



2018 UW Extension Cattle Feeders Workshops

UW Extension Beef Decision Making Tools

Presented by: Bill Halfman, UW Extension Agriculture Agent- Monroe County

UW Extension has several spreadsheet tools that have been developed to help beef producers take a practical approach to evaluating beef enterprises on their farm. These spreadsheet tools are available at the Wisconsin Beef Information Center Webpage on the Decision Tools and Software page: <https://fyi.uwex.edu/wbic/decision-tools-and-software/>

Following is a listing of the Spreadsheets Available:

- UW Extension Closeout Spreadsheet
- UW Extension Stocker Enterprise Budget
- UW Extension Cow-Calf Enterprise Budget
- Yardage Calculator
- UW Extension Feedlot Enterprise Budget Spreadsheet
- Hay Corn Substitution Calculator for Beef Cow Winter Rations
- Pricing Standing Small Grains
- Pricing Standing Hay
- Corn Silage Pricing Decision Aid
- Estimating Hay Usage Calculator
- Direct Marketing Freezer Beef Pricing Worksheet

Apps

- Corn Silage Pricing App
- Pricing Wet Corn App
- Pricing Standing Hay App

Following are copies of example outputs from some of the Spreadsheets.



UW Extension Feedlot Closeout Worksheet

 User inputs values
You can only edit values in blue

 Calculated Output

Income

Groups of Cattle Sold

Sort #	Date Sold	# of Head	Ave Sale wt in lbs	Total cwt. Sold	Price, \$/cwt	Total Return
1	7/1/17	24	1389	333.4	\$112.00	\$37,336.32
2	8/1/17	15	1362	204.3	\$115.00	\$23,494.50
				0.0		\$0.00
				0.0		\$0.00
				0.0		\$0.00
Summary		39	1379	537.7	\$113.14	\$60,830.82

Expenses

Cattle Costs

Group #	Date Purchased	# of Head	Ave Wt (lb)	Total cwt purchased	Price, \$/cwt	Total Cost
1	10/27/16	15	568	85.2	\$124.00	\$10,564.80
2	10/29/16	15	543	81.45	\$127.00	\$10,344.15
3	11/5/16	10	542	54.2	\$130.00	\$7,046.00
				0		\$0.00
				0		\$0.00
Summary		40	552	220.85	\$126.58	\$27,954.95

Feed Costs are Entered in on the the FEED COST tab (see bottom of window) of this spreadsheet tool

PERFORMANCE (overall)

Death Loss	2.5%	
Start Weight	552	lb
Final Weight	1379	lb
Pounds of Gain per head	826	lb
Average Days on Feed	256	days
Average Daily Gain	3.23	lb/day
Dry Matter Intake (average)	21.9	lb/hd/day
Feed To Gain (dry matter basis)	6.8	lb:lb
Ration Cost Per Ton (dry matter basis)	\$147.46	\$/Ton Dry Matter
Feed Cost (per pound of gain)	\$0.50	\$/lb Gain
Feed Cost per head day	\$1.61	\$/hd/day
Total Feed cost per head	\$412.73	\$/hd
Total Feed Cost for Pen	\$16,096.61	

OTHER LIVESTOCK COSTS (per group)

	Price per Unit	Total Cost	Cost Per Head
Interest cost, cattle		\$1,188.00	\$30.46
Interest cost, feed		\$402.00	\$10.31
Bedding	18 tons @ \$58.00	\$1,044.00	\$26.77
Veterinary cost		\$200.00	\$5.13
Health products (ie vaccines)		\$250.00	\$6.41
Growth promoters (ie implants)		\$180.00	\$4.62
Other supplies		\$0.00	\$0.00
Transportation		\$1,200.00	\$30.77
Marketing costs		\$0.00	\$0.00
Total livestock costs (group)		\$4,464.00	\$114.46

YARDAGE (includes overhead costs)

	Total Cost	Cost Per Head
Enter value from Yardage Calculator worksheet or your own value		
Daily Yardage Cost	\$6,487.65	\$166.35
Total cost of gain, \$/lb		\$0.84

RETURN TO RESOURCES

	Total Cost	Cost Per Head
Estimated receipts	\$60,830.82	\$1,559.76
Variable expenses	\$48,515.56	\$1,243.99
Returns to labor, management & capital	\$12,315.26	\$315.78
Fixed expenses	\$6,487.65	\$166.35
Returns to labor & management	\$5,827.61	\$149.43

see the price adjusters/ calculators below to determine prices on a per ton as fed basis

FEED COSTS							Total Cost	Cost Per Head
Ingredient	Total Feed as fed	Unit	% dry matter of feed	lb dry matter fed	Price \$/ton as fed	Unit	Total Cost	Cost per head
Oats		tons		0.0		\$/ton	\$0.00	\$0.00
Dry Rolled corn	11.7	tons	84.50%	19,773.0	\$121.00	\$/ton	\$1,415.70	\$36.30
High Moisture Shell Corn	63.4	tons	72.00%	91,296.0	\$99.21	\$/ton	\$6,289.91	\$161.28
Mineral	1.7	tons	97.00%	3,298.0	\$800.00	\$/ton	\$1,360.00	\$34.87
Dried distillers grains	12.4	tons	90.00%	22,320.0	\$117.00	\$/ton	\$1,450.80	\$37.20
Complete supplement		tons		0.0		\$/ton	\$0.00	\$0.00
Grass hay		tons		0.0		\$/ton	\$0.00	\$0.00
Alfalfa Hay- high quality	38.0	tons	88.00%	66,880.0	\$130.00	\$/ton	\$4,940.00	\$126.67
Corn silage	19.4	tons	38.00%	14,744.0	\$33.00	\$/ton	\$640.20	\$16.42
		tons		0.0		\$/ton	\$0.00	\$0.00
		tons		0.0		\$/ton	\$0.00	\$0.00
		tons		0.0		\$/ton	\$0.00	\$0.00
		tons		0.0		\$/ton	\$0.00	\$0.00
Total lbs of dry matter				218,311.0	Total Feed Costs		\$16,096.61	\$412.73
Intake, lb/hd/day				21.9	Feed cost per Ton Dry Matter		\$147.46	
					Feed Cost per pound of Gain			\$0.50
					Cost of gain, \$/lb/hd			\$1.61

Shell Corn Price Adjuster

\$3.26	Cash Grain Price for Standard 15.5% moisture shell corn
72.0%	% dry matter of high moisture corn
65.7	lb/bu as fed corrected for moisture
30.43	bu/ton as fed corrected for moisture
\$99.21	\$/ton on an as fed basis

Ear Corn Price Adjuster

\$3.26	Cash Grain Price for Standard 15.5% moisture SHELL corn
69.0%	% dry matter of the ear corn
83.0	lb/bu as fed corrected for moisture
24.09	bu/ton as fed corrected for moisture
\$78.53	\$/ton on an as fed basis

Hay & Haylage Price Adjuster

Stocker Enterprise Budget Worksheet

For Animals Primarily on Pasture calculated on a per head basis



Guidance on various line items can be found by placing cursor over triangle in the upper right corner of column A of that line

User inputs values Calculated Output
You can only edit values in blue except where noted otherwise

Scenario Projected Sale Date: 10/15/2017
 Receipts Avg Out

	Weight	Units	Price	Units	Dollars
Sale of cattle	774	lbs.	\$85.00	\$/cwt.	\$657.73

Variable Expenses Projected Purchase Date: 4/20/2017

	Amount	Unit	Price	Unit	Dollars
Cattle costs					
Initial weight (pay weight)	400	lbs.	\$110.00	\$/cwt.	\$440.00
Purchase costs			\$2.00	\$/hd.	\$2.00
Total purchase expense					\$442.00

Predicted Livestock Performance					
Expected average daily gain	2.10	lbs/day	Days Owned	178	days
			Total Weight Gain	374	lbs

Feed Costs- (not from Pasture)
 Values imported from Feed Costs Calculator worksheet (see tab at bottom of page)

Receiving program feed					
Days fed receiving ration	30	days			
Receiving ration costs	\$0.05	\$/lb as fed	\$0.54	\$/hd/day	\$16.11

Supplemental feed costs when on pasture					
Days supplemented on pasture	148				
Supplemental ration costs	\$0.07	\$/lb as fed	\$0.34	\$/hd/day	\$49.90
Total receiving and supplemental feed costs					\$66.01

Pasture Costs					
Pasture rental rate	\$8.00	\$/month	5	months	
Stocking density			2.5	hd/acre	\$16.00
Seed costs	\$5.00	\$/acre			\$2.00
Fertilizer	\$37.00	\$/acre			\$14.80
Fencing	\$7.00	\$/acre			\$2.80
Weed control	\$3.00	\$/acre			\$1.20
Machinery	\$13.75	\$/acre			\$5.50
Equipment	\$0.75	\$/head			\$0.75
Other	\$5.00	\$/acre			\$2.00
Total pasture costs			\$9.01	\$/hd/month	\$45.05

Other Livestock Costs					
Death losses	2	%			\$8.84
Interest cost, cattle	\$442	\$	6	%APR	\$12.93
Interest cost, feed	\$33	\$	6	%APR	\$0.01
Veterinary cost			\$15.00	\$/hd.	\$15.00
Growth promoters (i.e. implants)			\$5.00	\$/hd	\$5.00
Parasite control			\$4.00	\$/hd	\$4.00
Other supplies			\$3.00	\$/hd.	\$3.00
Transportation			\$18.00	\$/hd.	\$18.00
Daily yardage cost- not including labor	\$0.40	\$/hd/d	30	days	\$12.00
<i>*in most cases yardage costs should be included for days that calves are confined to drylot (non-grazing) areas</i>					
Marketing costs			\$6.00	\$/hd.	\$6.00
Taxes and Insurance			\$0.00	\$/hd.	\$0.00
Misc.			\$0.00	total	\$0.00
Total other livestock costs					\$84.78

Labor					
<i>Values imported from Labor Costs Calculator worksheet (see tab at bottom of page)</i>					
Hired labor	2.23	hr/hd	\$10.00	\$/hr	\$22.25
Unpaid labor	1.11	hr/hd	\$12.00	\$/hr	\$13.35
Unpaid management	0.08	hr/hd	\$18.00	\$/hr	\$1.43
Total					\$37.03

Return To Resources					
Estimated receipts					\$657.73
Variable expenses					\$635.85
Returns to labor, management & capital			\$/hd.		\$21.88
Labor & management					\$37.03
Returns to capitol investment			\$/hd.		(\$15.15)
Cost of gain					\$0.62

Breakeven Analysis					
Breakeven sell price per cwt.					\$86.96
Breakeven cost per cwt. less marketing cost.					\$86.18
Feeder calf purchase weight	400	lbs			
Breakeven feeder purchase price per cwt. assuming zero return to capitol					\$114.97

Wisconsin Beef Information Center <http://fji.uwex.edu/wbic/>

Spreadsheet Prepared by: Bill Hallman, Kory Stalsberg and Ryan Sterry, UW Extension Agriculture Agents
 An EEO/AA employer, University of Wisconsin Extension provides equal opportunities in employment and programming, including Title IX and American with Disabilities (ADA) requirements.

NOTE: No guarantee on the accuracy of the information generated. This is a tool to assist in making decisions.

Feed Cost Worksheet

User inputs values
You can only edit values in blue

Calculated Output

Receiving Program Feed Costs

	Amount	Unit	Total	Unit
Days fed receiving ration	30	lb:lb	imported from stocker enterprise sheet	

Calculate feed costs from an as-fed basis

Enter average lbs fed per head per day on an as-fed basis for receiving period

Ingredient	AS-fed	Ingredient	D.M	Total DM, Total As-fed		Unit	Price	Unit	Total Costs	
	lbs/hd/d	DM, %	lbs/hd/day	lbs	lbs					
Corn	4.8	86	4.1	124	144	lbs.	\$3.00	\$/bu.	\$7.71	
Other grain		86	0.0	0	0	lbs.	\$1.00	\$/bu.	\$0.00	
Dried distillers grains		92	0.0	0	0	lbs.	\$131.00	\$/ton	\$0.00	
Complete supplement		92	0.0	0	0	lbs.	\$500.00	\$/ton	\$0.00	
Mineral	0.2	92	0.2	6	6	lbs.	\$800.00	\$/ton	\$2.40	
Hay	5	88	4.4	132	150	lbs.	\$80.00	\$/ton	\$6.00	
Haylage		38	0.0	0	0	lbs.	\$80.00	\$/ton	\$0.00	
Corn silage		38	0.0	0	0	lbs.	\$44.00	\$/ton	\$0.00	
Mixing and mill cost			0.0	0	0	lbs.	\$0.15	\$/cwt.	\$0.00	
Totals	10		8.7	261	300	Total Feed Costs			\$16.11	
									Feed cost per head per day	\$0.54
									Feed cost per pound of ration as fed	\$0.05

Supplemental Feed While On Pasture

	Amount	Unit	Total	Unit
Days fed supplement	148	lb:lb	imported from stocker enterprise sheet	

Calculate feed costs from an as-fed basis

Enter average lbs fed per head per day on an as-fed basis during time supplemented on pasture

Ingredient	AS-fed	Ingredient	D.M	Total DM, Total As-fed		Unit	Price	Unit	Total Costs
	lbs/hd/d	DM, %	lbs/hd/day	lbs	lbs				
Corn	4.8	86	4.1	611	710	lbs.	\$3.00	\$/bu.	\$38.06
Other grain		86	0.0	0	0	lbs.	\$1.00	\$/bu.	\$0.00
Dried distillers grains		92	0.0	0	0	lbs.	\$131.00	\$/ton	\$0.00
Complete supplement		92	0.0	0	0	lbs.	\$500.00	\$/ton	\$0.00
Mineral	0.2	92	0.2	27	30	lbs.	\$800.00	\$/ton	\$11.84
Hay		88	0.0	0	0	lbs.	\$80.00	\$/ton	\$0.00
Haylage		38	0.0	0	0	lbs.	\$80.00	\$/ton	\$0.00
Corn silage		38	0.0	0	0	lbs.	\$44.00	\$/ton	\$0.00

Feedlot Enterprise Budget Worksheet



Economic Planning Budget (cash-flow) for one animal.

User inputs values Calculated Output

You can only edit values in blue

Description finish steer calves

RECEIPTS Projected Sale Date: 6/13/2018

Avg Out

	Weight	Units	Price	Units	Dollars
Steers	1325	lbs.	\$115.00	\$/cwt.	\$1,523.75

VARIABLE EXPENSES Projected Purchase Date: 10/15/2017

Amount Unit Price Unit Dollars

Cattle costs					
Initial weight (pay weight)	600	lbs.	\$145.00	\$/cwt.	\$870.00
Purchase costs			\$2.00	\$/hd.	\$2.00
Total purchase expense					\$872.00

PREDICTED PERFORMANCE

Predicted Average Daily Gain	3.00	lbs/d	Days on Feed	242	days
Predicted Feed to Gain ¹	7.1	lb:lb	Total Weight Gain	725	lbs

FEED COSTS

Enter values from Feed Costs Calculator worksheet

Feed cost per head per day	\$1.35
Total Feed Costs	\$326.23
Feed Cost of gain, \$/lb	\$0.45

OTHER LIVESTOCK COSTS

Death losses	2	%		\$17.44	
Interest cost, cattle	\$872	\$	10	%APR	\$57.74 <small>assumes 100% borrowed</small>
Interest cost, feed	\$163	\$	10	%APR	\$10.80 <small>assumes 100% borrowed</small>
Bedding	725	lbs.	\$35.00	\$/ton	\$12.69
Veterinary cost			\$3.00	\$/hd.	\$3.00
Health products (ie vaccines)			\$14.00	\$/hd.	\$14.00
Growth promoters (ie implants)			\$2.27	\$/hd.	\$2.27
Other supplies			\$3.00	\$/hd.	\$3.00
Transportation			\$5.00	\$/hd.	\$5.00
Marketing costs			\$12.00	\$/hd.	\$12.00
Total livestock costs					\$137.93

OVERHEAD COSTS (YARDAGE)

Enter value from Yardage Calculator worksheet or your own value

Daily Yardage Cost	\$0.60	Total Yardage Cost	\$145.00
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TOTAL COST PER POUND OF GAIN

Total cost of gain, \$/lb	\$0.84
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RETURN TO RESOURCES

Estimated receipts		\$1,523.75
Variable expenses		\$1,336.16
Returns to labor, management & capital	\$/hd.	\$187.59
Fixed expenses		\$145.00
Returns to labor & management	\$/hd.	\$42.59

BREAKEVEN ANALYSIS

Breakeven sell price per cwt.	\$111.79
Breakeven cost per cwt. less marketing cost.	\$110.88
Feeder calf purchase weight	600 lbs
Breakeven feeder purchase price per cwt.	\$152.10

Wisconsin Beef Information Center

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