

CowProfit\$ Case Study

Winter 2017



Introduction:

This case study is designed to help you get an initial understanding of CowProfit\$. It has been adapted from the "John and Jane Doe" demonstration file contained in the CowProfit\$ version 3.

If you have never used CowProfit\$ before, you will need from 45 to 90 minutes to complete this case study. Before you start, make sure that you are familiar with CowProfit\$' various components. The help function contains a wealth of information; just press the F1 key!

Points to Remember:

1. This case study does not represent any type of real life operation. An actual analysis will involve considerably more data entry and more time.
2. There is usually more than one correct answer. This is due to the inexact process of allocating amounts to the enterprises. If you're planning to compare your answers to those of others, you may wish to use the allocations provided (see "Hints on Allocating Amounts to Enterprises" below).
3. Spend some time planning your analysis before setting up the enterprises and starting data entry. In CowProfit\$, enterprises and crops can be created anytime, but once created they cannot be removed.

Case Study - Doe Land and Cattle Company

Jane and John Doe operate a small cow-calf operation near Anywhere, Alberta. They sell most of their calves in the fall, but some are backgrounded for sale the following spring. They grow only alfalfa-brome hay of which some is sold but most is fed to the breeding herd and backgrounders. Grazing takes place on owned and rented pasture, as well as on "aftermath" from their family's and neighbours' crop land. **Note that the Doe's enterprises consist only of Cow Calf, Feeders, Pasture and Forage and that the only forage crop grown is Alfalfa-Brome Hay** (don't set up an Aftermath enterprise here because CowProfit\$ does this for you automatically).

The Does keep reasonably good records. Income and expense column totals (on a cash basis), machinery and building lists as well as inventories and other pertinent information are in the tables below. John and Jane have also estimated their own labour contributions. They have kept track of most of their production information and it is also listed below.

Jane and John are extremely interested in several points. 1) Was their operation profitable last year? 2) Did each of their enterprises pull its own weight? 3) What were their costs of production, both per cow wintered and per pound of calf produced?

Instructions

If you have a copy of the file *cowprofitsdemo-blnk.cxl*, open it in CowProfit\$. This file has already been configured for the case study. Take a look at the various sections of the program and refer to the "Getting Started" section of the CowProfit\$ help function. CowProfit\$ lets you start anywhere you like and complete the various sections in any order. However, you may wish to check the help function or the manual for a suggested "plan of attack." Remember, don't create enterprises or crops until you have an overall plan. Once you've created them, they can't be removed.

Note: If you don't have the file *cowprofitsdemo-blnk.cxl*, you'll have to start a new file from CowProfit\$' menu: File - New etc.

John and Jane's Records

Financial Records - Nov 1, 2016 to Oct 31, 2017

Revenues

calf sales	66,775
breeding herd sales	16,580
feeder sales	44,333
forage sales	3,500

Expenses

gasoline and diesel	6,000
other expenses	10,000
vet & medicine	2,500
feed purchases	4,000
land rental	8,000
machinery repairs	20,000

	Cow-calf	Bckgrdr	Repl Hfr	Hay	Pasture	Aftermath
gasoline and diesel	5	1	1	10	1	0.5
other expenses	10	1	1	5	2	0.5
vet & medicine	100	34	14			
feed purchases	40	50	10			
land rental					1	
machinery repairs	5	1	1	10	1	0.5

Hints on Allocating Amounts to Enterprises

The Does have used CowProfit\$' 10 point proportional allocation system to spread these expenses across the various enterprises. You may wish to review "proportional allocation" using CowProfit\$' help feature. In order to simplify and standardize the exercise, the Does' suggested allocations are shown in the tables below.

Inventories

	Beginning inventory			Ending inventory		
	# Head	Weight	\$/Head	# Head	Weight	\$/Head
Cows/Bred Heifers	100		2,000	101		2,000
Bulls	4		4,000	3		4,000

	Beginning inventory			Ending inventory		
	# Head	Weight	\$/lb	# Head	Weight	\$/lb
Feeder heifers	12	550	1.50	3	550	2.05
Feeder steers	22	600	1.75	14	600	2.30
Repl heifers	14	550	1.70	15	550	2.18

	Beginning inventory			Ending inventory		
	# Bales	Weight	\$/bale	# Bales	Weight	\$/bale
Alfalfa Brome Hay	200	1,400	70	50	1400	70

	Current Value						
		Cow-calf	Bckgrdr	Repl Hfr	Forage	Pasture	Aftermath
Machinery							
4WD loader tractor	100,000	10	3	2	5	1	0.5
mower and baler	64,000				1		
non-power machinery	50,000	10	3	2	5	1	0.5

	Current Value						
		Cow-calf	Bckgrdr	Repl Hfr	Forage	Pasture	Aftermath
Buildings							
corrals, shop	100,000	10	2	2	2	1	0.5

	Beginning	Ending
Amounts Receivable		
hay sales	1,200	0

	Beginning	Ending
Amounts Payable		
fuel bill	0	2,000

	Beginning	Ending
Supply Inventory		
diesel fuel	2000	1000

	Beginning	Ending			
			Cow-calf	Bckgrdr	Repl Hfr
Purchased Feed Inventory					
grain (purchased):	1000	1500	40	50	10

Production Records

Cow-Calf Breeding herd information

Deaths 1 cow
 Sales 1 bull and 12 cull cows
 Transfers 14 yearling heifers to Cows/Bred Heifers, 1050 lb, \$1350 per head

Calf Crop

	Bull/Steer	Heifer
Births	45	48
Deaths	1	2
Sales	30	28
Sale Wt	550	500
Transfers	14 steer calves to Feeders - 600 lb, \$2.3 /lb 3 heifer calves to Feeders - 550 lb, \$2.05 /lb 15 heifer calves to Yearling Heifers - 550 lb, \$2.18 per head	

Backgrounders

Deaths 1 head
 Sales 12 heifers @ 800 lbs
 21 steers @ 850 lbs

Forage (Hay)

550 bales were produced (1400 lb each)
 650 bales fed (1400 lb @ \$70/ bale)
 50 bales were sold (1400 lb each)

Cow-calf	Bckgrdr	Repl Hfr
560	55	35

Pasture and Aftermath Grazing

100 cows grazed the "home quarter" for 60 days @ \$30 per AUM (equivalent to \$1/d)
 100 cows grazed the "Smith Place" for 30 days @ \$30 per AUM
 100 cows grazed chaff piles on the north quarter for 30 days @ \$20 per AUM (Aftermath grazing)
 100 cows grazed the Jones's Place for 30 days @ \$20 per AUM (Aftermath grazing)

(Note: Assume that a cow, with or without her calf, is equal to 1 Animal Unit Equivalent or AUE)

Unpaid Labour

1200 hours @ \$18 per hour

Cow Calf	Bckgrdr	Repl Hfr	Forage	Pasture	Aftermath
10	5	5	5	2	0.5

Reports, Analysis and Discussion

1. a) Was the Doe's Value of Production for Cow-Calf Enterprise in 2017? _____
(Hint: Look under Report < Livestock Reports)

2) What were the Doe's total costs of production?

Cow-calf \$ _____ **per cow wintered**
 \$ _____ **per lb of calf weaned**

3) Did each of their enterprises pull its own weight?

(Hint: Look under Reports < Winners and Losers)

Enterprise	Break-Even	Unit	Contribution Margin**	Gross Margin
Cow-calf				
Repl heifers				
Backgrounders				
Forage				
Pasture				
Aftermath Grazing				

4) What potential areas would you discuss with John and Jane?

For more information about this case study and the concepts involved, contact:

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**Contribution Margin may be the best single indicator of whether or not an enterprise is pulling its weight. Contribution Margin is defined as Value of Production minus Variable Costs. If Contribution Margin is positive, it means that the enterprise is paying a portion of fixed costs and has a positive effect on the business. If it is negative, the enterprise is having a negative effect on the business.