

## COW CALF 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’s 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:

1. *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.
2. *Ext\_Input*. This is where the extension specialist inputs the default values for his/her specific area.
3. *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 calving rate, calf weight, 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 calf price due to a decrease in their expected performance in feedlots 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.

<b>Disease effect on breeding cows</b>	
Mortality in cows (%)	<u>8.0%</u>
Mortality in heifers (%)	<u>1.0%</u>
Mortality in calves (%)	<u>1.0%</u>
Decrease in Calving Rate (%)	<u>10.0%</u>
Cow Decrease in Cull Weight (%)	<u>0.0%</u>
Premature Cow Culling (%)	<u>0.0%</u>
Decrease in Calf Wean Weight (%)	<u>2.0%</u>
Treatment cost (\$/case)	<u>32.0</u>
<b>Disease effect in prices</b>	
Heifer Calves Price (%)	<u>-3.0%</u>
Steer Calves Price (%)	<u>-3.0%</u>
Cull Cow Price (%)	<u>0.0%</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 calving rate, 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.

<b>Interest rate</b>	Default values	Region values	Customized
Interest Rate (%)	6.50%		6.50%
Interest rate, insurance on herd (%)	10.00%		10.00%
<b>Other costs</b>	Default values	Region values	Customized
Labor Price (\$/hour)	9		9
Labor Hours per cow	8		8
Veterinary cost per cow	25		25
Marketing and miscellaneous (% of value sold)	5.00%		5.00%
Feed Cost (\$/cow inventory)	263.01		263.01
	Default values	Region values	Customized
Number of cows	50		50
Acres / cow	2.5		2.5
Calving Rate (%)	96.00%		96.00%
Wean Rate (%)	92.16%		92.16%
Cull Rate (%)	18.00%		18.00%
Heifer Calves Weight (lbs.)	500		500
Steer Calves Weight (lbs.)	550		550
Cull Cow Weight (lbs.)	1350		1350
Heifer Calves Price (\$/lb)	1.20		1.20
Steer Calves Price (\$/lb)	1.33		1.33
Cull Cow Price (\$/lb)	0.67		0.67
Mortality in cows (%)	1.50%		1.50%
Mortality in heifers (%)	1.50%		1.50%
Mortality in calves (%)	4.00%		4.00%
Breeding cow price (\$/head)	750		750
Replacement heifer price (\$/head)	650		650

**Prod\_Input page**

Every cow-calf operation 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 calving rate, 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 cows	50		50
Acres / cow	2.5		2.5
Calving Rate (%)	96.00%		96.00%
Wean Rate (%)	92.16%		92.16%
Cull Rate (%)	18.00%		18.00%
Heifer Calves Weight (lbs.)	500		500
Steer Calves Weight (lbs.)	550		550
Cull Cow Weight (lbs.)	1350		1350
Heifer Calves Price (\$/lb)	1.2		1.2
Steer Calves Price (\$/lb)	1.33		1.33
Cull Cow Price (\$/lb)	0.67		0.67
Mortality in cows (%)	1.50%		1.50%
Mortality in heifers (%)	1.50%		1.50%
Mortality in calves (%)	4.00%		4.00%
Feed Cost (\$/cow inventory)	263.01		263.01
Labor Price (\$/hour)	9		9
Labor Hours per cow	8		8
Breeding cow price (\$/head)	750		750
Replacement heifer price (\$/head)	650		650

The result at the bottom of this page 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 product.

<b>RESULTS</b>	
<b>Cost per sick animal</b>	<b>226.90</b>