

# Instructions for Using Stocker/Feeder Cattle Spreadsheet Tools

University of Missouri Extension, Commercial Agriculture Beef Focus Team

## Evaluation of Buying Stockers

- ◆ This spreadsheet was written in Microsoft® Excel<sup>1</sup>. Conversion to other spreadsheet programs is not guaranteed.
- ◆ You will be asked if you want to enable macros in the spreadsheet. Click on the Enable Macros button.  
*The file has been scanned for viruses and is considered safe as it leaves my office.*
- ◆ The starting point for this spreadsheet is the upper left corner (A1) of the Stocker Calculations Page. If you are not at this location as the file is brought up, press <Control><Home>, or use the scroll bars to go to that location. Many of the calculations for this spreadsheet are done on the Sheet 1 page. This page is available for you to look at and to examine the equations used, however you don't need to enter any information on the page and it is locked.
- ◆ If the page is too small or too large for your screen, you can change the magnification by going to the View menu and selecting Zoom and then changing the setting.
- ◆ Depending on what you want to calculate, select (left click) one of the three buttons: Return to Ownership and Management, Purchase Price to Attain Given Return, or Sale Price to Attain Given Return.
  
- ◆ The spreadsheet allows you to have a period of confinement where the cattle are receiving a majority of their nutrient needs in the form of harvested feedstuffs (silage, feed grain, hay, etc.) followed by a period of time where the cattle are in a grazing situation (with or without additional supplement).
  - The spreadsheet does not allow you to have the cattle in the grazing situation first followed by a confinement period.
  - If you are not utilizing a confinement period, you must still enter values in several of the lines in the confinement period section:
    - Cost for processing products
    - Cost of treatment
    - Cost of re-pull treatment
    - Weight at end of confinement period (will be same as purchase weight in this situation)
- ◆ As with any spreadsheet tool – the answers generated are only as accurate as the accuracy of the inputs.
- ◆ Although the mathematical calculations were evaluated by a number of specialists and were tested on thousands of test examples, no warrantee is expressed or implied about the accuracy of the spreadsheet. PLEASE USE THE SPREADSHEET AT YOUR OWN RISK.

### To Calculate Return to Ownership and Management

You will be asked to fill in several variables concerning the stockering situation you are evaluating, all variables are on a per head basis (not the entire group).

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<sup>1</sup> Microsoft Corporation, Seattle, Washington

<b>Variable</b>	<b>Description</b>
Price paid per pound (\$)	The incoming cattle's price per pound. Four decimal places are available so that cattle that are purchased at \$82.75/cwt are entered as \$0.8275
Purchase weight (Lbs.)	Average purchase weight in pounds. For a group of 40 calves that weigh an average of 550 pounds, enter 550, not 22,000.
Trucking fee – arrival (\$)	If you are paying trucking fees as the cattle arrive, enter the per-head charge. (There will be another entry for trucking fees to ship the cattle out)
Hired labor cost per head (\$)	This is not where you pay yourself. This line is for any hired labor used to care for the cattle or facilities. One way to calculate the entry is to take the entire payroll and divide by the number of cattle fed per year. Another option is to charge the labor in the feedmill to the feed charge, the processing crew labor to the processing charge, the hospital crew labor to the treatment cost, etc. (in which case the hired labor cost per head is decreased or zero).
Annual interest rate (i.e. 10)	The entry should be a number greater than 1 – if the interest rate is 10%, enter the number as 10, not 0.10. The entry is the interest rate of borrowed money or if no borrowed money is used, the entry is the interest rate or return of an alternate investment.
<b>Confinement Period</b> Price paid per pound of diet, as fed (\$)	Price is reported on an as-fed (rather than dry-matter) basis. Since more than one diet are fed and the costs of different diet vary, the entry should be the prorated cost of the diets. Feed storage and mixing loss should be included in the diet price.
<b>Confinement Period</b> Pounds of diet fed daily, as fed	This entry should be the average (over the feeding period) pounds of feed delivered on an as-fed basis to the bunk. This will account for wastage at the bunk.

**Confinement Period**

Number of days in confinement

The number of days the cattle are confined in the situation being evaluated. If the cattle are not confined, enter zero.

**Confinement Period**

Yardage per day (\$)

Yardage being charged per day. If confined on your own land, either enter an appropriate yardage fee or if zero is entered, return to management should be evaluated with that in mind.

**Confinement Period**

Cost for processing products

(\$ for vaccines, implants, dewormers, tags)

Your cost for the products used at processing, including the cost of administration equipment (syringes, needles, implant guns, etc.). Processing labor may or may not be included in this value (see Hired Labor Cost per Head)

**Confinement Period**

Morbidity Rate

– during confinement period (%)

The number of cattle treated for any reason (or that died without being treated) during the confinement period divided by the number of cattle originally in the group. If the morbidity rate is 20%, enter the number as 20, not 0.20.

**Confinement Period**

Cost of treatment

(\$; entire cost of multiple-day treatment)

The average cost of antimicrobial or other drugs given to treat sick cattle plus the cost of administration equipment (syringes, needles, etc.) and any chute charges or other applicable fees. Repeat treatment rate and charges are included in this entry. Hospital labor may or may not be included in this value (see Hired Labor Cost per Head).

*Note: It is assumed that the same treatment is used for cattle in the confinement period and the grazing period.*

**Confinement Period**

Re-pull rate (%)

The number of cattle that are treated more than once (after they are considered cured) during the confinement period divided by the number of all cattle treated during the confinement period (i.e. if 20 calves in a pen of 100 are treated for disease and then 4 of those calves are treated for the same disease 2 weeks later, the re-pull rate is  $4 \div 20 = 20\%$  (enter as 20, not 0.20).

**Confinement Period**

Cost of re-pull treatment (\$)

Many times the drugs used to treat calves pulled from the pen a second (or more) time are different than the initial treatment, therefore the cost is likely to be different. The same guidelines are followed as with Cost of Treatment.

**Confinement Period**

Mortality rate

– during the confinement period (%)

The number of cattle that die during the confinement period divided by the number in the group at the start of the evaluation period. If the mortality rate is 1%, enter the number as 1, not 0.01.

**Confinement Period**

Weight at end of confinement period

This weight can be a shrunk weight, an actual weight with a pencil shrink, or an unshrunk weight – but consider the weighing situation when evaluating the results.

*Note: If no confinement period is utilized, the purchase weight must be entered both in the second blank (above) and in this entry blank.*

**Grazing Period**

Price paid per pound of supplement (\$)

Price is reported on an as-fed (rather than dry-matter) basis. Since more than one supplement may be fed and the costs of different supplements vary, the entry should be the prorated cost of the supplements. Feed storage and mixing loss should be included in the supplement price.

**Grazing Period**

Pounds of supplement fed daily, as fed

This entry should be the average (over the grazing period) pounds of supplement delivered on an as-fed basis. This will account for wastage during feeding.

**Grazing Period**

Number of days grazing

The number of days the cattle are grazing in the situation being evaluated.

**Grazing Period**

Pasture rent per head per day (\$)

Rent being charged per day. If grazing your own land, either enter an appropriate rent or if zero is entered, return to management should be evaluated with that in mind.

**Grazing Period**

Morbidity Rate

– during grazing period (%)

The number of cattle treated for any reason (or that died without being treated) during the grazing period divided by the number of cattle originally in the group. If the morbidity rate is 20%, enter the number as 20, not 0.20.

**Grazing Period**

Re-pull rate (%)

The number of cattle that are treated more than once (after they are considered cured) during the grazing period divided by the number of all cattle treated during the grazing period (i.e. if 20 calves in a pasture of 100 are treated for disease and then 4 of those calves are treated for the same disease 2 weeks later, the re-pull rate is  $4 \div 20 = 20\%$  ( enter as 20, not 0.20).

**Grazing Period**

Mortality rate  
– during the grazing period (%)

The number of cattle that die during the confinement period divided by the number in the group at the start of the evaluation period. If the mortality rate is 1%, enter the number as 1, not 0.01.

Price received at sale (\$/Lbs.)

The sale price expressed on a per-pound basis. Four decimal places are available so that cattle that are sold at \$70.75/cwt are entered as \$0.7075

Unshrunk sale weight (Lbs.)

The average weight at sale (of animals sold) prior to a pencil shrink being applied.

Percent pencil shrink (%)

The shrink applied to the weight at sale to yield the pay-weight. The entry should be a number greater than 1 – if the pencil shrink is 4%, enter the number as 4, not 0.04.

Trucking fees – departure (\$)

If you are paying trucking fees as the cattle leave your farm, enter the per-head charge.

Sales or commission fees (\$)

All sales or commission fees prorated on a per-head basis, including beef industry council check-off, brokers' commissions, livestock market commissions, etc.

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- The bottom portion of the report page gives results calculated from the entered variables. Other output is found on the Sheet 1 page, but the figures reported on the report page are considered to be the most valuable for the situation you are evaluating.

<b>Result</b>	<b>Description</b>
Cost of interest	The amount spent on interest (or opportunity from alternate investments) for the evaluated situation. This output was calculated by charging interest for the entire period (days owned) for those expenditures incurred at the start of the feeding period (i.e. price paid, arrival trucking, and processing cost) and for one-half of the days owned for those expenditures incurred throughout the confinement and grazing periods (i.e. feed, yardage, rent, treatment, re-pull treatment, and labor costs).
Average Daily Gain - confinement period (Deads In)	The gain from purchase weight to end-of-confinement weight divided by the days in confinement using the average weights of all the animals moved to the grazing situation subtracted from the average weight of all the purchased animals.
Average Daily Gain – grazing period (Deads In)	The gain from end-of-confinement weight to shrunk sale weight divided by the grazing days using the average weights of all the animals sold subtracted from the average weight of all animals placed on grazing.
Average Daily Gain –entire period (Deads In)	The gain from purchase weight to shrunk sale weight (pay weight to pay weight) divided by the days owned using the average weights of all the animals sold subtracted from the average weight of all the purchased animals.
Pounds of Diet, as fed – confinement period	The amount of feed consumed by the group including the feed consumed by animals that died and were not sold. The equation assumes that deaths occurred half-way through the confinement period.
Pounds of Supplement, as fed - grazing period	The amount of supplement consumed by the group including the supplement consumed by animals that died and were not sold. The equation assumes that deaths occurred half-way through the grazing period.
Feed Efficiency – confinement period (Lbs. of feed / 1 Lbs. of gain – Deads Accounted For)	The total pounds of feed (as fed) fed during the confinement period divided by the average pounds of gain (pay-weight to end-of-confinement weight change in pounds divided by the number of animals purchased).

Cost of Gain – confinement period  
(w/o Return to Mgmt. – Deads Accounted For)

Processing costs, yardage, diet cost, cost of interest and labor applicable to the confinement phase, and arrival trucking were figured in the confinement period COG. The costs were divided by the average pounds of gain (pay-weight to end-of-confinement weight change in pounds divided by the number of animals purchased).

Cost of Gain – grazing period  
(w/o Return to Mgmt. – Deads Accounted For)

Pasture rent, supplement cost, cost of interest and labor applicable to the grazing phase, sales commissions, and departure trucking were figured in the grazing period COG. The costs were divided by the average pounds of gain (end-of-confinement weight to pay-weight change in pounds divided by the number of animals purchased).

Cost of Gain – entire period  
(w/o Return to Mgmt. – Deads Accounted For)

All of the costs, except purchase cost and return to management, divided by the average pounds of gain (pay-weight to pay-weight change in pounds divided by the number of animals purchased).

Return to Ownership and Management

The dollars returned to pay ownership

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### To Calculate Purchase Price to Attain A Given Return

- This set of calculations is designed to aid in determining an appropriate purchase price for cattle with a given expected performance (health, growth, sale value). By using several production scenarios (expected case, best case, worst case), a confidence range can be produced for purchase price.
- **IMPORTANT NOTE** – Because purchase price is not known as an entry in the calculations, cost of interest is only estimated and therefore cost of gain is also an estimate. The equation to estimate cost of interest and subsequently cost of gain was set to be conservative at the time the spreadsheet was written (1999). Therefore, the estimated appropriate purchase price to attain a given return to management with the entered variables is more likely to error as being too high rather than too low – in order to place a safe upper purchase price limit.

<b>Variable</b>	<b>Description</b>
Purchase weight (Lbs.)	Average purchase weight in pounds. For a group of 40 calves that weigh an average of 550 pounds, enter 550, not 22,000.
Trucking fee – arrival (\$)	If you are paying trucking fees as the cattle arrive, enter the per-head charge. (There will be another entry for trucking fees to ship the cattle out)
Hired labor cost per head (\$)	This is not where you pay yourself. This line is for any hired labor used to care for the cattle or facilities. One way to calculate the entry is to take the entire payroll and divide by the number of cattle fed per year. Another option is to charge the labor in the feedmill to the feed charge, the processing crew labor to the processing charge, the hospital crew labor to the treatment cost, etc. (in which case the hired labor cost per head is decreased or is zero).
Annual interest rate (i.e. 10)	The entry should be a number greater than 1 – if the interest rate is 10%, enter the number as 10, not 0.10. The entry is the interest rate of borrowed money or if no borrowed money is used, the entry is the interest rate or return of an alternate investment.
<b>Confinement Period</b> Price paid per pound of diet, as fed (\$)	Price is reported on an as-fed (rather than dry-matter) basis. Since more than one diet are fed and the costs of different diet vary, the entry should be the prorated cost of the diets. Feed storage and mixing loss should be included in the diet price.

**Confinement Period**

Pounds of diet fed daily, as fed

This entry should be the average (over the feeding period) pounds of feed delivered on an as-fed basis to the bunk. This will account for wastage at the bunk.

**Confinement Period**

Number of days in confinement

The number of days the cattle are confined in the situation being evaluated. If the cattle are not confined, enter zero.

**Confinement Period**

Yardage per day (\$)

Yardage being charged per day. If confined on your own land, either enter an appropriate yardage fee or if zero is entered, return to management should be evaluated with that in mind.

**Confinement Period**

Cost for processing products

(\$ for vaccines, implants, dewormers, tags)

Your cost for the products used at processing, including the cost of administration equipment (syringes, needles, implant guns, etc.). Processing labor may or may not be included in this value (see Hired Labor Cost per Head).

**Confinement Period**

Morbidity Rate

– during confinement period (%)

The number of cattle treated for any reason (or that died without being treated) during the confinement period divided by the number of cattle originally in the group. If the morbidity rate is 20%, enter the number as 20, not 0.20.

**Confinement Period**

Cost of treatment

(\$; entire cost of multiple-day treatment)

The average cost of antimicrobial or other drugs given to treat sick cattle plus the cost of administration equipment (syringes, needles, etc.) and any chute charges or other applicable fees. Repeat treatment rate and charges are included in this entry. Hospital labor may or may not be included in this value (see Hired Labor Cost per Head).

*Note: It is assumed that the same treatment is used for cattle in the confinement period and the grazing period.*

**Confinement Period**

Re-pull rate (%)

The number of cattle that are treated more than once (after they are considered cured) during the confinement period divided by the number of all cattle treated during the confinement period (i.e. if 20 calves in a pen of 100 are treated for disease and then 4 of those calves are treated for the same disease 2 weeks later, the re-pull rate is  $4 \div 20 = 20\%$  (enter as 20, not 0.20).

**Confinement Period**

Cost of re-pull treatment (\$)

Many times the drugs used to treat calves pulled from the pen a second (or more) time are different than the initial treatment, therefore the cost is likely to be different. The same guidelines are followed as with Cost of Treatment.

**Confinement Period**

Mortality rate

– during the confinement period (%)

The number of cattle that die during the confinement period divided by the number in the group at the start of the evaluation period. If the mortality rate is 1%, enter the number as 1, not 0.01.

**Confinement Period**

Weight at end of confinement period

This weight can be a shrunk weight, an actual weight with a pencil shrink, or an unshrunk weight – but consider the weighing situation when evaluating the results.

*Note: If no confinement period is utilized, the purchase weight must be entered both in the second blank (above) and in this entry blank.*

**Grazing Period**

Price paid per pound of supplement (\$)

Price is reported on an as-fed (rather than dry-matter) basis. Since more than one supplement may be fed and the costs of different supplements vary, the entry should be the prorated cost of the supplements. Feed storage and mixing loss should be included in the supplement price.

**Grazing Period**

Pounds of supplement fed daily, as fed

This entry should be the average (over the grazing period) pounds of supplement delivered on an as-fed basis. This will account for wastage during feeding.

**Grazing Period**

Number of days grazing

The number of days the cattle are grazing in the situation being evaluated.

**Grazing Period**

Pasture rent per head per day (\$)

Rent being charged per day. If grazing your own land, either enter an appropriate rent or if zero is entered, return to management should be evaluated with that in mind.

**Grazing Period**

Morbidity Rate

– during grazing period (%)

The number of cattle treated for any reason (or that died without being treated) during the grazing period divided by the number of cattle originally in the group. If the morbidity rate is 20%, enter the number as 20, not 0.20.

**Grazing Period**

Re-pull rate (%)

The number of cattle that are treated more than once (after they are considered cured) during the grazing period divided by the number of all cattle treated during the grazing period (i.e. if 20 calves in a pasture of 100 are treated for disease and then 4 of those calves are treated for the same disease 2 weeks later, the re-pull rate is  $4 \div 20 = 20\%$  (enter as 20, not 0.20).

**Grazing Period**

Mortality rate

– during the grazing period (%)

The number of cattle that die during the confinement period divided by the number in the group at the start of the evaluation period. If the mortality rate is 1%, enter the number as 1, not 0.01.

Price received at sale (\$/Lbs.)

The sale price expressed on a per-pound basis. Four decimal places are available so that cattle that are sold at \$70.75/cwt are entered as \$0.7075

Unshrunk sale weight (Lbs.)

The average weight at sale (of animals sold) prior to a pencil shrink being applied.

Percent pencil shrink (%)

The shrink applied to the weight at sale to yield the pay-weight. The entry should be a number greater than 1 – if the pencil shrink is 4%, enter the number as 4, not 0.04.

Sales or commission fees (\$)

All sales or commission fees prorated on a per-head basis, including beef industry council check-off, brokers' commissions, livestock market commissions, etc.

Trucking fees – departure (\$)

If you are paying trucking fees as the cattle leave your farm, enter the per-head charge.

Return to ownership and management

The dollar amount you as the owner of the cattle want for your management expertise, risk assumption, and return on investment.

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- The bottom portion of the report page gives results calculated from the entered variables. Other output is found on the Sheet 1 page, but the figures reported on the report page are considered to be the most valuable for the situation you are evaluating.

<b>Result</b>	<b>Description</b>
Cost of interest (Estimated)	The amount spent on interest (or opportunity from alternate investments) for the evaluated situation. This output was calculated by charging interest for the entire period (days owned) for those expenditures incurred at the start of the feeding period (i.e. arrival trucking and processing cost) and for one-half of the days owned for those expenditures incurred throughout the confinement and grazing periods (i.e. feed, yardage, rent, treatment, re-pull treatment, and labor costs). As well as an entry for interest charged to an estimated purchase price.
Average Daily Gain - confinement period (Deads In)	The gain from purchase weight to end-of-confinement weight divided by the days in confinement using the average weights of all the animals moved to the grazing situation subtracted from the average weight of all the purchased animals.
Average Daily Gain – grazing period (Deads In)	The gain from end-of-confinement weight to shrunk sale weight divided by the grazing days using the average weights of all the animals sold subtracted from the average weight of all animals placed on grazing.
Average Daily Gain –entire period (Deads In)	The gain from purchase weight to shrunk sale weight (pay weight to pay weight) divided by the days owned using the average weights of all the animals sold subtracted from the average weight of all the purchased animals.
Pounds of Diet, as fed – confinement period	The amount of feed consumed by the group including the feed consumed by animals that died and were not sold. The equation assumes that deaths occurred half-way through the confinement period.
Pounds of Supplement, as fed - grazing period	The amount of supplement consumed by the group including the supplement consumed by animals that died and were not sold. The equation assumes that deaths occurred half-way through the grazing period.
Feed Efficiency – confinement period (Lbs. of feed / 1 Lbs. of gain – Deads Accounted For)	The total pounds of feed (as fed) fed during the confinement period divided by the average pounds of

gain (pay-weight to end-of-confinement weight change in pounds divided by the number of animals purchased).

Cost of Gain – confinement period  
(w/o Return to Mgmt. – Deads Accounted For)

Processing costs, yardage, diet cost, cost of interest and labor applicable to the confinement phase, and arrival trucking were figured in the confinement period COG. The costs were divided by the average pounds of gain (pay-weight to end-of-confinement weight change in pounds divided by the number of animals purchased).

Cost of Gain – grazing period  
(w/o Return to Mgmt. – Deads Accounted For)

Pasture rent, supplement cost, cost of interest and labor applicable to the grazing phase, sales commissions, and departure trucking were figured in the grazing period COG. The costs were divided by the average pounds of gain (end-of-confinement weight to pay-weight change in pounds divided by the number of animals purchased).

Cost of Gain – entire period  
(w/o Return to Mgmt. – Deads Accounted For)

All of the costs, except purchase cost and return to management, divided by the average pounds of gain (pay-weight to pay-weight change in pounds divided by the number of animals purchased).

Appropriate purchase price

The estimated purchase price you can pay to achieve your desired return if the cattle perform as entered into the spreadsheet.

*The purchase price is an estimate rather than strictly a result of a mathematical equation because the cost of interest is an estimate.*

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### To Calculate Sale Price to Attain A Given Return

- This set of calculations is designed to determine the sale price for cattle with a given expected performance (health, growth, sale value) that will yield a given return. By using several production scenarios (expected case, best case, worst case), a confidence range can be produced for sale price.

<b>Variable</b>	<b>Description</b>
Price paid per pound (\$)	The incoming cattle's price per pound. Four decimal places are available so that cattle that are purchased at \$82.75/cwt are entered as \$0.8275
Purchase weight (Lbs.)	Average purchase weight in pounds. For a group of 40 calves that weigh an average of 550 pounds, enter 550, not 22,000.
Trucking fee – arrival (\$)	If you are paying trucking fees as the cattle arrive, enter the per-head charge. (There will be another entry for trucking fees to ship the cattle out)
Hired labor cost per head (\$)	This is not where you pay yourself. This line is for any hired labor used to care for the cattle or facilities. One way to calculate the entry is to take the entire payroll and divide by the number of cattle fed per year. Another option is to charge the labor in the feedmill to the feed charge, the processing crew labor to the processing charge, the hospital crew labor to the treatment cost, etc. (in which case the hired labor cost per head is decreased or zero).
Annual interest rate (i.e. 10)	The entry should be a number greater than 1 – if the interest rate is 10%, enter the number as 10, not 0.10. The entry is the interest rate of borrowed money or if no borrowed money is used, the entry is the interest rate or return of an alternate investment.
<b>Confinement Period</b> Price paid per pound of diet, as fed (\$)	Price is reported on an as-fed (rather than dry-matter) basis. Since more than one diet are fed and the costs of different diet vary, the entry should be the prorated cost of the diets. Feed storage and mixing loss should be included in the diet price.
<b>Confinement Period</b> Pounds of diet fed daily, as fed	This entry should be the average (over the feeding period) pounds of feed delivered on an as-fed basis to the bunk. This will account for wastage at the bunk.

**Confinement Period**

Number of days in confinement

The number of days the cattle are confined in the situation being evaluated. If the cattle are not confined, enter zero.

**Confinement Period**

Yardage per day (\$)

Yardage being charged per day. If confined on your own land, either enter an appropriate yardage fee or if zero is entered, return to management should be evaluated with that in mind.

**Confinement Period**

Cost for processing products

(\$ for vaccines, implants, dewormers, tags)

Your cost for the products used at processing, including the cost of administration equipment (syringes, needles, implant guns, etc.). Processing labor may or may not be included in this value (see Hired Labor Cost per Head)

**Confinement Period**

Morbidity Rate

– during confinement period (%)

The number of cattle treated for any reason (or that died without being treated) during the confinement period divided by the number of cattle originally in the group. If the morbidity rate is 20%, enter the number as 20, not 0.20.

**Confinement Period**

Cost of treatment

(\$; entire cost of multiple-day treatment)

The average cost of antimicrobial or other drugs given to treat sick cattle plus the cost of administration equipment (syringes, needles, etc.) and any chute charges or other applicable fees. Repeat treatment rate and charges are included in this entry. Hospital labor may or may not be included in this value (see Hired Labor Cost per Head).

*Note: It is assumed that the same treatment is used for cattle in the confinement period and the grazing period.*

**Confinement Period**

Re-pull rate (%)

The number of cattle that are treated more than once (after they are considered cured) during the confinement period divided by the number of all cattle treated during the confinement period (i.e. if 20 calves in a pen of 100 are treated for disease and then 4 of those calves are treated for the same disease 2 weeks later, the re-pull rate is  $4 \div 20 = 20\%$  (enter as 20, not 0.20).

**Confinement Period**

Cost of re-pull treatment (\$)

Many times the drugs used to treat calves pulled from the pen a second (or more) time are different than the initial treatment, therefore the cost is likely to be different. The same guidelines are followed as with Cost of Treatment.

**Confinement Period**

Mortality rate  
– during the confinement period (%)

The number of cattle that die during the confinement period divided by the number in the group at the start of the evaluation period. If the mortality rate is 1%, enter the number as 1, not 0.01.

**Confinement Period**

Weight at end of confinement period

This weight can be a shrunk weight, an actual weight with a pencil shrink, or an unshrunk weight – but consider the weighing situation when evaluating the results.

*Note: If no confinement period is utilized, the purchase weight must be entered both in the second blank (above) and in this entry blank.*

**Grazing Period**

Price paid per pound of supplement (\$)

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**Grazing Period**

Pounds of supplement fed daily, as fed

This entry should be the average (over the grazing period) pounds of supplement delivered on an as-fed basis. This will account for wastage during feeding.

**Grazing Period**

Number of days grazing

The number of days the cattle are grazing in the situation being evaluated.

**Grazing Period**

Pasture rent per head per day (\$)

Rent being charged per day. If grazing your own land, either enter an appropriate rent or if zero is entered, return to management should be evaluated with that in mind.

**Grazing Period**

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– during grazing period (%)

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Price received at sale (\$/Lbs.)

The sale price expressed on a per-pound basis. Four decimal places are available so that cattle that are sold at \$70.75/cwt are entered as \$0.7075

Unshrunk sale weight (Lbs.)

The average weight at sale (of animals sold) prior to a pencil shrink being applied.

Percent pencil shrink (%)

The shrink applied to the weight at sale to yield the pay-weight. The entry should be a number greater than 1 – if the pencil shrink is 4%, enter the number as 4, not 0.04.

Sales or commission fees (\$)

All sales or commission fees prorated on a per-head basis, including beef industry council check-off, brokers' commissions, livestock market commissions, etc.

Trucking fees – departure (\$)

If you are paying trucking fees as the cattle leave your farm, enter the per-head charge.

Return to ownership and management

The dollar amount you as the owner of the cattle want for your management expertise, risk assumption, and return on investment.

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- The bottom portion of the report page gives results calculated from the entered variables. Other output is found on the Sheet 1 page, but the figures reported on the report page are considered to be the most valuable for the situation you are evaluating.

Result	Description
Cost of interest	The amount spent on interest (or opportunity from alternate investments) for the evaluated situation. This output was calculated by charging interest for the entire period (days owned) for those expenditures incurred at the start of the feeding period (i.e. price paid, arrival trucking, and processing cost) and for one-half of the days owned for those expenditures incurred throughout the confinement and grazing periods (i.e. feed, yardage, rent, treatment, re-pull treatment, and labor costs).
Average Daily Gain - confinement period (Deads In)	The gain from purchase weight to end-of-confinement weight divided by the days in confinement using the average weights of all the animals moved to the grazing situation subtracted from the average weight of all the purchased animals.
Average Daily Gain – grazing period (Deads In)	The gain from end-of-confinement weight to shrunk sale weight divided by the grazing days using the average weights of all the animals sold subtracted from the average weight of all animals placed on grazing.
Average Daily Gain –entire period (Deads In)	The gain from purchase weight to shrunk sale weight (pay weight to pay weight) divided by the days owned using the average weights of all the animals sold subtracted from the average weight of all the purchased animals.
Pounds of Diet, as fed – confinement period	The amount of feed consumed by the group including the feed consumed by animals that died and were not sold. The equation assumes that deaths occurred half-way through the confinement period.
Pounds of Supplement, as fed - grazing period	The amount of supplement consumed by the group including the supplement consumed by animals that died and were not sold. The equation assumes that deaths occurred half-way through the grazing period.

Feed Efficiency – confinement period  
(Lbs. of feed / 1 Lbs. of gain – Deads Accounted For)

The total pounds of feed (as fed) fed during the confinement period divided by the average pounds of gain (pay-weight to end-of-confinement weight change in pounds divided by the number of animals purchased).

Cost of Gain – confinement period  
(w/o Return to Mgmt. – Deads Accounted For)

Processing costs, yardage, diet cost, cost of interest and labor applicable to the confinement phase, and arrival trucking were figured in the confinement period COG. The costs were divided by the average pounds of gain (pay-weight to end-of-confinement weight change in pounds divided by the number of animals purchased).

Cost of Gain – grazing period  
(w/o Return to Mgmt. – Deads Accounted For)

Pasture rent, supplement cost, cost of interest and labor applicable to the grazing phase, sales commissions, and departure trucking were figured in the grazing period COG. The costs were divided by the average pounds of gain (end-of-confinement weight to pay-weight change in pounds divided by the number of animals purchased).

Cost of Gain – entire period  
(w/o Return to Mgmt. – Deads Accounted For)

All of the costs, except purchase cost and return to management, divided by the average pounds of gain (pay-weight to pay-weight change in pounds divided by the number of animals purchased).

Sale Price to Attain Given Return

The sale price needed to return the entered Return to ownership and management if the cattle perform as expected.

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