CowProfit$ Case Study

Winter 2017

Introduction:

This case study is designed to help you get an initial understanding of CowProfit$. It is has been adapted from the "John and Jane Doe" demonstration file contained in the version CowProfit$ version 3. If you are completely new to the software, 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 later the next spring. They grow only alfalfa-brome hay of which some is sold but most is fed to the breeding herd and feeders. Grazing is on their 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. CowProfits 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

Hints on Allocating Amounts to Enterprises - The Does have used CowProfit$' 10 point proportional allocation system to spread these expenses across the various

Financial Records - Jan 1 to Dec 31/2014

Revenues:	
calf sales	57,375
breeding herd sales	16,580
feeder sales	42,960
forage sales	10,500

Expenses:	
gasoline and diesel	6,000
other expenses	10,000
feed purchases	4,000
land rental	8,000
machinery repairs	20,000

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.

Cow-calf	Feeders	Forage	Pasture	Aftermath
5	2	10	1	0.5
10	2	5	2	0.5
40	60			
			1	
5	2	10	1	0.5

Inventories

	Beginning inventory			Ending inventory		
	number	weight	price	number	weight	price
Cows/Bred Heifers	100		2,000	101		2,000
Bulls	4		4,000	3		4,000
yearling heifers	14		1,800	15		1,800

	Beginning inventory			Ending inventory		
	number	weight	price	number	weight	price
Feeder heifers	12	550	1.80	3	550	1.80
Feeder steers	22	600	1.95	14	600	1.95

	Beginning inventory	Ending inventory
Alfalfa Brome Hay	100 bales @1400 lbs @$70	60 bales @1400 lbs @$70

Machinery	Current Value	
4WD loader tractor	100,000	
mower and baler	64,000	←
other machinery	50,000	(non-power)

Cow-calf	Feeders	Forage	Pasture	Aftermath
10	5	5	1	0.5
		1		
10	5	2	2	0.5

Buildings	Current Value	
corrals, shop	100,000	←

Cow-calf	Feeders	Forage	Pasture	Aftermath
10	4	2	1	0.5

Amounts Receivable	Beginning	Ending
hay sales	1200	0

Amounts Payable	Beginning	Ending
fuel bill	0	2,000

Supply Inventory
diesel fuel - beginning inventory of $2000, ending inventory of $1000.

Purchased Feed Inventory
grain (purchased): beg. inventory of $1000, end. Invent. of $1500 ←

Cow Calf	Feeders
40	60

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, 1000 lbs., $1800 per head

Calf production information

Births	45 bull calves and 48 heifers
Deaths	1 bull calf and 2 heifer calves
Sales	30 steer calves @550 lbs.
	28 heifer calves @500 lbs.
Transfers	14 steer calves to Feeders - 600 lbs., $1.95 / lb.
	3 heifer calves to Feeders - 550 lbs., $1.80 / lb.
	15 heifer calves to Yearling Heifers - 550 lbs., $1250 per head

Feeder cattle information

deaths	1 head
sales	12 heifers @ 800 lbs
	21 steers @ 850 lbs

Forage Information

410 bales were produced (1400 lbs. each)
300 bales were fed (1400 lbs. @ $70 / bale) ←
150 bales were sold (1400 lbs. each)

Cow-calf	Feeders
10	2

Pasture and Aftermath Grazing Information
100 cows grazed the "home quarter" for 60 days @ $30 per AUM
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	Feeders	Forage	Pasture	Aftermath
10	3	5	2	0.5

Reports, Analysis and Discussion

See if you can answer the Doe's questions from the first page of the case study.

1) Was the Doe's operation profitable in 2014? ____ What was their Net Farm Income? _____

2) Did each of their enterprises pull its own weight?
What was the contribution margin** for each enterprise?

	Contribution Margin
Cow-calf	
Feeders	
Forage	
Pasture	
Aftermath Grazing	

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

	Per Cow Wintered	Per lb of Calf
Cow-calf		

	Per Lb of Gain
Feeders	

4) What other issues 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.