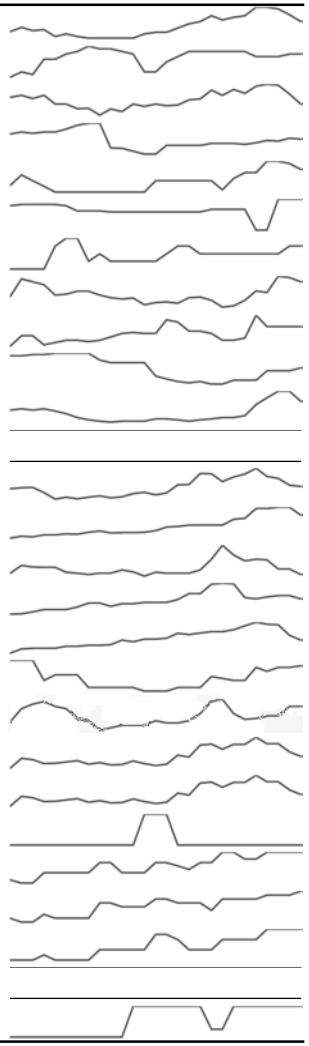
FEED $ENSE

Midwest Edition

1-Yr Ingredient Price Change ($/T)

	Jul-17	Jul-18	1-Yr Graph
Bakery Byproduct	168	180	
Beet Pulp	145	190	
Corn Grain	150	144	
Cottonseed	243	225	
Hominy	109	123	
Molasses	203	215	
Soyhulls	105	135	
Wheat Grain	190	208	
Wheat Midds	97	140	
Tallow	565	475	
Blood Meal	950	1150	
Brewers Grains, 30% DM	75	75	
Canola	274	284	
Corn Gluten Feed	100	158	
Corn Gluten Meal	510	505	
Cottonseed Meal	229	300	
Distillers Grains	122	157	
Linseed Meal	330	315	
Meat and Bone	305	370	
Soybean Meal	293	333	
Bypass SBM	313	353	
Urea	410	410	
Alfalfa - Supreme	185	225	
Alfalfa - Premium	170	205	
Alfalfa - Good	150	180	
Corn Silage, 35% DM	50	50	
Straw	80	140	

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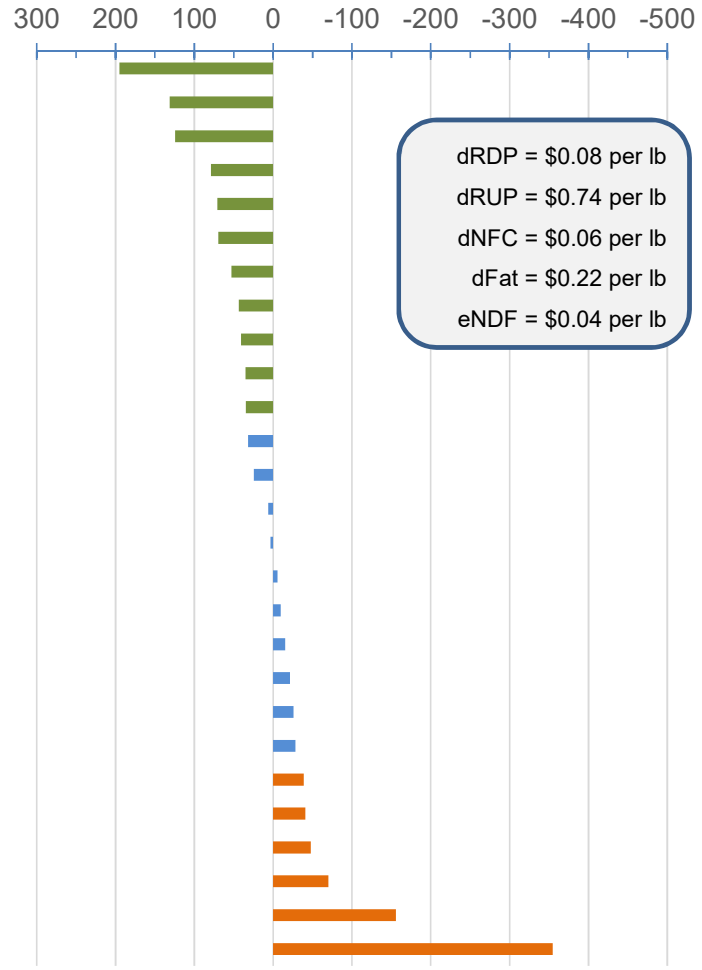
Global Nutrient Analysis

	Market Price ($/T)	Predicted Value ($/T)	Difference ($/T)
Corn Gluten Meal	505	700	195
Distillers Grains	157	288	131
Bypass SBM	353	477	124
Brewers Grains, 30% DM	75	101	79
Meat and Bone	370	441	71
Hominy	123	192	69
Wheat Midds	130	183	53
Canola	274	317	44
Soybean Meal	333	374	41
Corn Gluten Feed	168	203	35
Corn Grain	144	179	34
Bakery Byproduct	180	212	32
Cottonseed	250	274	24
Cottonseed Meal	300	306	6
Corn Silage, 35% DM	50	51	3
Soyhulls	135	129	-6
Straw	135	125	-10
Urea	410	395	-15
Alfalfa - Good	180	158	-22
Alfalfa - Premium	205	179	-26
Alfalfa - Supreme	225	197	-28
Wheat Grain	208	169	-39
Tallow	475	434	-41
Linseed Meal	315	267	-48
Beet Pulp	195	125	-70
Molasses	240	110	-156
Blood Meal	1150	795	-355



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Component Nutrient Analyses

Carbohydrate Analysis	Market Price ($/T)	Predicted Value ($/T)	Difference ($/T)
Corn Silage, 35% DM	50	68	47
Hominy	123	156	33
Beet Pulp	195	221	26
Corn Grain	144	169	24
Molasses	240	246	8
Alfalfa - Good	180	186	6
Bakery Byproduct	180	172	-8
Soyhulls	135	117	-18
Alfalfa - Premium	205	184	-21
Wheat Midds	130	106	-24
Alfalfa - Supreme	225	181	-44
Wheat Grain	208	148	-60

per lb
Starch = $0.10
Sugar = $0.18
Sol Fiber = $0.26
eNDF = $0.10

Protein Analysis	Market Price ($/T)	Predicted Value ($/T)	Difference ($/T)
Corn Gluten Meal	505	728	223
Bypass SBM	353	460	107
Distillers Grains	157	261	104
Meat and Bone	370	426	56
Brewers Grains, 30% DM	75	90	45
Soybean Meal	333	352	19
Canola	274	291	18
Urea	410	404	-6
Cottonseed Meal	300	282	-18
Corn Gluten Feed	168	148	-20
Linseed Meal	315	200	-115
Blood Meal	1150	854	-296

per lb
dRDP = $0.08
dRUP = $0.81

Fiber Analysis	Market Price ($/T)	Predicted Value ($/T)	Difference ($/T)
Soyhulls	135	256	121
Straw	135	199	64
Corn Silage, 35% DM	50	69	48
Beet Pulp	195	154	-41
Corn Gluten Feed	168	121	-47
Alfalfa - Good	180	131	-49
Distillers Grains	157	102	-55
Brewers Grains, 30% DM	75	36	-118
Cottonseed	250	116	-134

per lb
eNDF = $0.08
dNDF = $0.21

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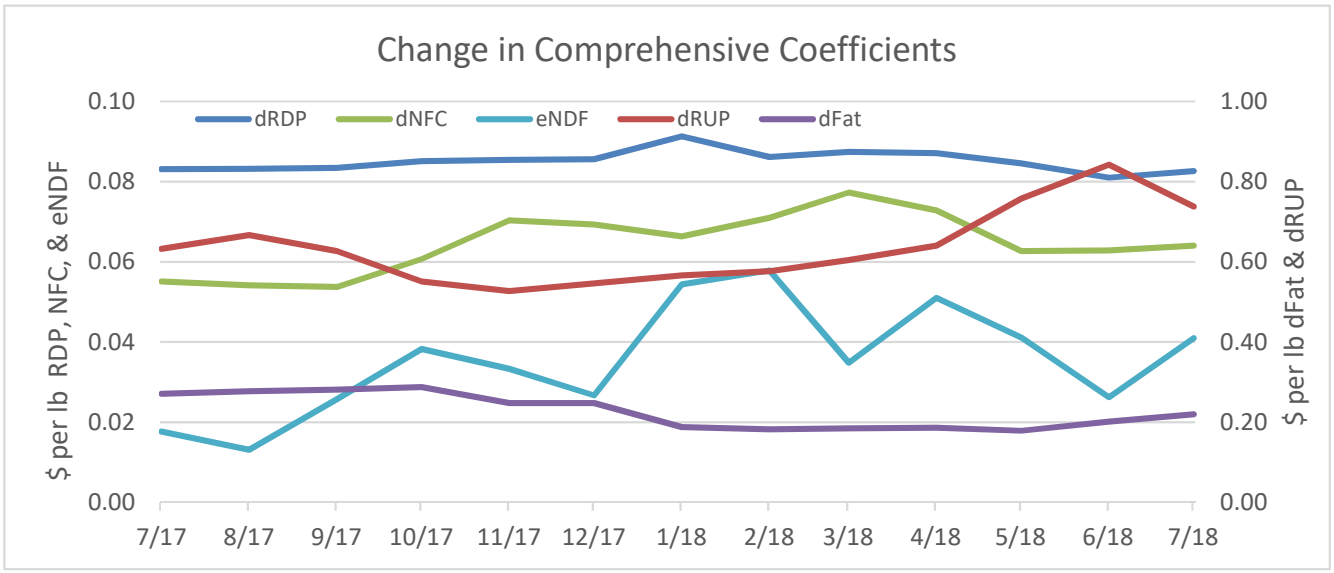

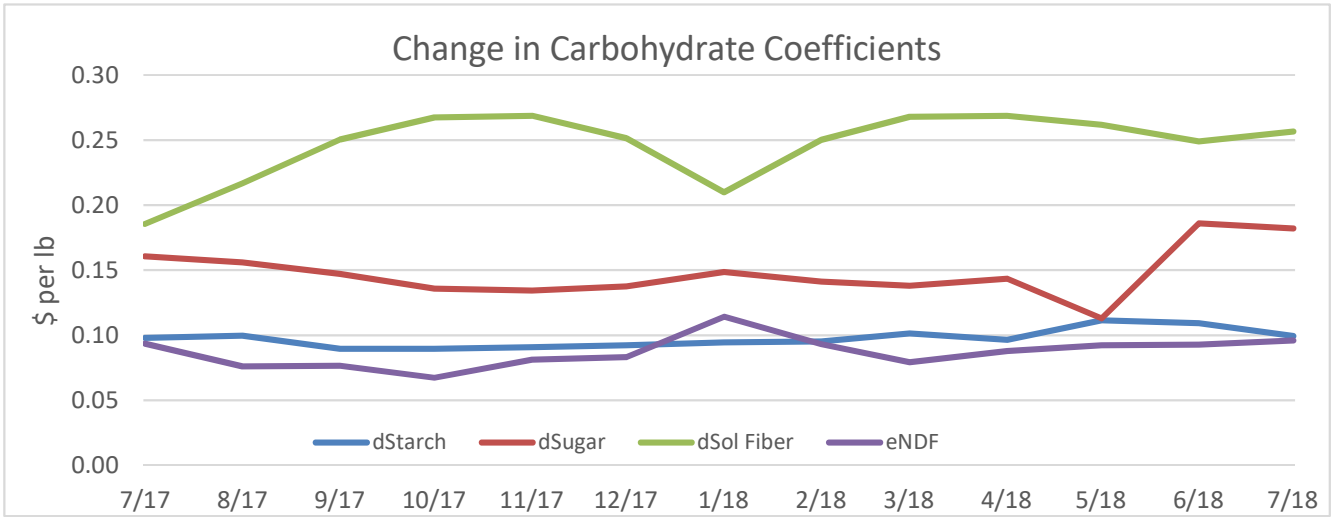

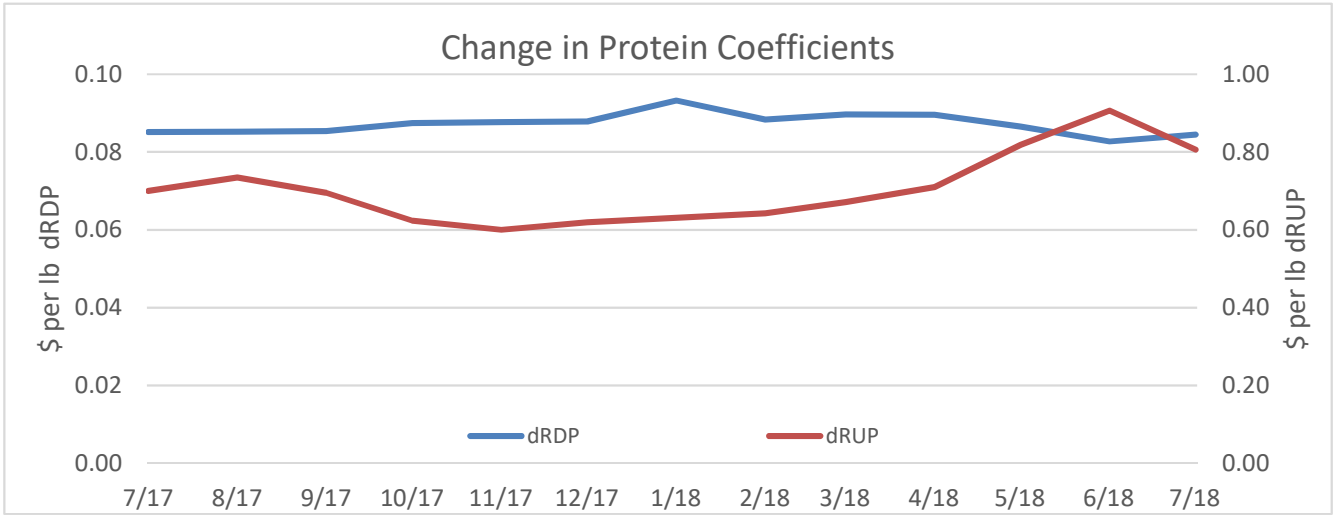

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Historical Undervalue/Overvalue of Feedstuffs ($/T)

Global Analysis	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18
Alfalfa - Good	-22	-22	-17	-13	-24	-27	-23	-12	-8	-9	-11	-23	-22
Alfalfa - Premium	-21	-15	-17	-16	-36	-34	-29	-18	-25	-17	-18	-18	-26
Alfalfa - Supreme	-20	-12	-27	-28	-43	-30	-31	-15	-34	-32	-21	-22	-28
Bakery Byproduct	30	36	38	38	43	42	22	21	27	20	20	24	32
Beet Pulp	-43	-45	-89	-101	-105	-81	-46	-69	-74	-75	-61	-60	-70
Blood Meal	-264	-235	-220	-138	-112	-101	-130	-96	-66	-61	-153	-473	-355
Brewers Grains, 30% DM	50	61	51	33	21	23	23	24	33	49	53	107	79
Bypass SBM	106	94	97	56	49	41	64	43	16	52	42	134	124
Canola	21	26	60	33	29	15	22	-14	-49	-13	-22	43	44
Corn Gluten Feed	66	68	58	58	49	49	50	44	44	52	37	25	35
Corn Gluten Meal	97	103	79	42	10	23	41	52	68	33	91	266	195
Corn Grain	15	23	34	44	44	42	37	43	32	22	30	23	34
Corn Silage, 35% DM	-24	-25	-19	-9	-6	-10	5	13	3	11	10	-5	3
Cottonseed	-20	-18	-19	-48	12	20	33	1	-7	6	17	36	24
Cottonseed Meal	48	47	28	-3	-15	-26	-28	-43	-61	-106	-22	19	6
Distillers Grains	134	131	131	99	89	81	76	67	73	80	72	119	131
Hominy	65	67	70	72	78	78	60	68	78	72	74	70	69
Linseed Meal	-79	-70	-38	-21	-18	-18	-13	-23	-15	-29	-39	-27	-48
Meat & Bone Meal	94	35	34	57	79	62	44	44	28	3	78	158	71
Molasses	-127	-125	-129	-107	-94	-93	-100	-91	-80	-96	-89	-155	-156
Soybean Meal	38	21	27	-1	-1	-11	11	-11	-40	-15	-26	35	41
Soyhulls	5	7	-23	-3	-14	-6	2	-14	-7	1	1	8	-6
Straw	16	10	25	35	34	27	-2	5	26	1	-5	-23	-10
Tallow	-29	-24	-28	-18	-28	-25	-25	-14	-9	-10	-22	-57	-41
Urea	-13	-10	-11	-5	-4	-1	-4	2	8	7	0	-23	-15
Wheat Grain	-41	-53	-44	-48	-28	-27	-26	-23	-13	-4	-11	-39	-39
Wheat Midds	61	43	52	53	46	30	28	27	33	54	18	50	53

Carbohydrate Analysis	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18
Corn Silage, 35% DM	7	4	15	12	14	9	3	6	17	10	8	2	6
Alfalfa - Good	-18	-14	-5	-6	-14	-17	-23	-16	-18	-16	-19	-20	-21
Alfalfa - Premium	-36	-32	-32	-33	-36	-30	-44	-30	-45	-50	-43	-48	-44
Alfalfa - Supreme	-12	-8	-11	-16	-15	-14	-19	-25	-26	-29	-30	-15	-8
Bakery Byproduct	18	16	13	7	12	13	25	19	19	22	23	26	26
Beet Pulp	14	25	29	37	26	26	26	30	17	7	18	21	24
Corn Grain	34	35	25	20	27	31	49	40	36	40	46	50	47
Hominy	34	38	39	42	43	42	28	35	43	37	39	36	33
Molasses	8	7	7	9	9	9	13	14	14	15	17	11	8
Soyhulls	-10	-10	-29	-8	-10	-7	-7	-24	-13	-10	-12	-11	-18
Wheat Grain	-47	-57	-58	-64	-56	-51	-47	-48	-40	-32	-34	-54	-60
Wheat Midds	-11	-30	-22	-20	-25	-41	-38	-41	-38	-19	-55	-29	-24

Protein Analysis	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18
Blood Meal	-205	-174	-161	-75	-48	-38	-73	-39	-9	-5	-94	-417	-296
Brewers Grains, 30% DM	11	21	9	-10	-17	-14	-9	-7	3	19	22	77	45
Bypass SBM	90	77	79	36	30	23	47	24	-3	35	24	119	107
Canola	-7	-3	31	2	-1	-14	-3	-39	-75	-36	-47	18	18
Corn Gluten Feed	21	23	10	4	-8	-5	-7	-18	-16	-7	-23	-24	-20
Corn Gluten Meal	126	133	109	73	41	53	68	77	93	58	117	292	223
Cottonseed Meal	21	19	-2	-33	-42	-52	-51	-65	-82	-126	-43	-2	-18
Distillers Grains	107	103	102	68	58	51	49	39	45	54	45	94	104
Linseed Meal	-151	-145	-112	-100	-94	-92	-77	-87	-81	-90	-103	-90	-115
Meat & Bone Meal	69	9	6	31	60	45	33	36	21	-3	72	145	56
Soybean Meal	20	3	9	-22	-25	-34	-11	-36	-67	-38	-51	14	19
Urea	-4	0	-2	6	7	10	5	12	18	17	11	-15	-6

Fiber Analysis	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18
Alfalfa - Good	-37	-36	-36	-33	-54	-58	-52	-44	-46	-44	-45	-50	-49
Beet Pulp	-25	-26	-47	-64	-66	-48	-24	-38	-45	-47	-35	-32	-41
Brewers Grains, 30% DM	-151	-150	-138	-140	-135	-123	-130	-119	-117	-119	-118	-115	-118
Corn Gluten Feed	-10	-11	-7	-4	-11	-16	-20	-22	-28	-24	-41	-65	-47
Corn Silage, 35% DM	13	14	19	21	13	18	35	43	28	44	43	49	48
Cottonseed	-178	-179	-184	-204	-135	-127	-99	-126	-141	-131	-121	-128	-134
Distillers Grains	-54	-65	-44	-61	-59	-55	-70	-71	-72	-81	-92	-93	-55
Soyhulls	105	110	110	127	127	125	114	118	129	130	132	137	121
Straw	98	97	96	101	83	77	52	55	72	56	54	61	64

FEED $ENSE MARGINS

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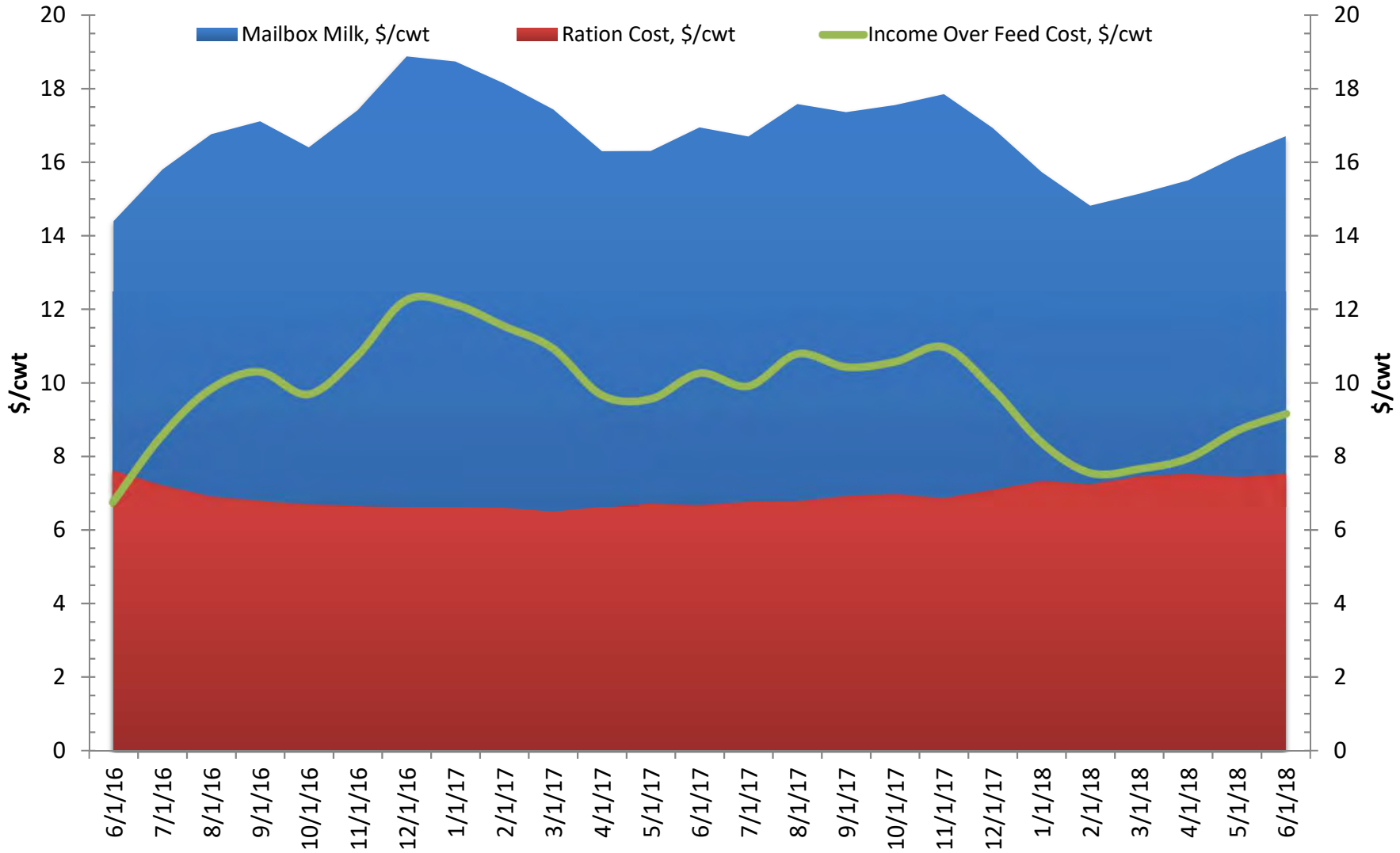

FEED COMPONENTS

Science, **Research**, Service

FEED $ENSE

Nutrient Values Eliminate Guesswork

Feed is the single largest expense for a dairy, and locating and evaluating quality, affordable feedstuffs is important to the economic success of the dairy. Since feed is a significant expense, we must employ multiple methods to identify feedstuffs that meet the nutrient requirement of the dairy cow most economically.

Feed Components has developed a method of evaluating the value of feedstuffs, taking both cost and available nutrient content into account. Nutrient values are derived using the composition and weekly market prices for a basket of feeds available in the region. We calculate predicted values for a set of ration components and metabolizable nutreints using regression analysis of retrospective weekly prices. When nutrient values are combined with the composition of a feed we arrive at a relative economic value of the ingredient. This gives us a global perspective of the feed's value.

Table 1 shows how the predicted value of soybean meal is calculated using nutrient values, with a net result of $378 per ton delivered. When compared to the current market price of $370 per ton, this feed is valued $8/T more than it's market price and is considered a "neutral" buy.

Table 1. Calculating the predicted value of soybean meal.

	dRDP	dRUP	dNFC	dFat	eNDF	
Amount, lbs/T	545	380	546	52	43	
Value, $ per lb	x 0.08	x 0.76	x 0.06	x 0.21	x 0.04	
	43.60	288.80	32.76	10.92	1.72	=$378/T

The first page of the report shows the price for the most recent week and the price one year ago. The second page of the report shows the most recent valuation of feedstuffs. Feeds are sorted from "best" buy to "worst" buy, where this difference is calculated by subtracting the market price from the predicted value. Ranking is more important than the absolute difference and this ranking incorporates a margin of error. Differences that lie within ±1 standard deviation (SD) are considered neutral buys or the predicted value is equivalent to market price. Light (+1 SD) and dark (+2 SD) green indicate the predicted value is greater than market price. Light (-1 SD) and dark (-2 SD) orange indicate the predicted value is less than market price. The undervalued, neutrally valued, or overvalued predicted differences are also shown graphically on the right-hand side of Page 2 along with the coefficients.

Page 3 contains the analyses for carbohydrates, proteins, and fiber. The top table contains an analysis of carbohydrate feeds where value is predicted using starch, sugar, soluble fiber, and eNDF. The middle table contains an analysis of protein feeds where we predict value using RDP and digestible RUP. And the bottom table contains the analysis of fiber where value is predicted using eNDF and digestible NDF. The coefficients or values for the carbohydrate, protein, and fiber fractions are to the right of each the table.

Page 4 shows the graphed nutrient coefficients over the last year. This is broken down for each of the 3 analyses: comprehensive, carbohydrate, and protein.

www.FeedComponents.com
info@feedcomponents.com