.

<sup>4</sup>This is the single year calculated result using average production.(lambs @\$1/#, wool @\$.95/#)

<sup>5</sup>This is the average feed disappearance for all three years at 1997 prices.

<sup>6</sup>Breakeven calculated to cover all costs except owners labor, management and equity.

<sup>7</sup>Net before paying owners labor, management and equity costs.

There are several interesting results listed in the table that merit further discussion. First look at the average weaning weights listed. Lambs reared in January were creep fed, all others received no creep feed. The addition of creep feed did not appear to have a positive effect on the weaning weights of the lambs in the January system. Creep feed may have had an impact on lamb survivability in the January groups. The cost of creep feed averaged \$6 per lamb. The six to nine pound advantage shown by the pasture group came at a very low cost.

Total feed cost were very similar for all groups with the exception of the large cost reduction observed in the pasture group. This feed cost savings of near \$11 was probably the largest contributor to the end results obtained.

Another difference contributing to the net return results was the reduction in other variable costs and fixed costs observed in the pasture lambing group. These two savings are mostly driven by the large difference in building expense associated with the pasture lambing system. The confinement groups require 20 square feet per ewe of expensive building, the outside groups require 12 square feet of less expensive building per ewe. The pasture group uses tree shelter belts for weather protection. It is interesting to note that these results include the winter of 1996-97, one of the worst winters on record.

We also observed a dramatic reduction in labor requirements for the May pasture group. Consider that no lambs are jugged, there is little or no manure to haul and winter feeding consists of simply dropping small bales off the back of a flatbed pickup. The net return from this system is even more attractive when considered on a per hour of labor and management basis.

### **Caution:**

These results are preliminary. They do not include replacement costs and income from ewe culling. They do not take into account the performance of lambs entering the feedlot. Some expenses, such as total veterinary and medical expenses are estimated in this analysis and will be refined. Also note that the haylage ration used for the confinement and outside groups suffered from quality problems in the May feeding period. This may have adversely affected the results for non-pasture May lambing groups. The results do merit further study and discussion of lambing systems in the west river region of the Dakotas.