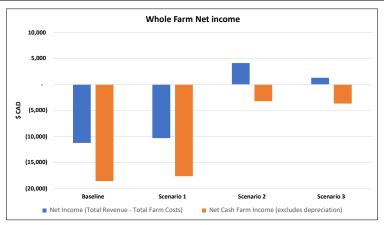


| Baseline Farm Description   | Mixed operation taking bob calves to slaughter weight (using existing facilities)   |  |  |  |
|-----------------------------|---|--|--|--|
| Ration (lb/head/day as fed) | Finishing ration is silage based delivered at 37 lbs/hd/day including corn silage (20.5 lb with DM30%), grass silage (6.6 lb), barley (9.9 lb with DMf 86%) and ATB mineral/rumensin mix (100 g)  |  |  |  |
| Scenario 1                  | Reduce sale price discount from \$0.07/lb to \$0.035/lb.  |  |  |  |
| Scenario 2                  | Holstein steers ADG increase from 2.54 lb to 3.2 lb (group 1 and 4).  |  |  |  |
| Scenario 3                  | Keeping dairy-beef cattle only  |  |  |  |
| Summary                     | This benchmark starts out with a negative profitability and requires ADG on Holstien steers to improve to be comparable with dairy-beef cross cattle or switch to 100% dairy-beef cross cattle to be viable. ADG was more impactful to the bottom line than reducing the price discount; however, if already operating at Scenario 2 or 3, reducing the price discount does provide incremental benefits. |  |  |  |
| Disclaimer:                 | This benchmark is based on 3 farms of data; outliers were excluded as required  |  |  |  |

| Environment                  |                      |
|------------------------------|----------------------|
| Average Annual Temperature   | 5.5°C                |
| Average Annual Precipitation | 900–1150 mm          |
| Ecoregion                    | Prince Edward Island |

| Physical Performance Indicators   |                  |
|-----------------------------------|------------------|
|                                   | Holstein, Angus, |
| Breed                             | Speckled Park    |
| Sale date                         | Year round       |
| Retained ownership                | Dairy Calves     |
| % of feed purchased               | 100%             |
| Annual sales of Cattle (no. head) | 81               |
| Placement weight (lbs)            | 86               |
| Sale Weight (lbs)                 | 1528             |
| Days on Feed                      | 583              |
| Average Daily Gain (lbs/day)      | 3.31             |

| Financial Descriptor |        |
|----------------------|--------|
| Operation Maturity   | Medium |
|                      |        |



| Whole Farm Overview                           | Baseline | Scenario 1 | Scenario 2 | Scenario 3 |
|---|----------|------------|------------|------------|
| Market Revenue                                |          |            |            |            |
| Dairy-Beef Reciepts                           | 142,062  | 142,995    | 142,062    | 144,396    |
| Crop Market Receipts                          | -        | -          | -          | -          |
| Other Farm Revenue +                          | -        | -          |            | -          |
| Total Revenue                                 | 142,062  | 142,995    | 142,062    | 144,396    |
| Expenses                                      | Baseline | Scenario 1 | Scenario 2 | Scenario 3 |
|   |          |            |            |            |
| Direct costs enterprises                      | 93,433   | 93,432     | 78,104     | 80,931     |
| Overhead costs                                | 10,161   | 10,161     | 10,161     | 10,161     |
| Paid labour                                   | 47,277   | 47,277     | 47,277     | 47,277     |
| Rents paid                                    | -        | -          | -          | -          |
| Interest paid                                 | 2,253    | 2,251      | 2,209      | 2,209      |
| Depreciation                                  | 7,495    | 7,495      | 7,495      | 7,495      |
| Total Farm Costs                              | 160,619  | 160,616    | 145,246    | 148,073    |
| Profits                                       | Baseline | Scenario 1 | Scenario 2 | Scenario 3 |
| Net Income (Total Revenue - Total Farm Costs) | (11,243) | (10,308)   | 4,131      | 1,291      |
| Net Cash Farm Income (excludes depreciation)  | (18,558) | (17,621)   | (3,184)    | (3,677)    |

Cost of Production: Cash Cost + Depreciation + Opportunity Costs

Cash Costs = Cash cost for purchased feed, fertiliser, seeds, fuel, maintenance, land rents, interest on liabilities, wages paid, veterinary costs plus medicine, water, insurance, accounting, etc (excl. Tax)  $\label{preciation} \textit{Depreciation = Linear depreciation on machinery and buildings, calculated on replacement values}$ 

Opportunity Costs = Calculated cost for using own production factors like labour (family working hours \* wage for qualified local labour, land (own land \* regional land rents) and capital (non-land equity \* longterm government bonds interest rate)

Whole Farm Profitability = Market returns (+ coupled payments) (+ decoupled payments) - whole-farm costs +/- changes in inventory +/- capital gains/losses.

Whole Farm Net Income = Whole farm profitability + depreciation + changes in inventory + capital gains/losses. Known as: 'Net farm income' (Agri Profits, 2018) Revenue = sales of calves, cull cows, breeding stock, government payments and other revenue applicable to the specific enterprise NOTE: Feed costs are based on cost of producing if homegrown.



| FINISHING   | Baseline | Scenario 1 | Scenario 2 | Scenario 3 |
|---|----------|------------|------------|------------|
| No. of beef cattle sold per year                          | 71       | 71         | 71         | 71         |
| Note: breeding stock sales are in the cow-calf enterprise |          |            |            |            |
| REVENUE (\$/head Sold)                                    | Baseline | Scenario 1 | Scenario 2 | Scenario 3 |
| Market Returns from Retained Ownership                    | 1,998.31 | 2,011.44   | 1,998.31   | 1,998.15   |
| Other Returns (Government payments, by-products)          | -        | -          | -          | -          |
| Total   | 1,998.31 | 2,011.44   | 1,998.31   | 1,998.15   |
| Costs (\$/head Sold)                                      | Baseline | Scenario 1 | Scenario 2 | Scenario 3 |
| VARIABLE COSTS  |          |            |            |            |
| Animal purchases  | 92.83    | 92.83      | 92.83      | 186.31     |
| Feed (purchase feed, fertiliser, seed, pesticides)        | 1,174.61 | 1,174.59   | 956.07     | 855.78     |
| Machinery (maintenance, depreciation, contractor)         | 126.36   | 126.36     | 126.36     | 126.12     |
| Fuel, energy, lubricants, water                           | 33.05    | 33.05      | 33.05      | 33.22      |
| Vet & medicine  | 24.11    | 24.11      | 24.16      | 22.96      |
| Other inputs  | 70.01    | 70.01      | 70.13      | 67.24      |
| Labour  |          |            |            |            |
| Paid Labour   | 671.70   | 671.70     | 671.70     | 669.62     |
| Unpaid Labour   |          |            |            |            |
| Total Variable Costs                                      | 2,192.67 | 2,192.65   | 1,974.29   | 1,961.26   |
| CAPITAL COSTS   |          |            |            |            |
| Insurance, taxes  | 16.21    | 16.21      | 16.21      | 16.16      |
| Buildings (maintenance, depreciation)                     | 55.77    | 55.77      | 55.77      | 55.69      |
| Land Cost   |          |            |            |            |
| Rented Land   |          |            |            |            |
| Owned Land  |          |            |            |            |
| Capital Costs   |          |            |            |            |
| Liabilities   | 1.05     | 1.05       | 0.96       | 0.87       |
| Own capital   | 1.05     | 1.05       | 0.96       | 0.87       |
| Total Capital Costs                                       | 74.07    | 74.08      | 73.89      | 73.58      |
| TOTAL COSTS   | Baseline | Scenario 1 | Scenario 2 | Scenario 3 |
| Cash Costs  | 2,159.24 | 2,159.23   | 1,940.77   | 1,927.78   |
| Depreciation Costs  | 106.45   | 106.45     | 106.45     | 106.19     |
| Opportunity Costs   |          |            |            |            |
| Total Production Costs (excludes own capital)             | 2,265.69 | 2,265.68   | 2,047.22   | 2,033.97   |
|   |          |            |            |            |

| Profits  | Baseline | Scenario 1 | Scenario 2 | Scenario 3 |
|--|----------|------------|------------|------------|
| Margin over operating costs                          | 4.11     | 4.13       | 4.10       | 4.39       |
| Short-term profit (cash costs)                       | (160.92) | (147.79)   | 57.54      | 70.37      |
| Medium-term profit (cash + depreciation)             | (267.38) | (254.24)   | (48.91)    | (35.82)    |
| Long-term profit (cash + depreciation + opportunity) | (267.38) | (254.24)   | (48.91)    | (35.82)    |

| Net Income (\$/head sold) | Baseline | Scenario 1 | Scenario 2 | Scenario 3 |
|---------------------------|----------|------------|------------|------------|
| Net Income                | (296.55) | (283.36)   | (77.55)    | (21.18)    |
| Net Cash Farm Income      | (192.01) | (178.83)   | 26.99      | 40.08      |

| Labour                              |                |       |       |       |       |
|-------------------------------------|----------------|-------|-------|-------|-------|
| Paid Labour                         | hours per year | 1,745 | 1,745 | 1,745 | 1,745 |
| Unpaid Labour                       | hours per year | -     | -     | -     | -     |
| Return to labour input              | \$/hour        | 18    | 18    | 26    | 25    |
| Average wages (paid and calculated) | \$/hour        | 27    | 27    | 27    | 27    |

| Net Income (annual total) |             | Baseline | Scenario 1 | Scenario 2 | Scenario 3 |
|---------------------------|-------------|----------|------------|------------|------------|
| Net Income                | \$ per year | (18,558) | (17,621)   | (3,184)    | (3,677)    |
| Net Cash Farm Income      | \$ per year | (11,243) | (10,308)   | 4,131      | 1,291      |

