

A photograph of a herd of dairy cows grazing in a lush green field. The cows are of various colors, including brown, black, and white. One cow in the foreground has a pink ear tag that says "Tiara". The text "Economics of Organic Dairy" is overlaid in large black font.

# Economics of Organic Dairy

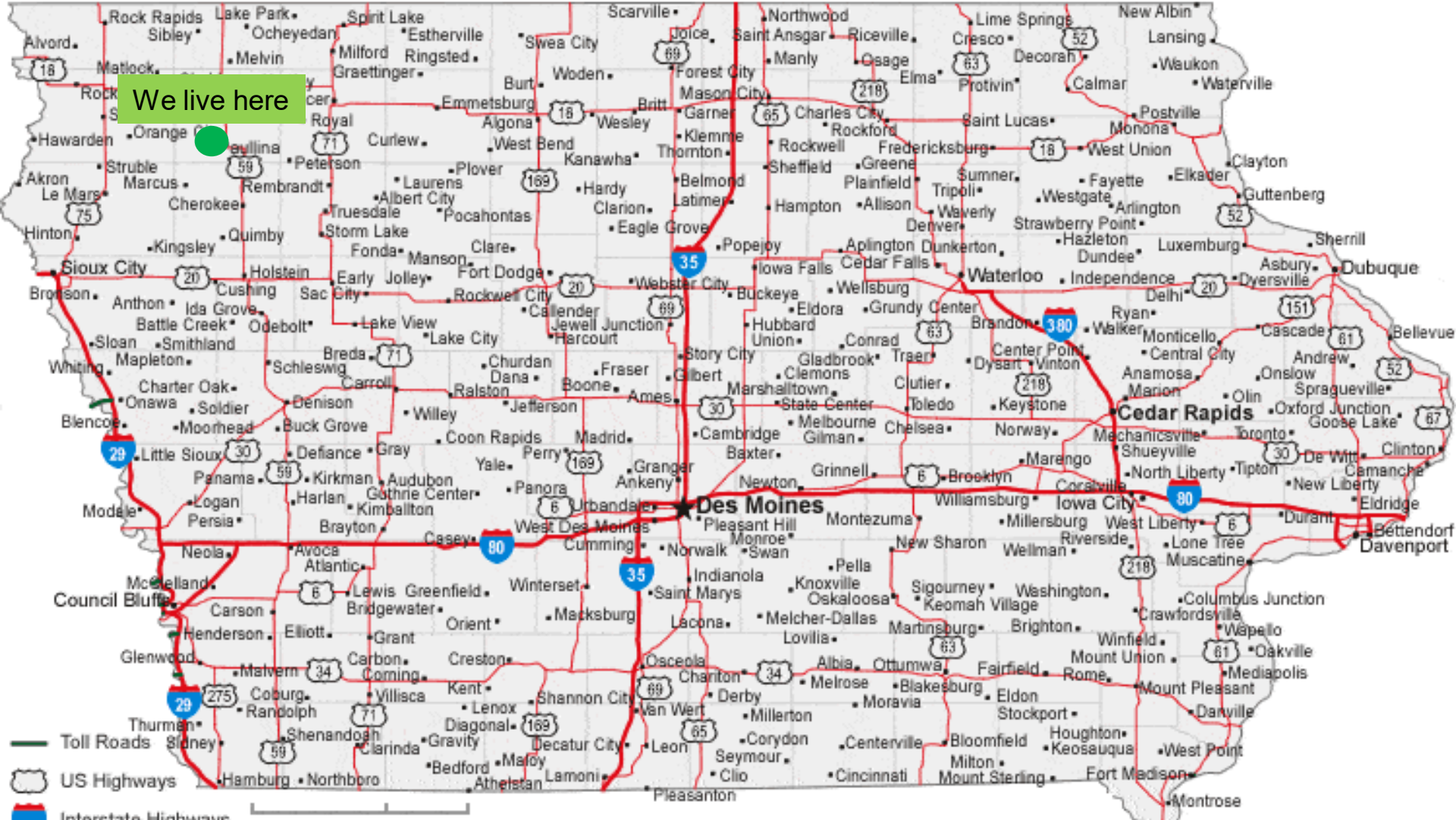
Torray and Erin Wilson  
January 18, 2019  
PFI





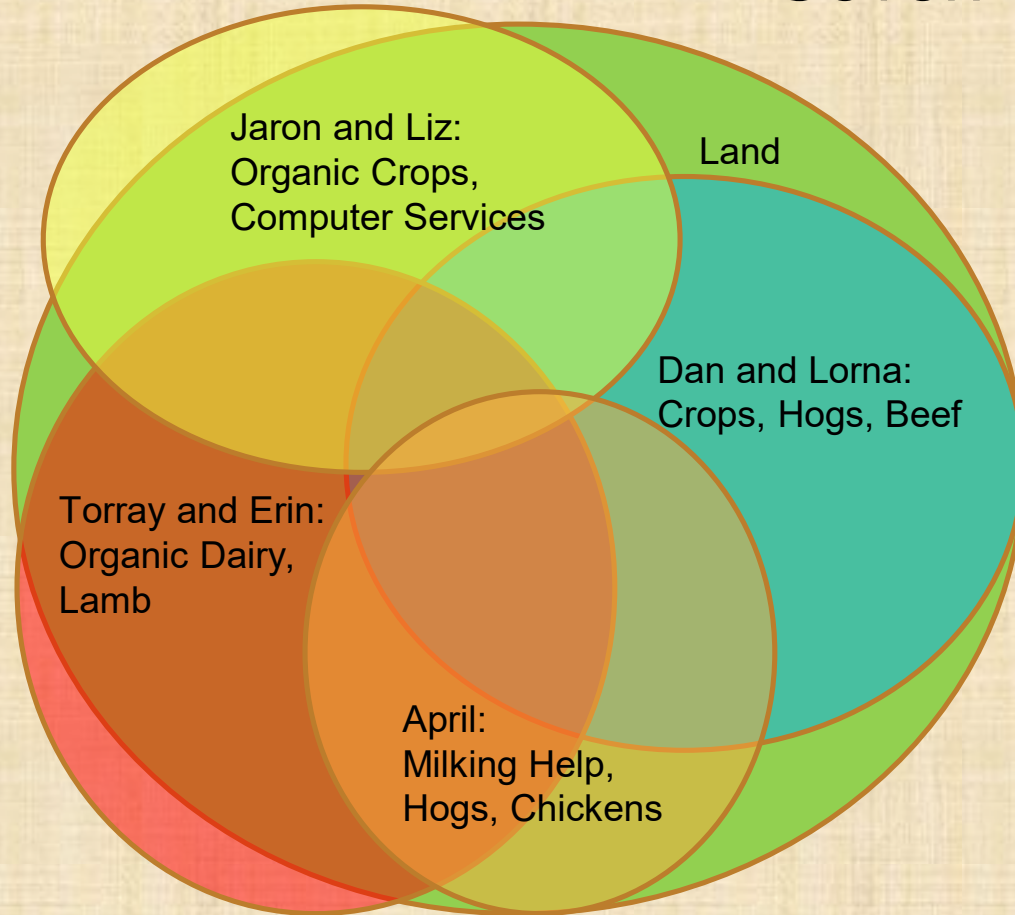


We live here





# Seven W Farm





# Overview of Wilson Dairy

- $\approx$ 190 acres for pasture/crops
- 100 Jersey and JerseyX
- Fall calving
- Home-raised replacement heifers
- Home-raised bulls for cleanup
- Steers for grass-fed beef



# VALUES













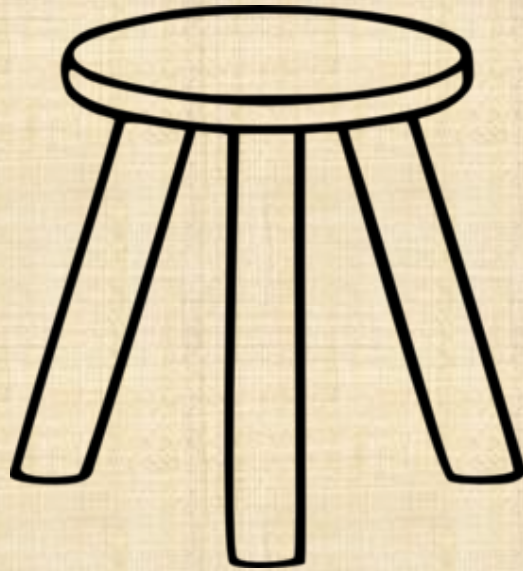


“Do what you can where you are with  
what you have”  
-Teddy Roosevelt

# Sustainability Profitability



# Triple Bottom Line



# SOCIAL





A woman in a grey t-shirt and blue jeans stands in a field of tall grass, looking towards a cornfield in the distance. In the foreground, a whiteboard with handwritten notes is visible. The notes include:

- 1 dairy cows, 10 calves
- 240 ewes < 200 Head Sheep
- Honey
- Organic Corn
- Special products
- Jumping
- Meat
- Direct Market Meat
- Local Calves
- Selling Bees
- Graze Corn
- Corn
- Seveling
- retrain
- Flavored Honey
- Flavored Honey





# ENVIRONMENTAL





# A Year in the Life of Torray & Erin

- Let's take a drive...



“The plans of the diligent lead to profit, as surely as haste leads to poverty”

-Proverbs 21:5










Terry Gompert

# Holistic Management Financial Plan



 Paste
  Cut
  Copy
  Format
 Times New R... 10 A A
 B I U
 = = =
 Wrap Text
 General
 \$ %
 Conditional Formatting
 Format as Table
 Cell Styles
 Insert
 Delete
 Format
 AutoSum
 Fill
 Clear
 Sort & Filter

Q57

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S				
1	ANNUAL INCOME AND EXPENSE PLAN																	Start Balance ==		Interest rate to ==		Inter	
2																		On this page, only the three cells at right may be modified directly:					
3		Planned Income	Misc. Income	Total Income	Planned Profit	Investment/ Profit	Liability Exp.	Overhead	Dairy & Beef	Crop & Forage	Sheep & Lamb	M Exp - Ent. #5	M Exp - Ent. #6	M Exp - Ent. #7	Total Expense	Total Income	Net/Deficit	Bank	Interest to Bank				
4	January PLAN	\$ 27,670	\$ -	\$ 27,670	\$ -	\$ -	\$ 6,900	\$ 4,149	\$ 9,522	\$ 4,095	\$ -	\$ -	\$ -	\$ -	\$ 24,666	\$ 27,670	\$ 3,004	\$ 3,042	\$ -				
5	ACTUAL	\$ 31,900	\$ -	\$ 31,900	\$ -	\$ -	\$ 6,900	\$ 4,149	\$ 9,522	\$ 4,095	\$ -	\$ -	\$ -	\$ -	\$ 24,666	\$ 31,900	\$ 7,234	\$ 7,273	\$ -				
6	DIFFERENCE	\$ 4,230	\$ -	\$ 4,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ 4,230	\$ 4,230	\$ -	\$ -				
7	CUMULATIVE DIFFERENCE TO DATE	\$ 4,230	\$ -	\$ 4,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ 4,230	\$ 4,230	\$ -	\$ -				
8	February PLAN	\$ 35,213	\$ -	\$ 35,213	\$ -	\$ -	\$ 3,239	\$ 5,176	\$ 14,246	\$ 5,881	\$ -	\$ -	\$ -	\$ -	\$ 28,542	\$ 35,213	\$ 6,671	\$ 9,713	\$ -				
9	ACTUAL	\$ 38,941	\$ -	\$ 38,941	\$ -	\$ -	\$ 3,239	\$ 5,196	\$ 14,246	\$ 5,881	\$ -	\$ -	\$ -	\$ -	\$ 28,562	\$ 38,941	\$ 10,379	\$ 17,652	\$ -				
10	DIFFERENCE	\$ 3,728	\$ -	\$ 3,728	\$ -	\$ -	\$ -	\$ (20)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (20)	\$ 3,728	\$ 3,708	\$ -	\$ -				
11	CUMULATIVE DIFFERENCE TO DATE	\$ 7,958	\$ -	\$ 7,958	\$ -	\$ -	\$ -	\$ (20)	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ (20)	\$ 7,958	\$ 7,938	\$ -	\$ -				
12	March PLAN	\$ 32,096	\$ -	\$ 32,096	\$ -	\$ -	\$ 3,095	\$ 6,496	\$ 13,746	\$ 20,867	\$ 915	\$ -	\$ -	\$ -	\$ 45,119	\$ 32,096	\$ (13,023)	\$ (3,310)	\$ (17)				
13	ACTUAL	\$ 35,908	\$ -	\$ 35,908	\$ -	\$ -	\$ 3,104	\$ 5,111	\$ 10,774	\$ 20,910	\$ 1,105	\$ -	\$ -	\$ -	\$ 41,004	\$ 35,908	\$ (5,096)	\$ 12,556	\$ -				
14	DIFFERENCE	\$ 3,812	\$ -	\$ 3,812	\$ -	\$ -	\$ (9)	\$ (3,85)	\$ 2,972	\$ (43)	\$ (190)	\$ -	\$ -	\$ -	\$ 4,115	\$ 3,812	\$ 7,927	\$ -	\$ -				
15	CUMULATIVE DIFFERENCE TO DATE	\$ 11,770	\$ -	\$ 11,770	\$ -	\$ -	\$ (9)	\$ (3,85)	\$ 1,365	\$ (43)	\$ (190)	\$ -	\$ -	\$ -	\$ 4,095	\$ 11,770	\$ 15,865	\$ -	\$ -				
16	April PLAN	\$ 28,305	\$ -	\$ 28,305	\$ -	\$ -	\$ 5,768	\$ 6,032	\$ 8,946	\$ 7,872	\$ 119	\$ -	\$ -	\$ -	\$ 28,737	\$ 28,305	\$ (432)	\$ (3,742)	\$ (15)				
17	ACTUAL	\$ 35,047	\$ -	\$ 35,047	\$ -	\$ -	\$ 2,648	\$ 4,807	\$ 8,615	\$ 3,679	\$ -	\$ -	\$ -	\$ -	\$ 19,749	\$ 35,047	\$ 15,298	\$ 27,854	\$ -				
18	DIFFERENCE	\$ 6,742	\$ -	\$ 6,742	\$ -	\$ -	\$ 3,120	\$ 1,225	\$ 331	\$ 4,193	\$ 119	\$ -	\$ -	\$ -	\$ 8,988	\$ 6,742	\$ 15,730	\$ -	\$ -				
19	CUMULATIVE DIFFERENCE TO DATE	\$ 18,512	\$ -	\$ 18,512	\$ -	\$ -	\$ 3,111	\$ 2,990	\$ 3,303	\$ 4,151	\$ (71)	\$ -	\$ -	\$ -	\$ 13,084	\$ 18,512	\$ 31,495	\$ -	\$ -				
20	May PLAN	\$ 21,175	\$ -	\$ 21,175	\$ -	\$ -	\$ 2,452	\$ 4,582	\$ 19,307	\$ 39	\$ -	\$ -	\$ -	\$ -	\$ 26,380	\$ 21,175	\$ (5,205)	\$ (8,947)	\$ (45)				
21	ACTUAL	\$ 22,880	\$ 160	\$ 23,040	\$ -	\$ -	\$ 5,798	\$ 5,844	\$ 22,970	\$ -	\$ 50	\$ -	\$ -	\$ -	\$ 34,662	\$ 23,040	\$ (11,622)	\$ 16,232	\$ -				
22	DIFFERENCE	\$ 1,705	\$ 160	\$ 1,865	\$ -	\$ -	\$ (3,346)	\$ (1,262)	\$ (3,663)	\$ 39	\$ (5)	\$ -	\$ -	\$ -	\$ (8,282)	\$ 1,865	\$ (6,417)	\$ -	\$ -				
23	CUMULATIVE DIFFERENCE TO DATE	\$ 20,217	\$ 160	\$ 20,377	\$ -	\$ -	\$ (235)	\$ 1,328	\$ (360)	\$ 4,189	\$ (121)	\$ -	\$ -	\$ -	\$ 4,802	\$ 20,377	\$ 25,178	\$ -	\$ -				
24	June PLAN	\$ 19,434	\$ 700	\$ 20,134	\$ -	\$ -	\$ 2,336	\$ 7,658	\$ 8,564	\$ 78	\$ -	\$ -	\$ -	\$ -	\$ 18,636	\$ 20,134	\$ 1,498	\$ (7,449)	\$ (37)				
25	ACTUAL	\$ 20,020	\$ 450	\$ 20,470	\$ -	\$ -	\$ 2,309	\$ 7,703	\$ 9,455	\$ 1,150	\$ -	\$ -	\$ -	\$ -	\$ 20,717	\$ 20,470	\$ (247)	\$ 15,985	\$ -				
26	DIFFERENCE	\$ 586	\$ (250)	\$ 336	\$ -	\$ -	\$ 27	\$ (45)	\$ (991)	\$ (1,072)	\$ -	\$ -	\$ -	\$ -	\$ (2,081)	\$ 336	\$ (1,745)	\$ -	\$ -				
27	CUMULATIVE DIFFERENCE TO DATE	\$ 20,803	\$ (90)	\$ 20,713	\$ -	\$ -	\$ (208)	\$ 1,283	\$ (1,351)	\$ 3,117	\$ (121)	\$ -	\$ -	\$ -	\$ 2,721	\$ 20,713	\$ 23,433	\$ -	\$ -				
28	July PLAN	\$ 11,691	\$ -	\$ 11,691	\$ -	\$ -	\$ 1,148	\$ 5,229	\$ 4,357	\$ 78	\$ -	\$ -	\$ -	\$ -	\$ 10,812	\$ 11,691	\$ 880	\$ (6,569)	\$ (33)				
29	ACTUAL	\$ 14,997	\$ 1,071	\$ 16,068	\$ -	\$ -	\$ 1,534	\$ 7,716	\$ 4,048	\$ 1,960	\$ -	\$ -	\$ -	\$ -	\$ 15,258	\$ 16,068	\$ 810	\$ 16,795	\$ -				
30	DIFFERENCE	\$ 3,306	\$ 1,071	\$ 4,377	\$ -	\$ -	\$ (386)	\$ (2,487)	\$ 309	\$ (1,832)	\$ -	\$ -	\$ -	\$ -	\$ (4,446)	\$ 4,377	\$ (70)	\$ -	\$ -				
31	CUMULATIVE DIFFERENCE TO DATE	\$ 24,108	\$ 981	\$ 25,089	\$ -	\$ -	\$ (594)	\$ (1,204)	\$ (1,042)	\$ 1,235	\$ (121)	\$ -	\$ -	\$ -	\$ (7,726)	\$ 25,089	\$ 23,364	\$ -	\$ -				
32	August PLAN	\$ 70	\$ 200	\$ 270	\$ -	\$ -	\$ 480	\$ 4,637	\$ 3,846	\$ 1,078	\$ -	\$ -	\$ -	\$ -	\$ 10,021	\$ 270	\$ (9,751)	\$ (16,320)	\$ (82)				
33	ACTUAL	\$ 6,210	\$ 420	\$ 6,630	\$ -	\$ -	\$ 621	\$ 6,082	\$ 9,998	\$ 1,350	\$ -	\$ -	\$ -	\$ -	\$ 18,041	\$ 6,630	\$ (11,411)	\$ 5,381	\$ -				
34	DIFFERENCE	\$ 6,140	\$ 220	\$ 6,360	\$ -	\$ -	\$ (131)	\$ (1,465)	\$ (6,152)	\$ (272)	\$ -	\$ -	\$ -	\$ -	\$ (8,020)	\$ 6,360	\$ (1,660)	\$ -	\$ -				
35	CUMULATIVE DIFFERENCE TO DATE	\$ 30,248	\$ 1,201	\$ 31,449	\$ -	\$ -	\$ (725)	\$ (2,669)	\$ (7,194)	\$ 963	\$ (121)	\$ -	\$ -	\$ -	\$ (9,746)	\$ 31,449	\$ 21,703	\$ -	\$ -				
36	September PLAN	\$ 16,112	\$ 77	\$ 16,189	\$ -	\$ -	\$ -	\$ 9,025	\$ 5,964	\$ 117	\$ -	\$ -	\$ -	\$ -	\$ 15,106	\$ 16,189	\$ 1,083	\$ (15,237)	\$ (76)				
37	ACTUAL	\$ 9,242	\$ 64	\$ 9,306	\$ -	\$ -	\$ -	\$ 2,638	\$ 6,540	\$ 449	\$ -	\$ -	\$ -	\$ -	\$ 9,637	\$ 9,306	\$ (331)	\$ 5,051	\$ -				
38	DIFFERENCE	\$ (6,870)	\$ (13)	\$ (6,883)	\$ -	\$ -	\$ -	\$ 6,387	\$ (586)	\$ (332)	\$ -	\$ -	\$ -	\$ -	\$ 5,469	\$ (6,883)	\$ (1,614)	\$ -	\$ -				
39	CUMULATIVE DIFFERENCE TO DATE	\$ 23,379	\$ 1,188	\$ 24,567	\$ -	\$ -	\$ (725)	\$ 3,718	\$ (7,780)	\$ 631	\$ (121)	\$ -	\$ -	\$ -	\$ (4,277)	\$ 24,567	\$ 20,290	\$ -	\$ -				
40	October PLAN	\$ 25,855	\$ 2,000	\$ 27,855	\$ -	\$ -	\$ -	\$ 4,273	\$ 11,781	\$ 9,125	\$ 124	\$ -	\$ -	\$ -	\$ 25,502	\$ 27,855	\$ 2,353	\$ (12,804)	\$ (66)				
41	ACTUAL	\$ 14,357	\$ -	\$ 14,357	\$ -	\$ -	\$ 828	\$ 5,200	\$ 7,045	\$ 1,357	\$ -	\$ -	\$ -	\$ -	\$ 14,430	\$ 14,357	\$ (73)	\$ 4,980	\$ -				
42	DIFFERENCE	\$ (11,498)	\$ (2,000)	\$ (13,498)	\$ -	\$ -	\$ (828)	\$ (928)	\$ 4,736	\$ 7,968	\$ 124	\$ -	\$ -	\$ -	\$ 11,072	\$ (13,498)	\$ (2,426)	\$ -	\$ -				
43	CUMULATIVE DIFFERENCE TO DATE	\$ 11,881	\$ (812)	\$ 11,069	\$ -	\$ -	\$ (1,553)	\$ 2,790	\$ (3,044)	\$ 8,599	\$ 395	\$ -	\$ -	\$ -	\$ 6,795	\$ 11,069	\$ 17,864	\$ -	\$ -				
44	November PLAN	\$ 35,032	\$ 1,500	\$ 36,532	\$ -	\$ -	\$ 2,517	\$ 18,331	\$ 6,696	\$ 6,864	\$ 120	\$ -	\$ -	\$ -	\$ 34,528	\$ 36,532	\$ 2,004	\$ (10,880)	\$ (56)				
45	ACTUAL	\$ 24,267	\$ -	\$ 24,267	\$ -	\$ -	\$ 2,575	\$ 7,682	\$ 14,007	\$ 144	\$ -	\$ -	\$ -	\$ -	\$ 24,408	\$ 24,267	\$ (141)	\$ 4,839	\$ -				

Reward:





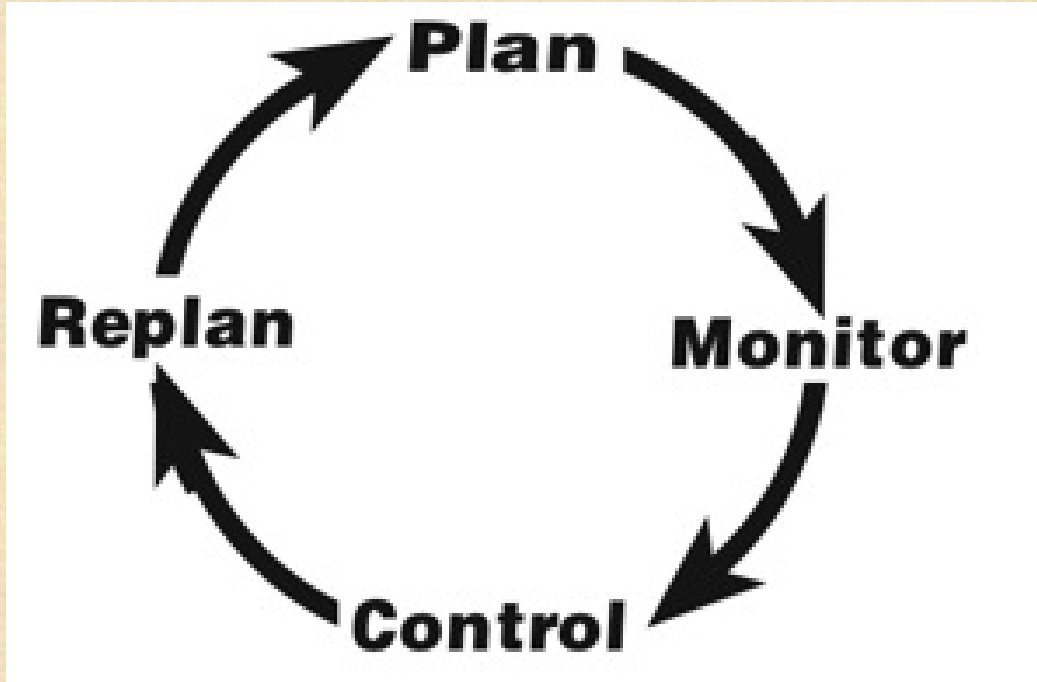
# Early Warning Signs:

1	Control Sheet							
2	Plan Column #	Amount Adverse to Plan	Amount Adverse YTD	Cause of Deviation from Plan	Proposed Action to Return to Plan	Who Act	Action Deadline (date)	Complete?
8	APR/MAY							
9	Total Income		2075	Est milk income high in april(quota settlement) and low in may	drop in milk price, need to readjust est milk income bc the cushion of the settlement will quickly be used up	TW	30-Jun	
10	Planned Profit		-600	forgot to transfer e-fund to savings	plan says it was deducted in march, but not april or may. Set up automatic deduct w back paymt for apr/may	EW	30-Jun	7/10/18- its in YNAB budget, no physical transfer, just held in checking account
11	Liability		-235	Beard cow pymt hard to est	continue to watch, no change needed			
12	Overhead		918	Owner's Draw & Shared Exp less than budgeted	No Change, nice cushion for upcoming exp			

No one plans to  
fail, but many  
people fail to  
plan.



But a “Plan” is NOT Enough...



# Windshield or Rear View Mirror























# Blue Sky Dairy Calf-raising





















**YEAR-END**

**2018**

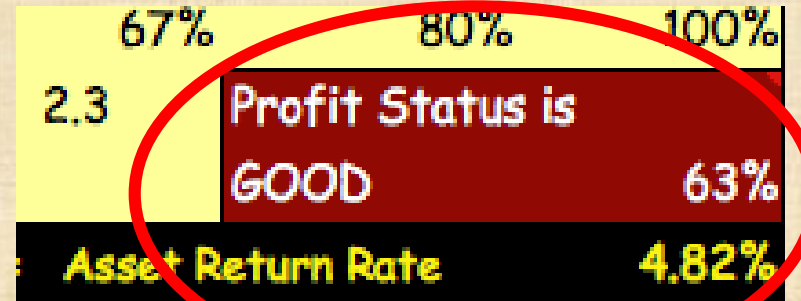


# DAIRY TRANS-

On a Scale of Superb, Great, Good, Average, Fair,  
Poor, Dire...

- We are:

OR



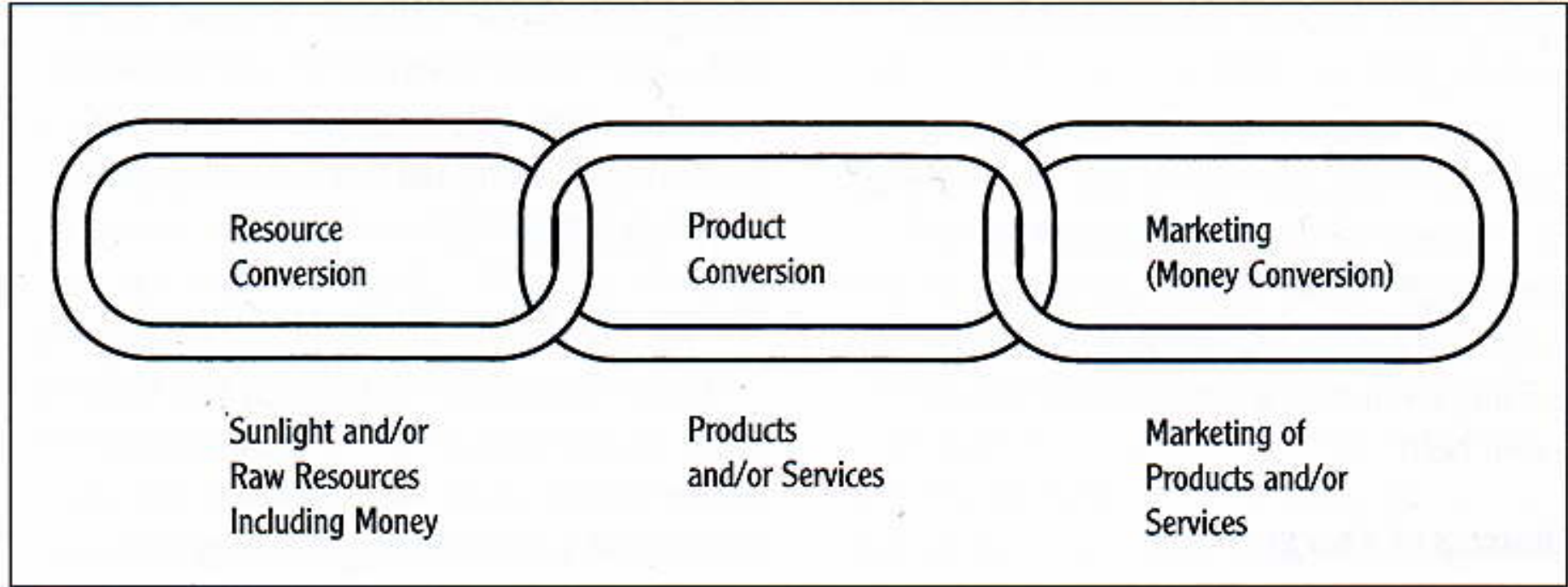
# 2018 Income per Cow

NET FARM INCOME STATEMENT					Benchmark
					Organic
Farm Cash Incomes		Yours	/Cwt.Eq.	/Cow	/Cow
Milk Sales	Hi	\$232,977	6,970	\$2,240	\$5,014
Cull Cow Sales	Cl	\$19,014	569	\$183	\$125
Calf Sales	De	\$2,475	74	\$24	\$60
Crop Sales		\$0	0	\$0	\$0
Other Income		\$31,901	954	\$307	\$137
Total Cash Income		\$286,367	\$33.43	\$2,754	\$5,336



	A	B	C	D	E	F	G	H
1	<b>Control Sheet</b>							
2	<b>Plan Column #</b>	<b>Amount Adverse to Plan</b>	<b>Amount Adverse YTD</b>	<b>Cause of Deviation from Plan</b>	<b>Proposed Action to Return to Plan</b>	<b>Who Act</b>	<b>Action Deadline (date)</b>	<b>Complete?</b>
35	DEC							
36	Total Income	-3453	-4650	2000 short on milk, 4000 short on beef- sold dan's beef instead of ours(2 animals)	sell 2 more beef in march of 2019, sell the rest of steers on open market	TEW	15-Jan	
37	Liability	2926	1315	short 3400 on repayment in operating loan, but paid extra on Beard cows & Dairy	schedule new op loan pay schedule once dairy loan paid off	TEW	15-Jan	
38	Overhead	1489	14928	3100 overbudget on household, 19,000 of enbe land rent unpaid	redo household budget. Increase to 4500 for 2019? Pay 2019 land rent asap in 2019	TEW	15-Jan	
39	Dairy & Beef	-2226	-12581	10,000 over on feed cost(forgot to put hay in the budget). 1800 over on labor?? 1800 over on repairs and supplies- building calf pens & repairs	sell extra animals. Do feed budget to match amount of feed. Work with nutritionist- feed for butterfat. Look at labor. Some Leedstone exp in this total that should be in vet/breeding	TEW	15-Jan	
40	Crop & forage	4969	20288	10,700 not paid in custom, 2575 in crop inputs not spent	pay off custom- wittrock, van tilberg, hofman ASAP. Take care of out soils- develop soil fertility plan, read soil books.	TEW	15-Jan	

# What is the Weak Link?



**The Chain of Production**



Human creativity first needs to utilize raw resources-sunlight in particular-and money to create a product or service. Then the product or service needs to be perfected and finally marketed to produce money. The chain is only as strong as its weakest link.

-HMI

## Fill Up Your Tool Box:

- Yearly Plan: Holistic Management Financial Plan
- Monthly Budgeting/Tracking: YNAB (You Need A Budget)
- Dairy TRANS: Year- End Analysis & Benchmarks
- Recordkeeping: FarmLogs
- Management Team



The prudent sees danger and hides himself,  
but the simple go on and suffer for it.  
-Proverbs 22:3

**MISTAKES, LESSONS,  
CHANGES**



# Mistakes

- Failed to control at earliest warning sign
- WITB rather than WOTB
- Retained too many calves

2016	2017	2018
39	46	70

# Lessons

- There are early warning signs if we are watching
- Respond quickly!
- Monitor more often during difficult times.
- Ask questions & be problem solvers
- Feed- know what we have
- Keep only the calves we can feed well



# Easier with Others



# Changes to Consider

- Increase profit per cow
- Work with nutritionist again
- Raise fewer calves
- Fall- seasonal calving vs year-round production
- Hire part-time non-family labor
- Management Mindset- WOTB vs WITB

**Test each decision to see which are possible and have best return**



# How to *FAIL* to Make a Profit

1. Fail to Plan.
2. Allow production costs to rise to optimistically anticipated income.
3. Borrow heavily against optimistically anticipated income.
4. Let immediate profits mask damaging side effects.
5. Not figuring out your “unfair advantage.”

**“If you have not  
accomplished your  
goals, adjust!  
Don’t keep doing  
the same over  
and over.”**

**-Allan Savory**

