## Economics of Cow/Calf Industry in Manitoba

Ben Hamm, P.Ag.
Farm Management Specialist Manitoba Agriculture

November 2023

## $C_{A X}^{A N}$



Source: Statistics Canada

## Canadian Total Cattle \& Calves <br> January 1



Source: Statistics Canada

## Canadian Beef Heifers (Breeding) January 1



## Manitobasm

## Livestock Price Insurance Settlement Index

Calf Settlement Index (Week of Dec 18)


## Cow/Calf Returns



[^0]
## Feedlot Profit/Loss



## Manitoba Cow-Calf Estimated Returns Covering Operating \& Labour, 1990-2023



## MANITOBA BEEF CATTLE BACKGROUNDING 500-900lb STEERS, ESTIMATED RETURNS, 1997-2023



2024 Cost of Production Beef Cow-Calf

300 Cow Herd - Corn Silage Ration



## Cow-Calf Production Costs - September, 2023 Based on a 300 Cow Herd

A. Operating Costs

1. Feed Costs

Grain and Concentrates
Forages
Salt \& Minerals
Extended Grazing Forages
Total Feed Cost

Cost/Cow
$\$ 95.72$
\$311.02
$\$ 42.09$
$\$ 41.65$
\$490.49

Total Cost Your Cost
\$28,717
\$93,305
\$12,627
\$12,496
\$147,145

## Winter Feed Ration Economics

| Pre Calving - Cows |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ration Number |  |  | \#1 | \#2 | \#3 | \#4 | \#5 | \#6 | \#7 | \#8 | \#9 | Total lbs /cow | Total Cost /cow ${ }^{2}$ |
|  | Days on Feed |  |  | 0 | 0 | 135 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |
| Feed Type | \$/unit | Ibs/Unit | \$/lb | Ration - Feed Per Day (lbs based on |  |  |  |  |  | 1400 | lb cow |  |  |  |
| Alfalfa Hay | \$160.00 | 2,000 | 0.080 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0.00 |
| Alfalfa Grass Hay | \$120.00 | 2,000 | 0.060 | 35 | 0 | 0 | 0 | 16 | 0 | 10 | 0 | 0 | 0 | \$0.00 |
| Grass Hay | \$80.00 | 2,000 | 0.040 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0.00 |
| Barley Straw | \$70.00 | 2,000 | 0.035 | 0 | 17 | 19 | 23 | 0 | 23 | 15 | 23 | 0 | 2,473 | \$86.57 |
| Barley Greenfeed | \$120.00 | 2,000 | 0.060 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | \$0.00 |
| Corn Silage | \$45.00 | 2,000 | 0.023 | 0 | 0 | 47 | 0 | 0 | 0 | 32 | 0 | 0 | 6,118 | \$137.66 |
| Barley Silage | \$55.00 | 2,000 | 0.028 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0.00 |
| Barley Grain | \$6.00 | 48 | 0.125 | 0 | 0 | 0 | 11 | 0 | 10 | 0 | 0 | 0 | 0 | \$0.00 |
| 32\% Feedlot Suppl. | \$550 | 2,205 | 0.249 | 0 | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 0 | 0 | 65 | \$16.24 |
| 32\% Liquid Suppl. | \$475 | 2,205 | 0.215 | 0 | 0 | 0 | 0 | 0 | 2.9 | 0 | 0 | 0 | 0 | \$0.00 |
| 20\% Grain Pellets | \$350 | 2,205 | 0.159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | \$0.00 |
| 1:1 Mineral | \$50.00 | 55 | 0.909 | 0.12 | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0.00 |
| 2:1 Mineral | \$50.00 | 55 | 0.909 | 0 | 0.06 | 0.06 | 0.06 | 0.12 | 0.2 | 0.2 | 0.06 | 0 | 8 | \$7.10 |
| Limestone | \$20.00 | 55 | 0.364 | 0 | 0 | 0.00 | 0 | 0 | 0.2 | 0 | 0.2 | 0 | 0 | \$0.00 |
| Blue Salt | \$10.00 | 55 | 0.182 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0 | 9 | \$1.66 |
| \$/head/day |  |  |  | \$2.22 | \$2.11 | \$1.91 | \$2.50 | \$2.22 | \$2.95 | \$2.04 | \$3.17 | \$0.00 |  | \$249.23 |


| Extended Grazing Options - Costs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Corn } \\ & \text { Grazing } \end{aligned}$ | $\begin{aligned} & \text { Stockpiled } \\ & \text { Forage } \end{aligned}$ | Swath Grazing | $\begin{gathered} \text { Crop } \\ \text { Residue } \end{gathered}$ |
| Standing Forage Cost (\$/lb) | n/a | \$0.025 | n/a | \$0.015 |
| Input Costs (\$/acre) |  |  |  |  |
| Seed | \$96.00 |  | \$32.00 |  |
| Fertilizer (incl. applic.) | \$209.00 |  | \$114.00 |  |
| Herbicide | \$16.00 |  | \$16.00 |  |
| Custom tillage | \$12.00 |  | \$12.00 |  |
| Custom seeding | \$25.00 |  | \$25.00 |  |
| Custom spraying | \$9.00 |  | \$9.00 |  |
| Miscellaneous | \$7.75 |  | \$7.75 |  |
| Land taxes | \$10.00 |  | \$10.00 |  |
| Land Costs | \$71.26 |  | \$71.26 |  |
| Labour | \$20.25 |  | \$20.25 |  |
| Subtotal | \$476.26 | \$50.00 | \$317.26 | \$7.50 |
| Fencing Costs |  |  |  |  |
| Estimated miles of fence required | 0.350 | 2.950 | 0.588 | 11.550 |
| Fence Investment Cost/acre | \$1.31 | \$1.31 | \$1.31 | \$1.31 |
| Fence Depreciation Cost/acre | \$1.64 | \$1.64 | \$1.64 | \$1.64 |
| Total cost per acre | \$479.21 | \$52.95 | \$320.21 | \$10.45 |


| Extended Grazing Options - Yields \& Cost Comparison |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Grazing Yield (wet tons/acre) | 15.00 | 1.00 | 7.50 | 0.25 |
| \% moisture | 50 | 10 | 40 | 8 |
| Yield (tons dry matter/acre) | 7.5 | 0.9 | 4.5 | 0.23 |
| Total \# cow grazing days/acre | 370.4 | 44.4 | 222.2 | 11.4 |
| Acres Req'd for Option | 28 | 236 | 47 | 924 |
| Total Extended Grazing Cost | \$13,417.90 | \$12,496.41 | \$15,049.91 | \$9,656.61 |
| Cost per cow | \$44.73 | \$41.65 | \$50.17 | \$32.19 |
| Cost/cow/day (based on 35 days) | \$1.28 | \$1.19 | \$1.43 | \$0.92 |

## Corn Grazing Vs Silage Pile Feeding

|  |  | Corn | $\frac{\text { Corn Pile }}{\text { Grazing }}$ |
| :---: | :---: | :---: | :---: |
| Input Costs (\$/acre) |  |  |  |
|  | Seed | \$96.00 | \$96.00 |
|  | Fertilizer (incl. applic.) | \$209.00 | \$209.00 |
|  | Herbicide | \$16.00 | \$16.00 |
|  | Custom tillage | \$12.00 | \$12.00 |
|  | Custom seeding | \$25.00 | \$25.00 |
|  | Custom spraying X 2 | \$18.00 | \$18.00 |
|  | Miscellaneous | \$7.75 | \$7.75 |
|  | Land taxes | \$10.00 | \$10.00 |
|  | Land Costs | \$71.26 | \$71.26 |
|  | Plastic | \$0.00 | \$15.00 |
|  | Custom Harveset | \$0.00 | \$120.00 |
|  | Straw | \$0.00 | \$0.00 |
|  | Subtotal | \$465.01 | \$600.01 |
|  |  |  |  |
| Fencing Costs |  |  |  |
|  | Estimated miles of fence required | 1.350 | 0.100 |
|  | Fence Investment Cost/acre | \$1.07 | \$0.54 |
|  | Fence Depreciation Cost/acre | \$1.64 | \$0.82 |
|  |  |  |  |
|  |  |  |  |
| Total cost per acre |  | \$467.72 | \$601.37 |
| Grazing Yield (wet tons/acre) |  | 15.00 | 15.00 |
| \% moisture |  | 50 | 50 |
|  | Yield (tons dry matter/acre) | 7.5 | 7.5 |
|  | Total \# cow grazing days/acre | 370.4 | 750.0 |
|  | Acres Req'd for Option | 145.8 | 72 |
|  |  |  |  |
| Straw for feeding |  |  | \$8,500.00 |
| Total Extended Grazing Cost |  | \$68,193.58 | \$51,798.28 |
| Labour |  | \$1,560.00 | \$780.00 |
| Cost per cow |  | \$232.51 | \$175.26 |
| Cost per cow per hd per day |  | \$1.29 | \$0.97 |


2. Other Operating Costs
Straw ..... $\$ 70.00$
Veterinary Medicine \& Supplies ..... $\$ 21.90$
Breeding Costs ..... $\$ 53.51$
Fuel, Maintenance \& Repairs ..... $\$ 42.39$
Utilities ..... \$9.48
Marketing \& Transportation ..... \$37.76
Death Loss ..... \$21.88
Manure Removal ..... \$10.84
Insurance ..... \$12.51
Herd Replacement ..... $\$ 85.80$
Pasture Rental ..... $\$ 0.00$
Pasture Operating ..... \$27.44
Labour - Hired ..... $\$ 52.00$
Miscellaneous ..... $\$ 3.33$
Subtotal Operating Costs ..... $\$ 945.83$
Operating Interest ..... $\$ 36.65$
Total Operating Costs$\$ 982.48$

## B. Fixed Costs

Livestock
Buildings
Machinery \& Equipment
Pasture Land \& Fencing
Total Fixed Costs
C. Owners - Labour \& Living
$\$ 64.47$
\$23.49
\$94.31
$\$ 68.47$
$\$ 250.75$
$\$ 162.00$
Total Cost of Production
\$1,602.86

## 300 Head Beef Cow Calf - Total Production Costs (\$/cow) <br> Owners-

Labour \&
Living, \$162 Fixe 10\% Pasture Land \& Fencing, \$68, 4\%

Fixed Cost
Machinery, \$94, 6\%

Fixed Cost -
Buildings, \$23
Livestock, \$64


## Marginal Returns per Acre

|  | Profitability and Breakeven Analysis |  |  |
| :--- | :---: | :---: | :---: |
| Estimated Farmgate | Per Cow | Total | Per Acre |
| Price (\$ per cwt) | $\$ 356.09$ |  |  |
| Calf weight (lbs) | 575 |  |  |
| Gross Revenue / cow | $\$ 1,945.14$ | $\$ 583,542$ | $\$ 406$ |
| Operating Expense Ratio | $61.2 \%$ |  |  |
| Marginal Returns |  |  |  |
| Over Feed Costs | $\$ 1,455$ | $\$ 436,397$ | $\$ 304$ |
| Over Operating Costs | $\$ 755$ | $\$ 226,509$ | $\$ 158$ |
| Over Operating \& Fixed Costs | $\$ 504$ | $\$ 151,285$ | $\$ 105$ |
| Over Total Costs (Net Profit) | $\$ 342$ | $\$ 102,685$ | $\$ 72$ |
|  | Price |  |  |
| Breakeven (Lb. weaned calf) | $\underline{(\$ / c w t)}$ | $\$ 218$ |  |
| Over Feed \& Operating Costs | $\$ 264$ |  |  |
| Over Feed, Operating \& Fixed Costs | $\$ 293$ |  |  |
| Over Total Costs |  |  |  |

## Cost Summary Per Cow Per Day

| Summer grazing (based on 135 days) | $\$ 1.183$ |
| :--- | :--- |
| Extended grazing (based on 35 days) | $\$ 1.190$ |
| Winter feed (based on 195 days) | $\$ 2.316$ |
| Yardage (based on 230 days) | $\$ 1.837$ |
| Total Overwinter Costs (based on 230 days) | $\$ 3.981$ |

Note: This budget is only a guide and is not intended to be an in-depth study of the cost of production of this industry. Interpretation and utilization of this information is the responsibility of the user. No liability for decisions based on this publication is assumed.

## 5\% Rule to Increase Profitability

Risk \& Sensitivity Analysis (Stress Test)

|  | Percent <br> Change | Per Head | Change from Baseline Value | Change in Profit/Cow | Change in <br> Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Operating Costs | (5.0\%) | \$1,141 | (\$60) | \$60 | \$18,017 |
| Sale Price (\$ per cwt) | 5.0\% | \$374 | \$18 | \$102 | \$30,713 |
| Calf Weaning Weight (lbs) | 5.0\% | 604 | 29 | \$102 | \$30,713 |
| Calf Crop \% | 1.0\% | 96 | 1 | \$20 | \$6,143 |
|  |  |  |  | \$285 | \$85,585 |

## Revenue per Cow with Different Weaning Rates

Table 1: Revenue per Cow as Weaning Rate Changes
Assuming 575 lb Calf Avg- 550 lb heifers and 600 lb steers Gross revenue per callf @3.50/lb X $575=\$ 2012.50$

Weaning Rate
95\%
90\%
85\% 80\%
75\%

Revenue per Cow

| $\$$ | $1,911.88$ |
| :--- | :--- |
| $\$$ | $1,811.25$ |
| $\$$ | $1,710.63$ |
| $\$$ | $1,610.00$ |
| $\$$ | $1,509.38$ |

## Pounds of Weaned Calf per Cow at Different Weaning Rates

Table 2: Pounds of Weanded Calf per Cow by Weaning Weight
Average Weaning Weight
Weaning Rate 400 lbs 450 lbs 500 lbs 550 lbs 600 lbs

| $95 \%$ | 380 | 427.5 | 475 | 522.5 | 570 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $90 \%$ | 360 | 405 | 450 | 495 | 540 |
| $85 \%$ | 340 | 382.5 | 425 | 467.5 | 510 |
| $80 \%$ | 320 | 360 | 400 | 440 | 480 |
| $75 \%$ | 300 | 337.5 | 375 | 412.5 | 450 |

## Land Use Efficiency on Pasture

| Land Base |  | $\begin{array}{c}\text { Marginal } \\ \text { Pasture }\end{array}$ | $\begin{array}{c}\text { Improved } \\ \text { Pasture }\end{array}$ |
| :--- | :--- | ---: | ---: |
| Number of cows pastured/season |  |  | 300 |$) 300$

## Low Equity Scenario on Land Value

$\left.\begin{array}{|l|l|r|r|}\hline \text { Land Base } & & & \begin{array}{c}\text { Marginal } \\ \text { Pasture }\end{array}\end{array} \begin{array}{c}\text { Improved } \\ \text { Pasture }\end{array}\right)$

## High Equity Scenario on Land Value

| Land Base |  |  | Marginal Pasture | Improved Pasture |
| :---: | :---: | :---: | :---: | :---: |
| Number of cows pastured/season |  |  | 300 | 300 |
| Number of cows/quarter |  |  | 32 | 64 |
| Number of pasture acres/head |  |  | 5.0 | 2.5 |
| Total Acres Required |  |  | 1500 | 750 |
| Pasture Land Value |  |  |  |  |
| (\$/acre, excl. fence, water, facilities) |  |  | \$2,000 | \$2,000 |
| Owned Land Equity |  | 85\% |  |  |
| Land Financed |  | 15\% |  |  |
| Land Opportunity Cost (Investment Rate) |  | 0.00\% |  |  |
| Land cost (\$/acre) |  |  |  |  |
| Finance Rate \& Term | 7.000\% |  | years |  |
| Principle \& Interest Cost |  |  | \$25.74 | \$25.74 |
| Owned Land Opportunity Cost |  |  | \$0.00 | \$0.00 |
| Total Cost (\$/acre) |  |  | \$25.74 | \$25.74 |
| Days on Pasture | 135 |  |  |  |
|  |  |  |  |  |
| Cost per Cow |  |  | \$128.72 | \$64.36 |
| Cost per Day |  |  | \$0.95 | \$0.48 |

## Land Use Efficiency with Corn Silage Acres

## Land Use Efficiency and Feed Security Analysis:

| Pasture (Marginal, Improved, Crown Land and Rented Pasture) | 135 Days |  |
| :--- | :--- | :--- |
| Extended Grazing (Corn, Stockpiled, Swath and Crop Residue) | 35 Days |  |
| Planned forage \& feed waste amount | $10 \%$ | 1,500 pound bales |
| Alfalfa Hay | 0 Total Tons @ | 3.50 tons/acre $(4.7$ bales $/ \mathrm{ac})$ |
| Alfalfa Grass Hay | 0 Total Tons @ | 2.79 tons/acre $(3.7 \mathrm{bales} / \mathrm{ac})$ |
| Grass Hay | 0 Total Tons @ | 2.00 tons/acre $(2.7 \mathrm{bales} / \mathrm{ac})$ |
| Barley Greenfeed | 0 Total Tons @ | 2.83 tons/acre $(3.8$ bales/ac $)$ |
| Corn Silage | 1,468 Total Tons @ | 15.0 tons/acre |
| Barley Silage | 0 Total Tons @ | 7.5 tons/acre |
| Barley Grain | 2,784 Total bu @ | 78 bu/acre |


|  |  |
| ---: | ---: |
| Acres/cow | Total Acres |
| 4.34 | 1,302 |
| 0.79 | 236 |
| 0.00 | 0 |
| 0.00 | 0 |
| 0.00 | 0 |
| 0.00 | 0 |
| 0.33 | 98 |
| 0.00 | 0 |
| 0.12 | 36 |
| 5.57 | 1,672 |

## Revenue per Acre on Farm that Produces Corn Silage

Profitability and Breakeven Analysis

| Estimated Farmgate | Per Cow | Total | Per Acre |
| :--- | ---: | ---: | ---: |
| Price (\$ per cwt) | $\$ 356.09$ |  |  |
| Calf weight (lbs) | 575 |  |  |
| Gross Revenue / cow | $\$ 1,945.14$ | $\$ 583,542$ | $\$ 406$ |
| Operating Expense Ratio | $61.2 \%$ |  |  |
| Marginal Returns | $\$ 1,455$ | $\$ 436,397$ | $\$ 304$ |
| Over Feed Costs | $\$ 755$ | $\$ 226,509$ | $\$ 158$ |
| Over Operating Costs | $\$ 504$ | $\$ 151,285$ | $\$ 105$ |
| Over Operating \& Fixed Costs | $\$ 342$ | $\$ 102,685$ | $\$ 72$ |
| Over Total Costs (Net Profit) | Price |  |  |
|  | $(\$ /$ cwt) |  |  |
| Breakeven (Lb. weaned calf) | $\$ 218$ |  |  |
| Over Feed \& Operating Costs | $\$ 264$ |  |  |
| Over Feed, Operating \& Fixed Costs | $\$ 293$ |  |  |
| Over Total Costs |  |  |  |

## Land Use Efficiency with Hay Acres



## Revenue per Acre on Farm that Produces Dry Hay

Profitability and Breakeven Analysis

| Estimated Farmgate | Per Cow | Total | Per Acre |
| :--- | :---: | :---: | :---: |
| Price (\$ per cwt) | $\$ 356.09$ |  |  |
| Calf weight (lbs) | 575 |  |  |
| Gross Revenue / cow | $\$ 1,945.14$ | $\$ 583,542$ | $\$ 277$ |
| Operating Expense Ratio | $64.4 \%$ |  |  |
| Marginal Returns |  |  |  |
| Over Feed Costs | $\$ 1,394$ | $\$ 418,237$ | $\$ 198$ |
| Over Operating Costs | $\$ 692$ | $\$ 207,532$ | $\$ 98$ |
| Over Operating \& Fixed Costs | $\$ 441$ | $\$ 132,308$ | $\$ 63$ |
| Over Total Costs (Net Profit) | $\$ 279$ | $\$ 83,708$ | $\$ 40$ |
|  | Price |  |  |
| Breakeven (Lb. weaned calf) | $\mathbf{\$ / c w t )}$ |  |  |
| Over Feed \& Operating Costs | $\$ 229$ |  |  |
| Over Feed, Operating \& Fixed Costs | $\$ 275$ |  |  |
| Over Total Costs | $\$ 305$ |  |  |

## Economics and Breakeven at 100\% Financed

B. Fixed Costs

| Livestock | \$429.81 | \$128,944 |  |
| :---: | :---: | :---: | :---: |
| Buildings | \$79.79 | \$23,937 |  |
| Machinery \& Equipment | \$218.09 | \$65,428 |  |
| Pasture Land \& Fencing | \$215.72 | \$64,715 |  |
| Total Fixed Costs | \$943.41 | \$283,024 |  |
| C. Owners - Labour \& Living | \$162.00 | \$48,600 |  |
| Total Cost of Production | \$2,306.53 | \$691,957.00 |  |
| Profitability and Breakeven Analysis |  |  |  |
| Estimated Farmgate | Per Cow | Total | Per Acre |
| Price (\$ per cwt) | \$356.09 |  |  |
| Calf weight (lbs) | 575 |  |  |
| Gross Revenue / cow | \$1,945.14 | \$583,542 | \$406 |
| Operating Expense Ratio | 61.7\% |  |  |
| Marginal Returns |  |  |  |
| Over Feed Costs | \$1,455 | \$436,397 | \$304 |
| Over Operating Costs | \$744 | \$223,208 | \$155 |
| Over Operating \& Fixed Costs | (\$199) | $(\$ 59,816)$ | -\$42 |
| Over Total Costs (Net Profit) | (\$361) | $(\$ 108,416)$ | -\$76 |
|  | Price |  |  |
| Over Feed \& Operating Costs | \$220 |  |  |
| Over Feed, Operating \& Fixed Costs | \$393 |  |  |
| Over Total Costs | \$422 |  |  |

## Crop Economics per acre

## Crop Production Costs 2024 Guidelines (Dollars Per Acre)

A. Operating Costs
Seed \& Treatment
Fertilizer

Crop Protection
Fuel
Machinery Operating \& Lease
Labour - Hired
Crop Insurance
Hail Insurance
Drying \& Other Costs
Land Taxes
Storage Costs
Interest on Operating
Total Operating

| Wheat Hard Red Spring | Wheat Northern Hard Red | Wheat Prairie Spring | Wheat Winter | Oats | Barley | Hybrid Fall Rye | Corn |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$36.00 | \$36.00 | \$36.00 | \$34.00 | \$25.00 | \$24.00 | \$82.40 | \$102.00 |
| \$124.44 | \$136.29 | \$128.39 | \$124.44 | \$91.21 | \$93.08 | \$152.08 | \$177.00 |
| \$61.81 | \$61.81 | \$61.81 | \$41.54 | \$23.13 | \$50.13 | \$8.38 | \$32.00 |
| \$38.14 | \$38.83 | \$38.28 | \$38.14 | \$44.98 | \$41.74 | \$38.79 | \$46.59 |
| \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 |
| \$5.40 | \$5.40 | \$5.40 | \$5.40 | \$5.40 | \$5.40 | \$5.40 | \$5.40 |
| \$13.52 | \$16.41 | \$12.45 | \$13.98 | \$21.02 | \$18.96 | \$18.50 | \$50.70 |
| \$11.80 | \$11.80 | \$11.80 | \$11.80 | \$11.80 | \$11.80 | \$11.80 | \$11.80 |
| \$17.75 | \$17.75 | \$17.75 | \$17.75 | \$17.75 | \$17.75 | \$17.75 | \$87.75 |
| \$20.00 | \$20.00 | \$20.00 | \$20.00 | \$20.00 | \$20.00 | \$20.00 | \$20.00 |
| \$17.88 | \$19.25 | \$18.15 | \$17.88 | \$31.63 | \$21.45 | \$22.00 | \$37.13 |
| \$16.73 | \$17.48 | \$16.88 | \$15.75 | \$14.26 | \$14.82 | \$18.09 | \$26.79 |
| \$388.46 | \$406.01 | \$391.90 | \$365.67 | \$331.16 | \$344.13 | \$420.19 | \$622.15 |

B. Fixed Costs

| Land Costs | $\$ 101.43$ | $\$ 101.43$ | $\$ 101.43$ | $\$ 101.43$ | $\$ 101.43$ | $\$ 101.43$ | $\$ 101.43$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Machinery Costs | $\$ 89.15$ | $\$ 89.15$ | $\$ 89.15$ | $\$ 89.15$ | $\$ 89.15$ | $\$ 89.15$ | $\$ 89.15$ |
| Total Fixed | $\$ 190.58$ | $\$ 190.58$ | $\$ 190.58$ | $\$ 190.58$ | $\$ 190.58$ | $\$ 190.58$ | $\$ 190.58$ |
| C. Owners - Labour \& Living | $\$ 27.00$ | $\$ 27.00$ | $\$ 27.00$ | $\$ 27.00$ | $\$ 27.00$ | $\$ 27.00$ | $\$ 27.00$ |
| Total Costs | $\$ 606.04$ | $\$ 623.59$ | $\$ 609.48$ | $\$ 583.25$ | $\$ 548.74$ | $\$ 561.71$ | $\$ 637.77$ |
| 8859.61 |  |  |  |  |  |  |  |

## Crop Production Costs 2024 Guidelines (Dollars Per Acre)

|  | Wheat Hard Red Spring | Wheat Northern Hard Red | Wheat Prairie Spring | Wheat Winter | Oats | Barley | Hybrid Fall Rye | Corn |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profitability Analysis |  |  |  |  |  |  |  |  |
| Estimated Farmgate |  |  |  |  |  |  |  |  |
| Target Price \$ per unit | \$9.25 | \$8.75 | \$8.75 | \$8.00 | \$5.00 | \$6.25 | \$6.50 | \$6.25 |
| Premium \$ per unit | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Target Yield per acre | 65 | 70 | 66 | 65 | 115 | 78 | 80 | 135 |
| Unit type (bu. or lb.) | bu | bu | bu | bu | bu | bu | bu | bu |
| Gross Revenue / acre | \$601.25 | \$612.50 | \$577.50 | \$520.00 | \$575.00 | \$487.50 | \$520.00 | \$843.75 |
| Operating Expense Ratio | 64.6\% | 66.3\% | 67.9\% | 70.3\% | 57.6\% | 70.6\% | 80.8\% | 73.7\% |
| Marginal Returns |  |  |  |  |  |  |  |  |
| Over Operating Costs | \$212.79 | \$206.49 | \$185.60 | \$154.33 | \$243.84 | \$143.37 | \$99.81 | \$221.60 |
| Over Total Costs (Net Profit) | (\$4.79) | (\$11.09) | (\$31.98) | (\$63.25) | \$26.26 | (\$74.21) | (\$117.77) | (\$15.86) |
| Profitability Ranking | 7 | 8 | 10 | 11 | 6 | 12 | 14 | 9 |
| Return on Investment (ROI) | (0.79\%) | (1.78\%) | (5.25\%) | (10.84\%) | 4.79\% | (13.21\%) | (18.47\%) | (1.85\%) |
| Return on Asset (ROA) | 3.10\% | 2.97\% | 2.55\% | 1.92\% | 3.73\% | 1.70\% | 0.82\% | 3.28\% |

## Crop Economics per Acre

## Crop Production Costs Guidelines (Dollars Per Acre)

A. Operating Costs
Seed \& Treatment

Fertilizer
Crop Protection
Fuel
Machinery Operating \& Lease
Labour - Hired
Crop Insurance
Hail Insurance
Drying \& Other Costs
Land Taxes
Storage Costs
Interest on Operating
Total Operating

| Canola | Soybeans | Sunflower Oilseed | Flaxseed | Peas | Beans Pinto | Beans White | Beans Black |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$80.00 | \$90.00 | \$50.00 | \$64.00 | \$88.00 | \$116.00 | \$112.00 | \$118.00 |
| \$142.10 | \$42.23 | \$116.14 | \$62.46 | \$28.13 | \$78.26 | \$86.16 | \$86.16 |
| \$66.76 | \$23.58 | \$47.52 | \$32.26 | \$46.00 | \$129.78 | \$129.78 | \$129.78 |
| \$37.93 | \$33.05 | \$39.07 | \$36.32 | \$33.15 | \$32.61 | \$32.15 | \$32.15 |
| \$25.00 | \$25.00 | \$38.00 | \$25.00 | \$25.00 | \$50.00 | \$50.00 | \$50.00 |
| \$5.40 | \$5.40 | \$5.40 | \$5.40 | \$5.40 | \$5.40 | \$5.40 | \$5.40 |
| \$17.50 | \$25.95 | \$27.35 | \$21.70 | \$19.66 | \$39.01 | \$40.82 | \$46.86 |
| \$11.80 | \$15.34 | \$11.80 | \$11.80 | \$23.60 | \$20.65 | \$20.65 | \$20.65 |
| \$17.75 | \$17.75 | \$27.75 | \$17.75 | \$17.75 | \$17.75 | \$17.75 | \$17.75 |
| \$20.00 | \$20.00 | \$20.00 | \$20.00 | \$20.00 | \$20.00 | \$20.00 | \$20.00 |
| \$12.38 | \$10.45 | \$22.00 | \$6.88 | \$13.75 | \$8.71 | \$7.79 | \$7.79 |
| \$19.65 | \$13.89 | \$18.23 | \$13.66 | \$14.42 | \$23.32 | \$23.51 | \$24.05 |
| \$456.26 | \$322.64 | \$423.26 | \$317.22 | \$334.86 | \$541.49 | \$546.01 | \$558.59 |
| \$101.43 | \$101.43 | \$101.43 | \$101.43 | \$101.43 | \$101.43 | \$101.43 | \$101.43 |
| \$89.15 | \$89.15 | \$109.03 | \$89.15 | \$89.15 | \$109.03 | \$109.03 | \$109.03 |
| \$190.58 | \$190.58 | \$210.46 | \$190.58 | \$190.58 | \$210.46 | \$210.46 | \$210.46 |
| \$27.00 | \$27.00 | \$27.00 | \$27.00 | \$27.00 | \$27.00 | \$27.00 | \$27.00 |
| \$673.83 | \$540.22 | \$660.72 | \$534.80 | \$552.44 | \$778.95 | \$783.48 | \$796.06 |

## Crop Production Costs Guidelines (Dollars Per Acre)

|  | Canola | Soybeans | Sunflower Oilseed | Flaxseed | Peas | Beans Pinto | Beans White | Beans Black |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Farmgate |  |  |  |  |  |  |  |  |
| Target Price \$ per unit | \$15.75 | \$15.25 | \$0.25 | \$16.00 | \$9.50 | \$0.50 | \$0.50 | \$0.50 |
| Premium \$ per unit | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Target Yield per acre | 45 | 38 | 2,000 | 25 | 50 | 1,900 | 1,700 | 1,700 |
| Unit type (bu. or lb.) | bu | bu | lb | bu | bu | 1 b | lb | lb |
| Gross Revenue / acre | \$708.75 | \$579.50 | \$500.00 | \$400.00 | \$475.00 | \$950.00 | \$850.00 | \$850.00 |
| Operating Expense Ratio | 64.4\% | 55.7\% | 84.7\% | 79.3\% | 70.5\% | 57.0\% | 64.2\% | 65.7\% |
| Marginal Returns |  |  |  |  |  |  |  |  |
| Over Operating Costs | \$252.49 | \$256.86 | \$76.74 | \$82.78 | \$140.14 | \$408.51 | \$303.99 | \$291.41 |
| Over Total Costs (Net Profit) | \$34.92 | \$39.28 | (\$160.72) | (\$134.80) | (\$77.44) | \$171.05 | \$66.52 | \$53.94 |
| Profitability Ranking | 5 | 4 | 16 | 15 | 13 | 1 | 2 | 3 |
| Return on Investment (ROI) | 5.18\% | 7.27\% | (24.33\%) | (25.21\%) | (14.02\%) | 21.96\% | 8.49\% | 6.78\% |
| Return on Asset (ROA) | 3.90\% | 3.99\% | 0.35\% | 0.47\% | 1.63\% | 7.06\% | 4.94\% | 4.69\% |

## Cow Value if Financing 15\%

What Can you Profitably Pay for Cows? (15\% financed)


## Cow Value if Financing 100\%

What Can you Profitably Pay for Cows? (100\% financed)


## Manage Risk

- Take out the risk with risk management programs
- Agri Insurance ( forage and pasture)
- Livestock Price Insurance
- Agristability (whole farm)
- Manitoba livestock cash advance (operating interest)
- Watch deadlines - Agri insurance March 31, Agristability April 302024


## Livestock

- Beef 300 Cow-Calf Production Costs (Excel or PDF)
- Beef 150 Cow-Calf Production Cost (Excel or PDF)
- Beef Backgrounding Costs (Excel or PDF)
- Beef Replacement Heifer Costs (Excel or PDF)
- Beef Grassing Costs (Excel or PDF)
- Beef Feedlot Finishing Costs (Excel or PDF)
- FeedPlan Feed Ingredient Cost Calculator (Online, Excel)
- Beef Cow Overwinter Cost Calculator (Online, Excel)
- Managing Low Forage Supplies During Winter (Excel or PDF)
- Calf Creep Feed Calculator (Online, Excel)
- Straw Ammoniation Calculator (Excel)
- Livestock Price Slide Calculator (Online, Excel)
- LPI Calf Decision Calculator (Online, Excel)
- LPI Feeders Decision Calculator (Online, Excel)
- Cow Share Lease Calculator (Excel)
- Bison Cow-Calf Production Costs (Excel or PDF)
- Bison Bull Backgrounding Costs (Excel or PDF)
- Bison Bull Finishing Costs (Excel or PDF)
- Sheep Lamb Production Costs (Excel or PDF)


## Forage

- Hay: Round Bale and Silage Production Costs (Excel or PDF)
- Silage Production Costs (Excel or PDF)
- Pasture Production Costs (Excel or PDF)
- **NEW** Pasture Days Insurance Calculator (Excel)
- Standing Hay Costs Calculator (Online, Excel)
- FeedPlan Feed Ingredient Cost Calculator (Online, Excel)
- Forage Purchase Decision Calculator (Excel)
- Forage Price Moisture Conversion Calculator (Online, Excel)
- Forage Yield Moisture Conversion Calculator (Online, Excel)
- Manitoba Agriculture Forage Production


## Land, Fence \& Buildings

- RentPlan Crop Land Rental Rate Calculator (Online, Excel or PDF)
- Pasture Rental Rate Calculator (Online, Excel)
- FencePlan Cost Calculator (Online, Excel)
- Grain Bin and Farm Building Rental Cost Planner (Online, Excel)
- Crop Share Lease Calculator (Excel)
- Hay Storage Cost Planner (Excel)
- Contracts and Leases
- Agricultural Crown Land
- Manitoba Assessment Property Search
- Manitoba Assessment Property Sales
- Association of Manitoba Community Pastures


## mašc Online Calculators

## Machinery

- Farm Machinery Custom and Rental Guide


## Land, Fence \& Buildings

- RentPlan Cropland Rental Rate Calculator
- Pasture Rental Rate Calculator
- FencePlan Cost Calculator
- Grain Bin and Farm Building Rental Cost Planner


## Forage

- FeedPlan Feed Ingredient Cost Calculator
- Pasture Rental Rate Calculator
- Standing Hay Cost Calculator
- Standing Corn Cost Calculator
- Standing Greenfeed Cost Calculator
- Straw Cost Calculator
- Forage Price Moisture Conversion Calculator
- Forage Yield Moisture Conversion Calculator


## Crops

- RentPlan Cropland Rental Rate Calculator
- Seeding Rate and Cost Calculator
- FertPlan Fertilizer Cost And Requirement Calculator
- Crop Reseeding Decision Tool
- Crop Disease Break Even Calculator
- Sclerotinia Treatment Decision Calculator (Canola)
- Sclerotinia Treatment Decision Calculator (Sunflowers)
- Grain Drying Cost Calculator
- Straw Cost Calculator


## Livestock

- Beef Cow Overwinter Cost Calculator
- FeedPlan Feed Ingredient Cost Calculator
- LPI Decision Calculator (Calf)
- LPI Decision Calculator (Feeder)
- Calf Creep Feed Calculator


## Questions?

## Contact me:

Ben Hamm

Farm Enterprise Management Specialist 204-392-9350


[^0]:    Source Canfax Research

