

Nebraska Sheep Enterprise Budget Example - 250 Head Flock

Background

Members of the Nebraska Sheep and Goat Producers Association provided input into figures and design of a sheep enterprise budget template using Excel. While sheep flock size and practices vary across Nebraska, for the purpose of example, it was determined that the sample flock would utilize 250 ewes and five rams. The producers contributing information for this project indicated that most either sell all lambs at weaning or feed all lambs and sell them as finished lambs. Using the sheep budget template, three budget examples were created for producers to use as a guide. The first budget represents selling a third of the lambs at weaning and growing the rest to finishing weight with 50% of the finished lambs sold on a live weight basis and the rest sold on a carcass weight basis. *Chart 1: Sheep Flock production flowchart, 250 ewes*

The 2nd budget example updated the template figures to reflect an example of selling all lambs right after weaning. The third example shows finishing all the lambs to 140 pounds each. In each case, feed consumption expenses change as do other variable expenses.

Producers raising sheep often operate diversified farms or ranches with other crop and/or livestock enterprises, however some producers have off-farm jobs and raise their sheep on small farms or ranches with sheep as a key enterprise. Sheep can often be added to a cattle operation, one ewe per cow, without changing the stocking rate due to the differences in forage preferences as sheep prefer forbs while cattle prefer grasses.

This budget and template should only be used as a guide. Individual producers can utilize the sheep budget template and enter information that reflects their estimated revenue and expenses and the numbers of sheep cared for and raised in their operation.

Livestock Management Practices

Typical lambing time across much of Nebraska is in the spring. Lambing rates run around 140% (1.4 lambs per ewe). This would equate to about 40% of the ewes birthing twins in any given year. Lamb death loss before weaning can range from 4.8 to 8.7%*. Post-weaning death rate is projected at 3%. In the example budgets, 350 lambs are born. From birth to weaning, 6% death loss is noted, leaving 329 lambs weaned. After selling 100 of the weaned lambs, the remaining 229 lambs are fed a finishing ration over a 130-day period, growing from 75 to 140 pounds each. Of the 229 lambs fed, a 3% death loss is assumed, leaving 222 finished lambs to sell. The finishing ration used in the sample budget includes corn, grass hay, and 34% protein supplement.

Producers in Nebraska reported a mix of practices in either raising their own ewes as replacements or buying breeding ewes for replacements. In these sample budgets, all replacement ewes are purchased. A 6% death loss for the breeding ewes and a cull rate of 10%, require 43 replacement ewes to be purchased each year to maintain the herd at 250 ewes.

Machinery, Equipment and Facilities

Basic equipment utilized for a sheep flock would typically include an ATV, pickup, tractor, stock trailer, feed wagon, feed bunk, portable chute, panels. Facilities often include a barn and corrals.

The total value of the machinery and equipment that pertains to use in the sheep operation is entered into the 'Production Parameters' worksheet of the budget. If an ATV is used for other enterprises on the ranch, with 30% use for the sheep operation, 30% of its current and future value should be entered into the budget program. If the stock trailer is used 100% of the time for the sheep enterprise, then 100% of its current and future value should be included in machinery and equipment. The depreciation cost and opportunity cost of ownership are figured in the

'Expenses – Fixed' worksheet. Annual repair expenses on fencing and equipment that can be attributed to the sheep enterprise are entered in the 'Expenses – Variable' worksheet.

Animal Purchases, Feed and Variable Expenses

With any livestock enterprise, feed costs are a major expense and should be carefully estimated. Prices for the various feed items entered in the 'Production Parameters' worksheet of the sheep budget template carry over to the feed expense section where quantity fed per animal amounts are entered. It is important to note that feed and hay raised on owned ground, along with the utilization of pasture ground should be considered separate enterprises. Therefore, in this representative budget, feed, hay, and pasture, are included as cash expenses, valued at current market or rental value. In this budget example, one AUM (Animal Unit Month) was valued at \$43. While pasture capacity varies across Nebraska, this example budget reflects 0.7 AUMs per acre in west central Nebraska. In Eastern Nebraska we would use 1 AUM per acre and in the Panhandle, 0.4 AUMs per acre would be used under normal pasture conditions. In the west central Nebraska location, each ewe would utilize 2.14 acres of pasture per year, while a ram would need 2.86 acres of pasture annually or 549 acres for both ewes and rams together. Individual producers may enter an opportunity cost or cash rental rate for their land use for the sheep enterprise in lieu of AUM values in their budgets.

In the 'Other Variable Expenses' worksheet, expenses such as marketing, vet, and labor are entered on a per ewe basis, then the total is calculated in the worksheet and for other expense items such as repairs, a total expense is requested. Keep in mind that expenses entered in the 'Expenses – Variable' worksheet should be expenses that are direct expenses allocated to the sheep enterprise, which in some cases may be a percentage of a total expense

amount for the entire farm or ranch business, e.g., repairs on machinery used in multiple enterprises. Expenses such as general liability insurance, accounting, and vehicles for example, not specific to the sheep enterprise, should be allocated by percentage and entered in the 'fixed expense' worksheet as overhead.

Revenue and Breakeven Prices

The 'Summary Budget' worksheet of the budget template summarizes total revenue and expense totals for the entire budget. The summary budget provides a total net revenue calculation and a net return per ewe. In addition, breakeven price calculations for weaned lambs and finished lambs on a live weight and carcass weight basis are provided.

**USDA National Animal Health Monitoring System, 2011 Study.*

Sheep Enterprise Budget Template and Budget Narrative Developed by:

Daniel Gertner, Graduate Student, Department of Agricultural Economics, University of Nebraska – Lincoln

Glennis McClure, Extension Educator, Department of Agricultural Economics, University of Nebraska - Lincoln

Randy Saner, Extension Educator, University of Nebraska -Lincoln

Elliott Dennis, PhD, Department of Agricultural Economics, University of Nebraska – Lincoln



Sheep Budget Example 1

