

FEEDLOT BUDGETS EXPLAINED

An essential input to the “cost of disease” question is the cost of a sick animal. This cost is farm specific and depends on the farm cost of production and opportunity cost. While some cost estimates from research or your veterinarian’s previous experience may be helpful, the most accurate value will be based on the farm’s own numbers. The following file helps to estimate the cost of disease per animal that gets sick using partial budgets comparison.

It has 3 input pages:

4. *Vet_Input*. This is where the consulting veterinarian inputs the expected treatment costs and loss of productivity associated with the disease that he/she is trying to evaluate.
5. *Ext_Input*. This is where the extension specialist inputs the default values for his/her specific area.
6. *Prod_Input*. This is where the producer inputs normal productivity information and some of the relevant prices. The result is displayed at the bottom of the *Prod_Input* page and reflects the difference in net income between a healthy and a sick animal.

Vet_Input page

Each disease has a different effect on productivity and cost depending on the disease, the production system and other things. Therefore, it is important that the consulting veterinarian input the expected effect on average daily gain, mortality rate, etc that a certain disease can cause in animals that get sick on the specific farm. In some situations, the disease may cause changes in prices such as a decrease in the fed cattle price due to a decrease in the quality grade or the inability to sell cattle in certain markets. The second part of the sheet also permits the veterinarian to input expected changes in prices.

Disease effect on feedlot cattle	Sick
Mortality rate (%)	<u>5.00%</u>
Decrease on ADG (%)	<u>10.00%</u>
Decrease on Feed Efficiency (%)	<u>15.00%</u>
Treatment Cost (antibiotics, etc)	<u>25</u>
Decrease on final weight (%)	<u>5.00%</u>
Cull Weight (%)	<u>0.00%</u>
Percentage Culled (%)	<u>0.00%</u>
Disease affect in Fed Cattle Price (%)	<u>-5.00%</u>

Ext_Input page

There are some differences in productivity and cost per head between different regions of the U.S. Therefore is very important that the extension specialist can adapt the default values to their own region. The extension input page has default values for each of the variables and has a cell where the extension specialist can input the values for their region (yellow shaded cells). The final value for the variable is found in the green shaded cells. If some yellow cells remain empty, the final value for the variable will be equal to the default value.

There is a warning system to prevent typos when entering the data. If the input value makes no sense, for example a negative average daily gain, the computer will not let the value to be input showing a new window with a warning message that explains what is wrong. If one of the values entered differs too much from the default value, a warning message will appear on the right of the screen that shows something like this: **Warning: This value seems too high** (or too low)

Some of the final values on this spreadsheet will be used directly in the calculation and some will be used as default values in the spreadsheet that the producer needs to fill out.

	Default values	Region values	Customized
Number of head	200		200
Final Weight (lbs.)	1250		1250
Initial Weight (lbs.)	550		550
Average Daily Gain (lbs/day)	3.23		3.23
Feed to Gain	7.01		7.01
Death loss (%)	1.20%		1.20%
Feeder Cattle Price (\$/lb)	1.3		1.3
Fed Cattle Price (\$/lb live)	0.87		0.87
Carcass disposal cost (\$/lb)	0.07		0.07
Culled cattle weight (lbs.)	900		900
	Default values	Region values	Customized
Other Variable Cost			
Veterinary and health related costs (\$/cow)	10		10
Marketing and miscellaneous (\$/cow)	14		14
Labor Hours	3		3
Labor Cost (\$/hour)	9		9
Feed Price (\$/lb)	0.038		0.038
Interest Rate (%)	6.50%		6.50%

Prod_Input page

Every feedlot is unique and so are the effects of diseases, therefore it is a good idea to estimate its cost based on actual information from the farm. This page is for the producer to input production information that is specific to his/her farm. The producer input page has default values for each of the variables that come from the extension page. This page also has a cell where the producer can input the values that are specific to his/her farm (yellow shaded cells). The final value for the variable is found in the green shaded cells. If some yellow cells remain empty, the final value for the variable will be equal to the default value.

There is a warning system to prevent typos when entering the data. If the input value makes no sense, for example a negative average daily gain, the computer will not let the value to be input showing a new window with a warning message that explains what is wrong. If one of the values entered differs too much from the default value, a warning message will appear on the right of the screen that shows something like this: **Warning: This value seems too high** (or too low)

	Default values	Producer values	Customized
Number of head	200		200
Final Weight (lbs.)	1250		1250
Initial Weight (lbs.)	550		550
Average Daily Gain (lbs/day)	3.23		3.23
Feed to Gain	7.01		7.01
Death loss (%)	1.20%		1.20%
Feeder Cattle Price (\$/lb)	1.3		1.3
Fed Cattle Price (\$/lb live)	0.87		0.87
Feed Price (\$/lb)	0.038		0.038
Carcass disposal cost (\$/lb)	0.07		0.07
Culled cattle weight (lbs.)	900		900

The result appears at the bottom of this page and can be interpreted as the difference in net income between an animal that gets sick and a healthy one. The cost of the disease not only includes the cost of treatment, but also lost efficiency and even an increase loss of labor and product.

RESULTS
Cost per sick animal 186.94