# Iowa Dairy Enterprise Budgets, 2018

### A.S. Leaflet R3247

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## **Importance of Dairy Enterprise Analyses**

Dairy businesses often are comprised of many activities that complement or compete with one another, these parts being enterprise units. Many dairy operations maintain cropping enterprises that typically have *complementary* resources such as feed and manure. Raising heifer calves or feeding dairy steers are examples of enterprises that would *compete* with one another due to sharing of resources including feed, facilities, and labor. At times a dairy may have a *supplementary* enterprise which does not *compete* with or *complement* another enterprise, such as utilizing a pasture that cannot be utilized in an alternative way.

Enterprise analysis is the evaluation of an enterprise to determine the profitability. This analysis can be done with historical or projected values. Additionally, it can be completed on any desired time frame, but typically, enterprise analysis is completed on a yearly or production cycle time period.

Enterprise analysis should be completed on all parts of a business to determine how each enterprise utilizes the business resources and contributes to the business financially. When reviewing each enterprise one should keep in mind how it contributes to the whole farm business' goals and strategies in comparison with the other enterprises. Enterprise analysis can hold a lot of value and be an important financial tool if revenues, costs, labor, land, and capital are allocated correctly.

Dairy profitability is primarily driven by milk price and production on revenue side and on expense side by feed, labor and heifer replacement costs. Measures of net returns given varying levels of production based on type of management and/or cow type is needed for producers to gauge the current financial outlook for their operation.

## **Use of ISUEO Dairy Enterprise Budgets**

ISU Extension and Outreach Dairy Team created budgets for a panoply of dairy production systems to include conventional, grazing, organic and organic-no grain systems. In addition, a heifer sub-budget was also created as part of each budget. Users can download 2018 budgets at <a href="https://www.extension.iastate.edu/dairyteam">www.extension.iastate.edu/dairyteam</a> under the farm management tab (examples given at end of article). There are two Excel files, one for the conventional and pasture based budgets and a second for the organic based systems. The summary tab for each of the files will give users a quick glimpse into the types of budgets in each of the files. <a href="Users can then scroll through each tab for user information and/or budget for the particular production system">www.extension.iastate.edu/dairyteam</a> under the farm

budget, as mentioned earlier is to the right of each of the budgets. A users' guide is available to help users understand the workings of the spreadsheet files along with budget use basics. Finally, a blank template is available for producers to input their own data for their own enterprise analysis.

Dairy enterprise budgets allow one to evaluate expected revenue including quantity and price of output, milk or meat, and additional sources of income including sale of bulls and heifers. On the cost side, one can evaluate feed and other operating costs; buildings and equipment investment; paid and unpaid labor resources; and all other inputs required. These revenues and costs lead to the profitability of the enterprise which can be measured on a whole herd, per cow or per cwt. equivalent basis.

The dairy enterprise budgets are designed based on an average producer given the associated production and herd type parameters. Additionally, the dairy budgets use industry averages or standards as assumptions for various calculations which may vary from an individual farm's management practices.

These numbers are to be used for planning. When real farm data is available, it should be utilized to obtain a more accurate representation of the given operation. Therefore, producers must evaluate their resources, input quantities, related prices, and expected output to determine profitability and net return per operation, per cwt., or per cow.

### **Budgets Based on Production or Management**

There is a wide variety of management practices and structures that make up the Iowa's dairy industry. The dairy budgets include estimates of production returns for multiple types of dairy enterprises including organic, pasture, and conventional based systems at varying production levels and breeds. Estimates are intended to reflect average management intensity for the given level of production and dairy breed type.

#### **Application**

Individual farm factors may affect costs and returns, so each farm should adjust the inputs to represent their own situation. ISU budgets can act as a benchmark for average enterprises in Iowa, comparison between system types or production levels, or a starting place to make adjustments for analysis or for future planning. One must note that dairy enterprise budgets measure profitability versus cash flow; therefore, additional analysis may need to be completed before making management decisions.

2018 is predicted to be another difficult year for dairy. A reason why it is paramount to use the Iowa Dairy Budgets as many producers contemplate their future in the dairy industry.

	ISU E	xtensi	on DAI	RY BUDG	ĒΤ			HERD	DATA IN	IPUT
For: Holstein/Holstein Cros	s Breed (	Cows or	n Pasture	2017 Pr	ojected	Total	Herd	Milk/Cow	18,000	lbs
Income	Price	Unit	Amount	Cwt Eq.	1 Cow	Cows Only	w/Heifers	No. Cows	120	
Milk Sales	\$16.50	cwt.	180.00	180.00	\$2,970	\$356,400	\$356,400	Lbs/Cow	1,200	lbs
Bull Calves	\$100	head	0.45	2.73	\$45	\$5,400	\$5,400	Cull Rate	27%	
Cull Cows (less death loss)	\$720	head	0.22	9.60	\$158	\$19,008	\$19,008		24	months
Manure	\$3.00	ton	20.00	3.64	\$60	\$7,200	\$7,200	No.Heifer	s Needed	66.7
Heifer Sales	\$125	head	0.46	3.48	\$58	\$6,900	\$3,000	Heifer R	aising Bu	dget
Expenses			Totals	199.45	\$3,291	\$394,908	\$391,008		for 24	_
Feed Costs (DM = Dry Matter	)Feed Was	stage	10%					Feed Cost	ts	
, , ,	\$235.29	_	2.00	\$2.60	\$518	\$62,118	\$79,911	\$517.65	2.50	ton
Pasture Forage - DM	\$72.73	ton	2.50	\$1.00	\$200	\$24,000	\$27,437	\$100.00	1.25	
_	\$103.03	ton	2.00	\$1.14	\$227	\$27,200	\$30,122		0.75	
Corn Equivalent - US No. 2		bu	60.0		\$224	\$26,928	\$30,270		26.00	
By Product Feed		lb.	0	\$0.00	\$0	\$0	\$0	Ţ <b>.</b>		
Protein Supplement		lb.	0	\$0.00	\$0	\$0	\$2,930	\$85.25	500.00	lh
Salt and Minerals		lb.	250		\$14	\$1,650	\$1.745	\$2.75	50.00	
Fat Supplement		lb.	0	\$0.00	\$0	\$0	\$0	\$0.00	0.00	
Milk Replacer/Calf Feed		lb.	0	\$0.00	\$0	\$0	\$6,156		200.00	
min replace/can reed			d Costs =	\$5.93	\$1,182	\$141,896	\$178,571	-		tons/hd
Livestock Costs				4	4-,	41.5/11.5	40.070.0	Livestock		
	\$180.00	head	1.00	\$0.90	\$180	\$21,600	\$21,944			
Freight/Trucking/Hauling		cwt	180.00		\$36	\$4,320	\$4,492			
Veterinary & Medicine	\$0.50	cwt.	180.00		\$90	\$10,800	\$12,862		head	
•	\$37.00	head	1.00		\$37	\$4,440	\$5,884		head	
Breeding Fees	\$30.00			\$0.19	\$37 \$30			\$3.00		
DHIA/Accounting/Legal	\$0.25	head	1.00		\$45	\$3,600	\$3,703			
Marketing		cwt	180.00	\$0.23		\$5,400	\$5,434 45,430		nead 0.5	
,		ton	0.33	\$0.17	\$33	\$3,960	\$5,679	-		
Gas/Fuel/Oil	\$2.85	gal.	12.00		\$34	\$4,104	\$4,496	_		gal.
Electricity		kWh	540.00		\$59	\$7,128	\$7,790			kWh
Other (oper. int., phone)	\$90.00		1.00		\$90	\$10,800	\$11,144	\$10.00		
Facilities & Equipment Cost								Facilities à	& Equip Co	osts
Milking Center/Parlor										
Dairy Housing	\$1,400		10.0%	\$0.70	\$140	\$16,800	\$16,800		Cost/Hea	•
Manure Storage/Handling	\$600	head	10.0%	\$0.30	\$60	\$7,200	\$7,942	\$21.60	\$0.03	
Heifer Housing							\$5,135		\$0.21	
Machinery and Equipment	\$800		18.0%	\$0.72	\$144	\$17,280	\$19,178		\$0.08	
			stment Pe					_	Cost/head	
				st and Insu					with labor	
Cow Ownership Costs	\$1,600	cow	5.00%	\$0.40	\$80	\$9,600	\$11,185		Ownership	
Heifer Replacement Costs	\$1,400	/heife	r	\$1.90	\$378	\$45,360		\$125.00	Initial Val	ue
Labor and Mgt Costs	\$13.00	hour	42.00	\$2.74	\$546	\$65,520	\$75,351	\$286.00	22.00	hrs/hd
	1	Total E	xpenses:	\$16.29	\$3,249	\$389,888	\$28,935	\$2,015	Total Co	st (24 mc
Net Returns after all Cost i	ncluding L	abor &	Assets:	\$0.21	\$42	\$5,020	\$28,935	\$2,015	24	Non. Cost
DATOV PUD A O comunich+@2										

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DairyBud 4.0 Pasture and Conventional Dairy Budgets -- Iowa State University Extension and Outreach Dairy Team

Dairy Systems Budget Summary	Low Input	Average Input	Thou India	Average Production	Low Production	Average Production	or Average Produc	TION FROM PROGE	DUCTION
Comparing Profits Across Systems	12 K Pasture	15 K Pasture	18 K Pasture	15 K Jersey	18 K Conventional	22 K Conventional	26 K Conventional	al 30 K Conventional	ntional
2017	\$18.00 Milk Price	\$16.50 Milk Price	\$16.50 Milk Price	\$18.50 Milk Price	\$16.50 Milk Price	\$16.50 Milk Price	e \$16.00 Milk Price	\$16.00	Milk Price
Incomes	Cart Eq. 1 Cow		Cart Eq.	Ourt Eq.	Cart Eq.	Cart Eq.	٥	۰	1 00
Milk Sales	120.00 2160.00	150.00	180.00 29	150.00	180.00	220.00 36	260.00 41	3	4800.00
Bull Calves		2.09 34.50		1.27 23.50	2.85 47.00	2.73	2,81		45.00
Cull Cows (less death los	4.62 83.20	7.14	9.60	4.50	9.60	11.78			230.40
Manure		3.27	3.64	2.59	3.64	3.82	3.94	_	63.00
Heifer Sales	1.96 35.25	2.85		1.91 35.25			5.03	80.50 5.03	80.50
Expenses	130.55 2349.95	165.35 2728.30	0 199.45 3290.90	160.27 2964.95	199.65 3294.15	242.51 4001.40	0 286.18 4578.90	326.18	5218.90
Feed Costs (DM = Dry Metter)									
Hay/Haylage - DM	\$5.95 \$776	\$3.13 \$518	\$2.60	\$4.52 \$725		\$2.99 \$725	\$2.53	\$725 \$238	\$776
Pasture Forage - DM	\$2.82 \$368	\$1.21 \$200	\$1.00 \$200	\$0.00			\$0.00	\$000	\$0
Corn Silage - DM.		\$1.37 \$227	\$1.14		\$1.59		\$1.11		\$340
Corn Equivalent - US No		**	\$1.13	\$1.12 \$180	\$1.12	\$1.08 \$262	\$1.11	\$318 \$0.97	\$318
By Product Feed			\$0.00		\$0.37		\$0.55		\$182
Protein Supplement			\$0.00		\$0.34		\$0.45		\$171
Salt and Minerals	-	\$0.07	\$0.07		\$0.07		\$0.0\$		\$20
Fat Supplement	\$0.00		\$0.00		\$0.00		\$0.19		\$108
Milk Replacer/Calf Feed	\$0.00		\$0.00		\$0.00		\$0.00		\$
	\$8.85 \$1,135	\$6.80 \$1,124	_	\$8.48 \$1,359	\$7.13 \$1,423	\$6.22 \$1,309		_	\$1,913
Livestock Costs									
Dairy Supplies	**		\$0.90		\$1.00	\$0.91 \$220	\$0.84		\$240
Freight/Trucking/Haulit			\$0.18 \$36	\$0.19 \$30	\$0.18		\$0.18		\$60
Veterinary & Medicine			\$0.45		\$0.45	\$0.54 \$133	\$0.64		\$210
Breeding Fees			\$0.19		\$0.23		\$0.19		\$53
DHIA/Accounting/Legal			\$0.15				\$0.10		\$30
Marketing		\$0.23 \$38	\$0.23 \$45	\$0.23 \$38	\$0.23 \$45	\$023 \$55	\$0.23	\$65 \$023	\$75
Sedding Costs			\$0.17				\$0.35		\$100
Gas/Fuel/Oil			\$0.17		\$0.21 \$43	\$0.18 \$4:	\$0.15		\$43
Electricity			\$0.30			_	\$0.24		\$68
Other (oper. int., phone	\$0.54 \$70		\$0.45	\$0.56 \$90	\$0.45 \$90	\$0.37 \$90	\$0.31		\$8
Facilities & Equipment Costs									
Milking Center/Parlor		\$0.44 \$72	\$0.42	\$0.52 \$84	\$0.48 \$96	\$0.40 \$96	\$0.34		\$8
Dairy Housing	**			\$0.87 \$140			\$0.70	\$200 \$0.61	\$200
Manure Storage	\$0.31 \$40	\$0.30 \$50	\$0.30	\$0.31 \$50	\$0.30 \$60	\$0.25 \$60	\$0.21		\$60
Heifer Housing									
Machinery and Equipmen		•	\$0.72	-	••	•	\$0.69		\$216
Cow Ownership Costs	\$0.54 \$70		\$0.40				\$0.33		\$95
Heifer Replacement Costs	\$1.61 \$210			\$1.31 \$210	\$1.89 \$378	\$1.85 \$448	\$1.81	\$518 \$1.59	\$518
Labor and Mgt Costs	\$3.78 \$494	\$3.14 \$520	\$2.74 \$546	\$3.41 \$546	\$2.73 \$546	\$2.25 \$546	\$1.91 \$546	46 \$1.67	\$546
Total Expenses:	\$21.00 \$2,741	\$17.76 \$2,937	\$16.29 \$3,249	\$20.52 \$3,288	\$18.19 \$3,631	\$16.23 \$3,936	5 \$15.21 \$4,353	53 \$14.15	\$4,615
	the my designer								****
		92	205	- S C C C C C C C C C C C C C C C C C C	200	20.27	223	26 51.85	

Organic Dairy Budgets -- Iowa State University Extension and Outreach Dairy Team DairyBUD 1.0RG

CAT C5 and Grail   15k with Corn   15k C5 and Gra   18k C5 Grain   R5   22k C5 Grain   R5   10cm   CAT E4.	Organic Dairy Systems Summary		Jersey/Cross Con Small/A	SS CON		Aedium Co	Medium/Lar	ge Cow	Medium/Lo	arge Ca	Medium Co	V MG	Medium C	, MO	Wedium/L	arge Co	Large Cow	,	arge Cow	
Milk Pric   545   Milk Pric   531.00   Milk Pric	Comparing Profits Across Sy	vstems 6K	No Grai		N No Gra		2K No Gr		12K CS an	id Grain	15K with		5 K CS	and Gra	18K CS 6		22K CS 6	rain RS	26K All+Li	nseed
1, cm		\$3	6.00 Mi	Pi		ilk Pric	\$34.50 Mi		\$31.00 A		\$31.00 A		\$31.00				\$29.50	Wilk Pric	\$29.50 Milk Pri	ilk Pric
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		ď			Ourt Eq.	1 Com	Curt Eq.	1 Com	Curt Eq.	1 Com	Cart Eq.		Ourt Eq.	1 Cow	Out Eq.	1 Com	Out Eq.	1 Com	Cent Eq.	1 Cow
1, 20, 0, 10, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0	Milk Sales			2160.00	90.00	3172.50	120.00	4140.00	120.00	3720.00	150.00	4650.00	150.00	4650.00	180.00	5580.00	220.00	6490.00	260.00	7670.00
Maior   157   Maior   130   110   134   410   410	Bull Calves	1	0.65	23.50	7970	23.50	102	35.25	1.14	35.25	1.52	47,00	1.52	47.00	2.27	70.50	2.79	82.25	3.19	8.8
\$800.75   \$17.05   \$17.0   \$	Cull Cows (less o	Degitti lo	6 8	40.00	13.5	8.8	3.6	54.00	3,50	26.25	3.04	5400	174	200	0.0	00,60	080	606.50	9.14	240.00
3300,75   127.63   4410,75   128.77   3990,25   159.75   4928,75   138.99   4928,75   138.99   4928,75   138.99   4929	Heifer Sales		3 3	58.75	167	58.73	204	70.50	2.27	2 05 05	2.65	82.25	9	58.75	1 8	58.75	199	58.75	1.99	58.75
\$ 5401         \$ 50.12         \$ 57.02         \$ 51.02         \$ 57.03         \$ 51.05         \$ 52.04         \$ 50.00         \$ 51.05         \$ 52.04         \$ 50.00         \$ 51.00 <th< td=""><th></th><td></td><td></td><td>61.75</td><td></td><td>380.75</td><td>127.83</td><td>4410.25</td><td></td><td>990.25</td><td></td><td>952.25</td><td>- 2</td><td>1928.75</td><td></td><td>5924.25</td><td></td><td>6893.50</td><td></td><td>8125.75</td></th<>				61.75		380.75	127.83	4410.25		990.25		952.25	- 2	1928.75		5924.25		6893.50		8125.75
\$ 4541         \$ 612         \$ 788         \$ 430         \$ 470         \$ 780         \$ 450         \$ 470 <t< td=""><th>Feed Costs (DM : Dry Mother)</th><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>r</td><td></td><td>Ī</td><td></td><td>Ī</td><td></td><td></td><td></td><td></td></t<>	Feed Costs (DM : Dry Mother)											r		Ī		Ī				
\$ 500         \$ 2.66         \$ 3.90         \$ 14.0         \$ 180         \$ 11.3         \$ 100         \$ 2.00 <th>Hav/Havlage - D</th> <td>W</td> <td>\$8.68</td> <td>\$569</td> <td>\$668</td> <td>\$641</td> <td>\$6.12</td> <td>\$783</td> <td>\$3.87</td> <td>\$498</td> <td>\$4.90</td> <td>\$783</td> <td>\$3.58</td> <td>\$569</td> <td>\$3.72</td> <td>\$712</td> <td>\$2.44</td> <td>\$569</td> <td>\$207</td> <td>\$569</td>	Hav/Havlage - D	W	\$8.68	\$569	\$668	\$641	\$6.12	\$783	\$3.87	\$498	\$4.90	\$783	\$3.58	\$569	\$3.72	\$712	\$2.44	\$569	\$207	\$569
\$1         \$1<	Pasture Forage	. PW	\$3.35	\$220	\$292	\$280	\$2.66	\$340	\$1.40	\$180	\$138	\$220	\$1.13	\$180	\$105	\$200	\$0.68	\$160	\$0.73	\$200
\$1         \$1<	Corn Silage - DA	-	\$0.00	\$	\$0.00	\$	\$0.00	\$0	\$3.50	\$450	\$5.16	\$825	\$4.72	\$750	\$3.14	\$600	\$2.82	\$660	\$2.18	\$600
\$10         \$10 <th>Corn Equivalent</th> <td>- US N</td> <td>\$0.00</td> <td>Ç</td> <td>\$0.00</td> <td>Ş</td> <td>\$0.00</td> <td>\$</td> <td>\$3.23</td> <td>\$416</td> <td>\$0.00</td> <td>\$</td> <td>\$2.86</td> <td>\$455</td> <td>\$4.20</td> <td>\$802</td> <td>\$3.26</td> <td>\$762</td> <td>\$3.45</td> <td>\$950</td>	Corn Equivalent	- US N	\$0.00	Ç	\$0.00	Ş	\$0.00	\$	\$3.23	\$416	\$0.00	\$	\$2.86	\$455	\$4.20	\$802	\$3.26	\$762	\$3.45	\$950
\$1         \$0.00         \$0         \$0.00         \$0         \$0.00         \$0         \$0.00         \$0         \$0.00         \$0         \$0         \$0.00         \$0         \$0         \$0.00         \$0         \$0         \$0.00         \$0         \$0         \$0.00         \$0	By Product Feed	-	\$0.00	0\$	\$0.00	Ş	\$0.00	\$	\$0.00	\$	\$0.00	\$	\$0.00	Ş	\$0.00	0\$	\$1.48	\$347	\$1.34	\$370
\$10         \$0.08         \$110         \$0.08         \$110         \$0.08         \$110         \$0.08         \$110         \$0.08         \$110         \$0.08         \$110         \$0.08         \$10         \$100	Protein Supplem	nent	\$0.00	<b>Q</b>	\$0.00	Ş	\$0.00	\$	\$0.00	\$	\$0.00	\$0	\$0.00	ş	\$0.00	\$	\$0.00	\$	\$1.60	\$440
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Salt and Minera	ş	\$168	\$110	\$1.15	\$110	\$0.86	\$110	\$0.85	\$110	\$0.69	\$110	\$0.69	\$110	\$0.72	\$138	\$0.65	\$151	\$0.64	\$176
\$190 \$1.00 \$0.00 \$0 \$0.00 \$0 \$0 \$1.00 \$0 \$0 \$0.00 \$0 \$0 \$0.00 \$0 \$0.00 \$0  \$190 \$1.50 \$1.223 \$11.285 \$1.654 \$12.13 \$1.988 \$12.99 \$2.065 \$12.83 \$2.451 \$11.34 \$2.649  \$190 \$1.55 \$2.00 \$11.55 \$2.00 \$11.31 \$2.10 \$1.38 \$2.05 \$12.83 \$2.451 \$11.34 \$2.649  \$20 \$0.21 \$27 \$0.21 \$27 \$0.21 \$27 \$0.21 \$27 \$0.21 \$24 \$0.27 \$20 \$2.05  \$20 \$0.22 \$20 \$0.22 \$20 \$2.02 \$2.00 \$2.01 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.02 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.02 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.02 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.02 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.02 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.02 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.02 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.02 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.02 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.02 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00  \$20 \$0.00 \$2.00 \$	Fat Supplement	_	\$0.00	O#	\$0.00	Ş	\$0.00	\$	\$0.00	\$0	\$0.00	\$0	\$0.00	ş	\$0.00	\$	\$0.00	\$	\$0.00	\$
\$1,031         \$9.64         \$1,233         \$1,283         \$1,283         \$1,283         \$1,283         \$1,283         \$1,283         \$1,283         \$1,283         \$1,283         \$2,031         \$1,283         \$2,031         \$1,283         \$2,031         \$1,283         \$2,031         \$1,293 </td <th>Milk Replacer/C</th> <td>_</td> <td>\$0.00</td> <td>0\$</td> <td>\$0.00</td> <td>Ş</td> <td>\$0.00</td> <td>\$</td> <td>\$0.00</td> <td>\$</td> <td></td> <td>\$0</td> <td>\$0.00</td> <td>ş</td> <td>\$0.00</td> <td>\$</td> <td>\$0.00</td> <td>0\$</td> <td>\$0.00</td> <td>\$</td>	Milk Replacer/C	_	\$0.00	0\$	\$0.00	Ş	\$0.00	\$	\$0.00	\$		\$0	\$0.00	ş	\$0.00	\$	\$0.00	0\$	\$0.00	\$
\$ \$190         \$1156         \$200         \$1131         \$210         \$120         \$230         \$107         \$250           \$ \$20         \$0.21         \$27         \$401         \$27         \$402         \$47         \$77         \$402         \$404			13.71	\$833	\$10.73	\$1,031	\$9.64	\$1,233	\$12.85	\$1,634		\$1,938	\$12.99	\$2,063	\$12.83	\$2,431	\$11.34	\$2,649	\$12.00	\$3,305
\$190         \$1.56         \$200         \$1.31         \$210         \$1.20         \$230         \$1.07         \$250           \$36         \$0.21         \$27         \$0.21         \$34         \$0.21         \$34         \$0.21         \$34         \$0.21         \$34         \$0.21         \$41         \$0.21         \$40         \$40.71         \$47         \$47         \$47         \$47         \$47         \$47         \$40.47         \$47         \$40.47         \$40.71         \$40.71         \$40.71         \$40.71         \$40.71         \$40.71         \$40.71         \$40.71         \$40.71         \$40.71         \$40.71         \$40.71         \$40.71         \$40.72         \$40.47         \$40.72         \$40.47         \$40.72	Livestock Costs																			
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\$ \$36         \$0.42         \$54         \$0.47         \$15         \$0.47         \$175         \$0.47         \$175         \$0.47         \$195         \$0.47         \$195         \$0.47         \$195         \$0.47         \$195         \$0.47         \$195         \$0.12         \$195         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112         \$295         \$112	Freight/Truckin	ng/Hauli	\$0.17	\$11	\$0.21	\$20	\$0.21	\$27	\$0.21	\$27	\$0.21	\$34	\$0.21	\$3 <b>4</b>	\$0.21	\$41	\$0.21	\$50	\$0.21	\$59
4 \$13         \$0.15         \$19         \$0.11         \$17         \$0.12         \$19         \$0.12         \$29         \$0.12         \$19         \$0.12         \$19         \$0.12         \$19         \$0.12         \$19         \$0.12         \$19         \$0.12         \$19         \$0.12         \$19         \$0.12         \$19         \$0.12         \$10	Veterinary & Ma	edicine	\$0.37	\$24	\$0.38	\$36	\$0.42	\$54	\$0.42	\$54	\$0.47	\$75	\$0.47	\$73	\$0.47	\$30	\$0.56	\$132	\$0.66	\$182
1         \$30         \$0.23         \$30         \$0.19         \$30         \$0.16         \$30         \$0.13         \$30           8         \$27         \$0.28         \$36         \$0.28         \$46         \$0.28         \$46         \$0.28         \$46         \$0.28         \$46         \$0.28         \$46         \$40.28         \$46         \$40.28         \$46         \$40.28         \$46         \$40.28         \$46         \$40.28         \$46         \$40.28         \$46         \$40.28         \$46         \$40.28         \$46         \$40.28	Breeding Fees		\$0.20	\$13	\$0.14	\$13	\$0.15	\$19	\$0.15	\$19	\$0.11	\$17	\$0.12	\$19	\$0.13	\$25	\$0.12	\$29	\$0.12	\$33
3         \$27         \$0.28         \$36         \$40.28         \$445         \$60.28         \$45         \$60.28         \$45         \$60.28         \$45         \$60.28         \$45         \$60.28         \$45         \$60.28         \$45         \$60.28         \$45         \$60.28         \$46         \$60.28         \$56         \$60.39         \$75         \$60.43         \$60.80         \$65         \$60.47         \$475         \$60.39         \$67.3         \$60.80         \$66         \$60.47         \$40.25         \$40         \$60.29         \$67.3         \$60.80         \$66         \$60.80         \$66         \$60.80 <t< td=""><th>DHIA/Accounts</th><td>ng/Lega</td><td>\$0.46</td><td>\$30</td><td>\$0.31</td><td>\$30</td><td>\$0.23</td><td>\$30</td><td>\$0.23</td><td>\$30</td><td>\$0.19</td><td>\$30</td><td>\$0.19</td><td>\$30</td><td>\$0.16</td><td>\$30</td><td>\$0.13</td><td>\$30</td><td>\$0.11</td><td>\$30</td></t<>	DHIA/Accounts	ng/Lega	\$0.46	\$30	\$0.31	\$30	\$0.23	\$30	\$0.23	\$30	\$0.19	\$30	\$0.19	\$30	\$0.16	\$30	\$0.13	\$30	\$0.11	\$30
2         \$550         \$0.51         \$66         \$0.47         \$75         \$0.57         \$90         \$0.39         \$75         \$0.43         \$100           \$ \$34         \$0.27         \$34         \$0.25         \$40         \$0.25         \$40         \$0.25         \$40         \$0.25         \$40         \$0.25         \$40         \$0.25         \$40.39         \$40.25         \$40.39         \$62.5         \$40.39         \$60.39         \$60.39         \$60.39         \$60.39         \$40.39         \$40.25         \$40.39         \$40.45         \$40.45         \$40.45         \$40.45         \$40.45         \$40.45         \$40.45         \$40.46         \$40.39         \$40.46         \$40.31	Marketing		\$0.27	\$18	\$0.28	\$27	\$0.28	\$36	\$0.28	\$36	\$0.28	\$45	\$0.28	\$45	\$0.28	\$54	\$0.28	\$66	\$0.28	\$78
\$ \$34 \$0.27 \$34 \$0.27 \$34 \$0.25 \$40 \$0.25 \$40 \$0.21 \$40 \$0.21 \$40 \$0.21 \$43 \$40 \$40.25 \$40 \$0.25 \$40 \$0.25 \$40 \$0.25 \$40 \$0.21 \$40 \$0.21 \$40 \$0.21 \$40 \$0.21 \$40 \$0.22 \$40.32 \$40	Bedding Costs		\$0.76	\$20	\$0.52	\$20	\$0.51	\$65	\$0.50	\$65	\$0.47	\$75	\$0.57	8	\$0.39	\$75	\$0.43	\$100	\$0.36	\$100
9         \$57         \$0.44         \$57         \$0.39         \$62         \$0.39         \$62         \$0.39         \$62         \$0.39         \$62         \$0.39         \$62         \$0.39         \$62         \$0.39         \$62         \$0.39         \$62         \$0.39         \$62         \$0.39         \$62         \$0.37         \$480           7         \$160         \$1.32         \$170         \$113         \$180         \$103         \$180         \$0.34         \$180         \$0.77         \$180           8         \$0.50         \$1.22         \$120         \$103         \$120         \$1045         \$140         \$0.34         \$180         \$0.77         \$180           8         \$100         \$0.39         \$50         \$0.31         \$104         \$0.31         \$60         \$0.77         \$180           8         \$100         \$0.39         \$50         \$0.31         \$50         \$0.31         \$50         \$0.31         \$60         \$0.77         \$180           8         \$10         \$0.39         \$50         \$0.31         \$50         \$0.31         \$50.79         \$144         \$0.77         \$180           8         \$10         \$20.84         \$107         \$	Gas/Fuel/Oil		\$0.52	\$34	\$0.36	\$34	\$0.27	\$34	\$0.27	\$34	\$0.25	\$40	\$0.25	\$40	\$0.21	\$40	\$0.18	\$43	\$0.16	\$43
7         \$16.0         \$1.33         \$170         \$1.32         \$170         \$1.33         \$180         \$1.33         \$180         \$0.94         \$180         \$0.77         \$180           3         \$6.0         \$0.56         \$77         \$0.45         \$72         \$0.45         \$70         \$70         \$70         \$70         \$70         \$70         \$70         \$70         \$70         \$70         \$70         \$70         \$70         \$70         \$70         \$70         \$70	Electricity		\$0.86	\$57	\$0.59	\$57	\$0.44	\$57	\$0.44	\$57	\$0.39	\$62	\$0.39	\$62	\$0.33	\$62	\$0.27	\$64	\$0.24	\$65
\$ \$60 \$0.56 \$72 \$0.56 \$72 \$0.45 \$72 \$0.45 \$72 \$0.45 \$72 \$0.41 \$78 \$0.36 \$84 \$100 \$0.94 \$120 \$40.93 \$120 \$40.93 \$120 \$40.99 \$140 \$0.88 \$140 \$0.94 \$160 \$0.77 \$180 \$120 \$40.99 \$120 \$40.99 \$120 \$40.91 \$50.90 \$120 \$40.91 \$120 \$40.99 \$120 \$40.91 \$120 \$40.91 \$120 \$40.99 \$120 \$40.91 \$120 \$40.99 \$120 \$40.99 \$120 \$40.99 \$120 \$40.99 \$120 \$40.90 \$4	Other (oper. int	., phone	\$2.44	\$160	\$1.67	\$160	\$1.33	\$170	\$1.32	\$170	\$1.13	\$180	\$1.13	\$180	\$0.94	\$180	\$0.77	\$180	\$0.65	\$180
\$ \$60         \$0.56         \$72         \$0.45         \$72         \$0.45         \$72         \$0.45         \$72         \$0.45         \$72         \$0.45         \$72         \$0.45         \$72         \$0.45         \$72         \$0.45         \$72         \$0.41         \$78         \$0.36         \$88         \$140         \$0.84         \$160         \$0.77         \$180           \$ \$40         \$0.39         \$50         \$0.31         \$50         \$0.31         \$50         \$0.31         \$60         \$0.77         \$180           \$ \$40         \$0.84         \$108         \$107         \$117         \$0.79         \$126         \$0.31         \$60         \$0.77         \$180           \$ \$40         \$0.94         \$108         \$107         \$117         \$0.79         \$126         \$0.31         \$60         \$0.26         \$60           \$ \$40         \$40         \$108         \$40.79         \$117         \$40.79         \$126         \$60.77         \$180           \$ \$40         \$40         \$40         \$40.79         \$126         \$24.7         \$40         \$50.70         \$140         \$50.70         \$140         \$160         \$160         \$160         \$160         \$160         \$160	Facilities & Equipment Costs																			
4         \$100         \$0.94         \$120         \$0.93         \$120         \$0.88         \$140         \$0.88         \$140         \$0.88         \$140         \$0.84         \$160         \$0.77         \$180           2         \$40         \$0.39         \$50         \$0.31         \$50         \$0.31         \$50         \$0.31         \$60         \$0.26         \$0.26         \$60         \$60         \$60         \$60.77         \$180         \$60.77         \$180         \$60.77         \$180         \$60.77         \$180         \$60.77         \$60         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77         \$60         \$60.77 </td <th>Milking Centery</th> <td>/Parlor</td> <td>\$0.91</td> <td>\$60</td> <td>\$0.63</td> <td>99\$</td> <td>\$0.56</td> <td>\$72</td> <td>\$0.56</td> <td>\$72</td> <td>\$0.45</td> <td>\$72</td> <td>\$0.45</td> <td>\$72</td> <td>\$0.41</td> <td>\$78</td> <td>\$0.36</td> <td>\$84</td> <td>\$0.33</td> <td>8</td>	Milking Centery	/Parlor	\$0.91	\$60	\$0.63	99\$	\$0.56	\$72	\$0.56	\$72	\$0.45	\$72	\$0.45	\$72	\$0.41	\$78	\$0.36	\$84	\$0.33	8
\$ \$40 \$0.39 \$50 \$0.39 \$50 \$0.31 \$50 \$0.31 \$50 \$0.31 \$50 \$0.31 \$50 \$0.31 \$60 \$0.26 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$6	Dairy Housing		\$152	\$100	\$1.04	\$100	\$0.94	\$120	\$0.93	\$120	\$0.88	\$140	\$0.88	\$140	\$0.84	\$160	\$0.77	\$180	\$0.73	\$200
\$ \$70 \$0.84 \$108 \$0.84 \$108 \$0.73 \$117 \$0.79 \$126 \$0.75 \$144 \$0.77 \$180 1 \$279 \$2.75 \$352 \$2.82 \$363 \$2.41 \$385 \$2.42 \$385 \$2.47 \$473 \$2.40 \$560 4 \$714 \$5.78 \$740 \$3.74 \$1.74 \$740 \$4.79 \$765 \$4.81 \$765 \$4.00 \$765 \$3.7 \$765 5 \$3.001 \$26.90 \$3.439 \$3.009 \$3.873 \$27.01 \$4.315 \$28.16 \$4.478 \$26.36 \$5.037 \$23.58 \$5.509 \$1.385 6 \$3.80 \$77.60 \$971 \$0.91 \$117 \$3.99 \$637 \$2.84 \$451 \$4.64 \$887 \$5.32 \$1.385	Manure Storage		\$0.61	\$40	\$0.42	\$40	\$0.39	\$50	\$0.39	\$50	\$0.31	\$50	\$0.31	\$20	\$0.31	\$60	\$0.26	\$60	\$0.22	\$60
4         \$0.04         \$108         \$0.84         \$108         \$0.73         \$117         \$0.79         \$126         \$0.75         \$144         \$0.77         \$180           3         \$70         \$0.57         \$73         \$0.56         \$75         \$0.50         \$80         \$0.75         \$144         \$0.77         \$180           1         \$279         \$2.05         \$78         \$0.56         \$78         \$24.7         \$40.7         \$6.37         \$88           4         \$714         \$5.76         \$765         \$4.81         \$765         \$4.0         \$765         \$3.2         \$765         \$4.0         \$765         \$4.0         \$765         \$4.0         \$765         \$4.0         \$765         \$4.0         \$765         \$4.0         \$765         \$4.0         \$765         \$4.0         \$765         \$4.0         \$765         \$4.0         \$765         \$4.0         \$765         \$4.0         \$4.0         \$765         \$4.0         \$765         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0         \$4.0	Heifer Housing																			
3 \$70 \$0.57 \$73 \$0.56 \$75 \$40.50 \$40.0 \$40.50 \$80 \$40.42 \$80 \$40.37 \$88 \$11 \$279 \$2.75 \$352 \$2.82 \$363 \$2.41 \$385 \$2.42 \$385 \$2.47 \$473 \$2.40 \$560 \$40.42 \$385 \$2.47 \$473 \$2.40 \$560 \$40.40 \$26.00 \$3.430 \$3.430 \$40.00 \$3.430 \$40.00 \$4.431 \$28.46 \$4.81 \$765 \$4.00 \$765 \$3.27 \$765 \$4.00 \$3.60 \$3.430 \$40.00 \$3.430 \$40.00 \$4.431 \$28.46 \$4.478 \$26.36 \$5.037 \$23.58 \$5.509 \$40.00 \$4.48	Machinery and E	Equipme	\$137	\$30	\$0.94	\$	\$0.84	\$108	\$0.84	\$108	\$0.73	\$117	\$0.79	\$126	\$0.75	\$144	\$0.77	\$180	\$0.72	\$198
1 \$279 \$2.75 \$352 \$2.82 \$363 \$2.41 \$385 \$2.42 \$385 \$2.47 \$473 \$2.40 \$560 \$160 \$160 \$160 \$160 \$160 \$160 \$160 \$1	Cow Ownership Costs		\$103	\$68	\$0.73	\$70	\$0.57	\$73	\$0.58	\$75	\$0.50	\$80	\$0.50	\$80	\$0.42	\$80	\$0.37	\$88	\$0.34	\$95
4 \$714 \$5.78 \$740 \$5.75 \$740 \$4.79 \$765 \$4.81 \$765 \$4.00 \$765 \$3.27 \$765 \$765 \$3.001 \$26.90 \$3.009 \$3.873 \$27.01 \$4.315 \$28.16 \$4.478 \$26.36 \$5.037 \$23.58 \$5.509 \$3 \$3.873 \$27.01 \$4.315 \$28.16 \$4.478 \$26.36 \$5.037 \$23.58 \$5.509 \$3 \$3.873 \$20.91 \$117 \$3.99 \$637 \$2.84 \$451 \$4.64 \$887 \$5.92 \$1,385 \$1,385 \$1,385 \$24.64 \$4.64 \$887 \$26.36 \$3.98 \$	Heifer Replacement Costs		\$4.12	\$270	\$2.91	\$279	\$2.75	\$352	\$2.82	\$363	\$2.41	\$385	\$2.42	\$382	\$2.47	\$473	\$2.40	\$560	\$2.35	\$648
\$3,001         \$26,90         \$3,439         \$30.09         \$3,873         \$27.01         \$4,315         \$28.16         \$4,478         \$26,36         \$5,037         \$23.58         \$5,509         \$           \$380         \$77.60         \$971         \$0.91         \$117         \$3.99         \$637         \$2.84         \$4.64         \$887         \$5.92         \$1,385           Historical and Outback Drive Team	Labor and Mgt Costs		\$10.88	\$714	\$7.44	\$714	\$5.78	\$740	\$5.75	\$740	\$4.79	\$765	\$4.81	\$765	\$4.00	\$765	\$3.27	\$765	\$2.78	\$765
\$ \$380 \$7.60 \$971 \$0.91 \$117 \$3.99 \$637 \$2.84 \$451 \$4.64 \$887 \$5.92 \$1,385	Total Exp			12,828	\$31.29	\$3,001	\$26.90	\$3,439	\$30.09	\$3,873		\$4,315	\$28.16	\$4,478	\$26.36	\$5,037	\$23.58	\$5,509	\$23.24	\$6,400
University Extension and Outreach	rns after all Ost including Labor &			-\$466	\$3.96	\$380	\$7.60	\$971	\$0.91	\$117	\$3.99	\$637	\$2.84	\$451	\$4.64	\$887	\$5.92	\$1,385	\$6.26	\$1,725
	Results from Ossonic Doing Bus	hote hy L	new Team	ol Town	State Uni	Jonesity E	ctension and	Outhorich	h Daimy Tea											ı

\*The "No Grain" budgets:

The "No Grain" budgets milk production levels may be difficult to sustain given the ration intake of forage needed to accomodate both the energy and protein levels required to sustain the related milk production.

			I	5U Extens	ISU Extension DAIRY BUDGE	BUDGET				
ISU Extension and	L									
Outreach Dairy Team				PASTURE			٥	CONVENTIONAL	AL	
Dairy Budgets Users Guide	Dairy Enterprise Type	8 'WO	Jersey Cross Breed Cows.	Medium Cross Breed Cows.	Holstein/H olstein Cross Breed.	Jersey Cows, 15,000 RHA	Low Production Cows, 18,000 RHA	Average Production Cows, 22,000 RHA	Average Production Cows, 26.000 RHA	High Production Cows, 30,000 RHA
The budgets are created for users to evaluate profitability at	Feed Wastage		10%	10%	10%	10%	30%	10%	10%	10%
breed types.	Hay/Haylage, DM Tons	858	E	2	2	2.8	2.8	2.8	2.8	8
Introduction to Budget Input - Ration Sheet	Pasture Forage, DM Tons	858	4.6	2.5	2.5	0	0	0	0	0
This input sheet is for the user to input an operation's actual ration for cows and heifers on a	Corn Siloge, DM Tons	33%	0	2	2	2.8	2.8	2.8	2.8	m
per head basis. Cow rations should be entered on an annual basis and account for dry and	Corn Equivalent, bushels	858	0	45	60	48	99	20	85	85
lactating periods. Current rations are based on 320 day lactation and 45 day dry period. Heifer rations should account	By Product Feed, pounds	*06	0	0	0	1000	1000	1400	2130	2450
Inputs values for rations entered are based on expected values from ISU bairy	Protein Supplement, pounds	%06	0	0	0	300	400	200	750	1000
The user can enter ration values to replace the current values entered under the respected budget.		100%	200	200	250	220	250	285	320	365
Keys to Remember	Fat Supplement, pounds	%08	0	0	0	0	0	0	180	365
Cells with blue font are user input cells; cells with black font are calculated or locked cells.     Cells with red marks contain additional notes for	Milk Replacer/Calf Feed, pounds	<b>%06</b>	0	0	0	0	0	0	0	0
	٩	As Fed, Tons	9.04	12.71	13.16	13.88	14.28	14.83	15.85	17.09
	As F Dry Mat	As Fed, lbs/day Dry Matter/ lbs/day	49.54	69.67	72.11	76.07	78.27	81.27	36.84	93.65