

FEED \$ENSE

Northeast Edition

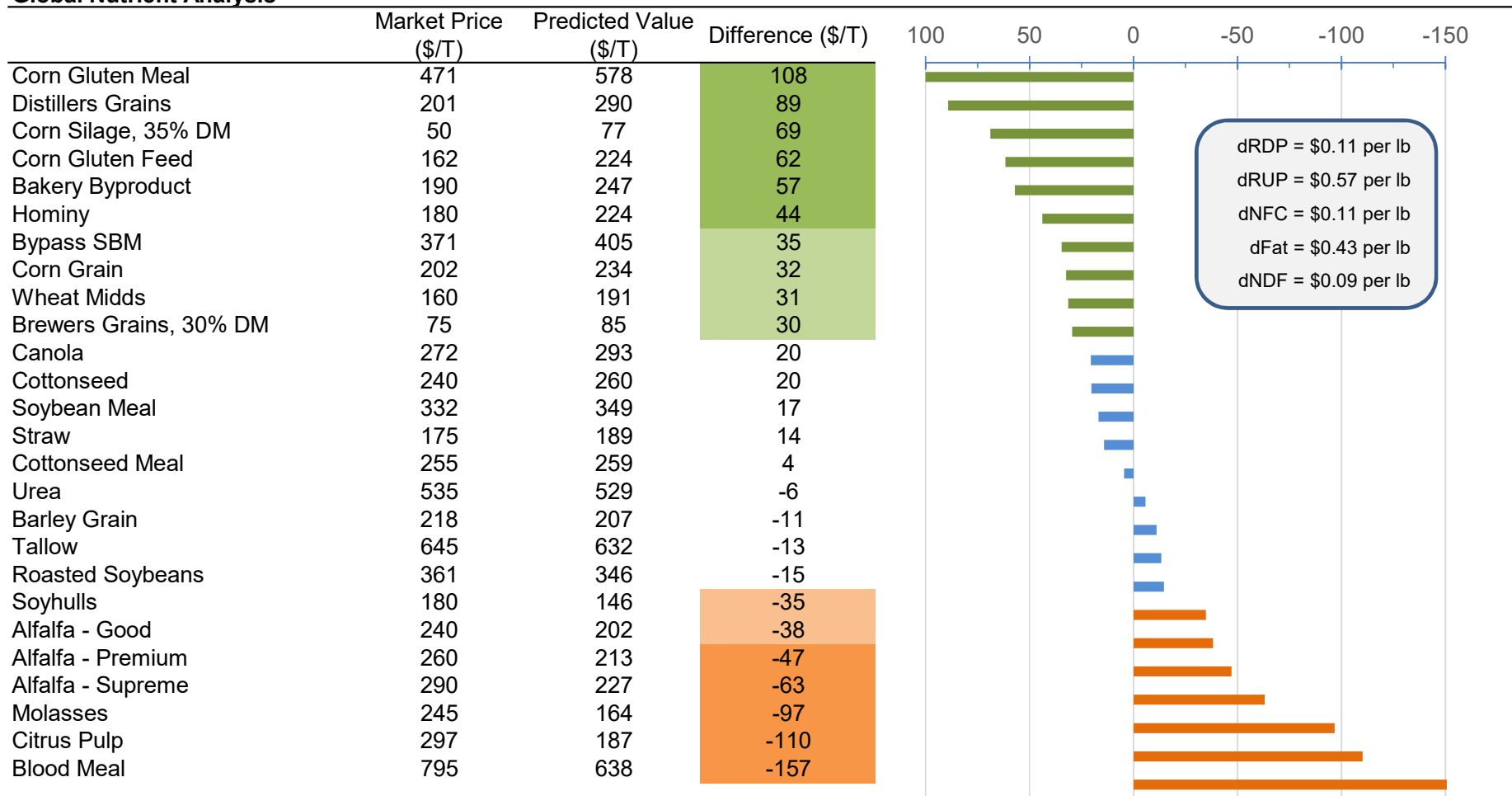
1-Yr Ingredient Price Change (\$/T)

	Sep-18	Sep-19	1-Yr Graph
Bakery Byproduct	179	190	
Barley Grain	182	218	
Citrus Pulp	287	274	
Corn Grain	174	201	
Cottonseed	245	237	
Hominy	175	180	
Molasses	238	245	
Soyhulls	151	180	
Tallow	545	645	
Wheat Midds	144	157	
Brewers Grains, 30% DM	75	75	
Blood Meal	898	798	
Canola	286	273	
Corn Gluten Feed	165	162	
Corn Gluten Meal	573	471	
Cottonseed Meal	355	255	
Distillers Grains	197	201	
Roasted Soybeans	376	362	
Soybean Meal	364	332	
Bypass SBM	396	371	
Urea	492	535	
Alfalfa - Supreme	295	290	
Alfalfa - Premium	265	260	
Alfalfa - Good	240	240	
Corn Silage, 35% DM	50	50	
Straw	140	175	

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Global Nutrient Analysis



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Component Nutrient Analyses

<i>Carbohydrate Analysis</i>	Market Price (\$/T)	Predicted Value (\$/T)	Difference (\$/T)
Corn Silage, 35% DM	50	83	84
Citrus Pulp	297	354	57
Corn Grain	202	203	1
Molasses	245	245	0
Hominy	180	177	-3
Bakery Byproduct	190	183	-7
Alfalfa - Good	240	232	-8
Barley Grain	218	194	-24
Alfalfa - Premium	260	232	-28
Soyhulls	180	150	-30
Wheat Midds	160	126	-34
Alfalfa - Supreme	290	227	-63

per lb
 Starch = \$0.12
 Sugar = \$0.16
 Sol Fiber = \$0.36
 eNDF = \$0.11

<i>Protein Analysis</i>	Market Price (\$/T)	Predicted Value (\$/T)	Difference (\$/T)
Corn Gluten Meal	471	613	142
Distillers Grains	201	232	32
Bypass SBM	371	390	19
Urea	535	539	4
Brewers Grains, 30% DM	75	76	3
Cottonseed Meal	255	249	-6
Canola	272	263	-10
Soybean Meal	332	313	-19
Corn Gluten Feed	162	131	-31
Roasted Soybeans	361	294	-67
Blood Meal	795	713	-82
Cottonseed	240	156	-84

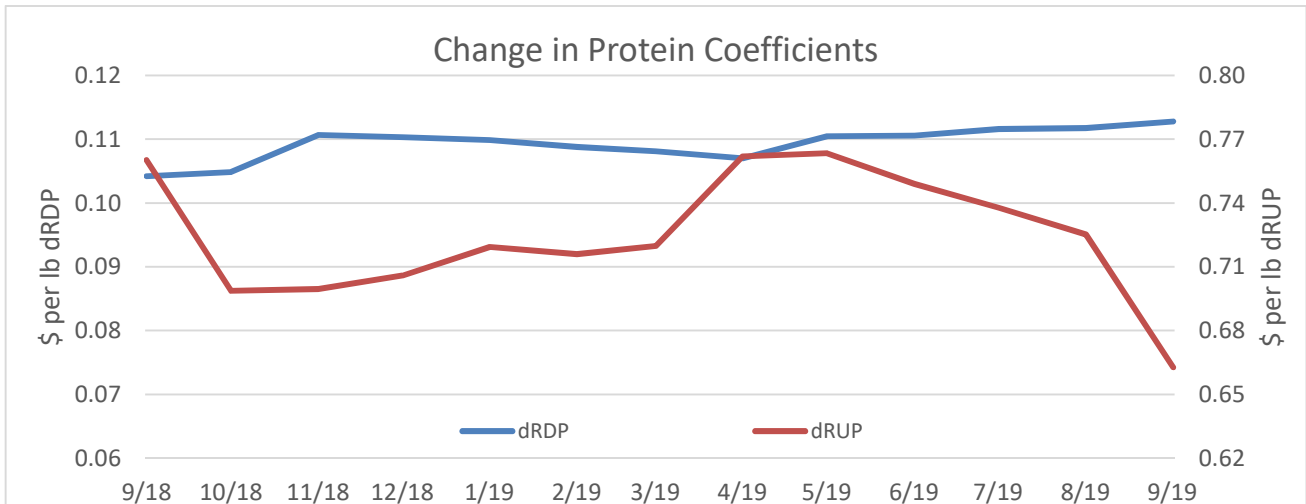
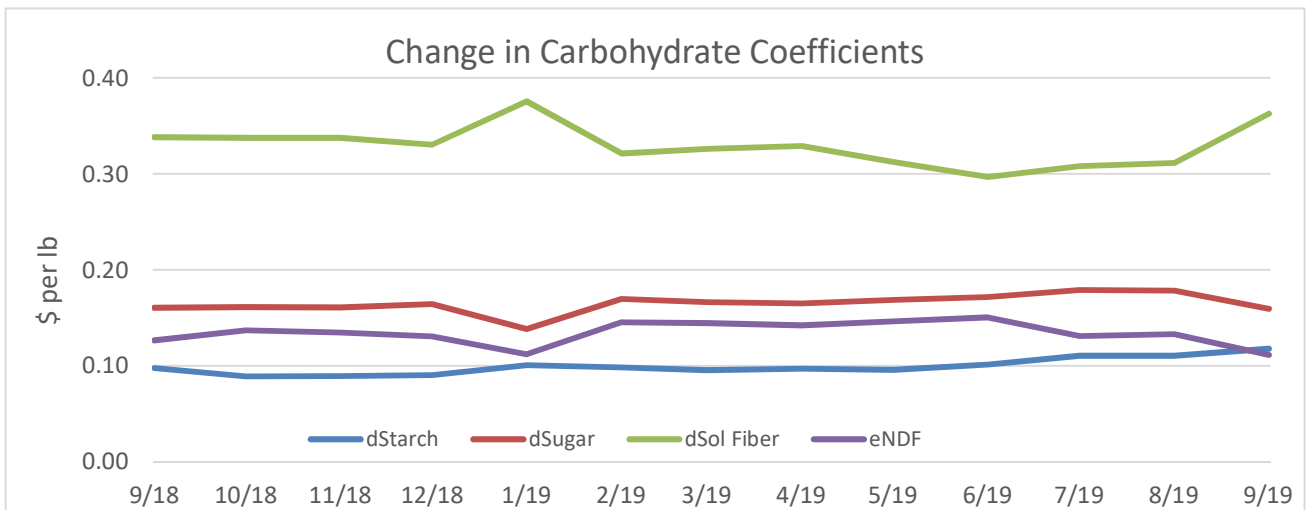
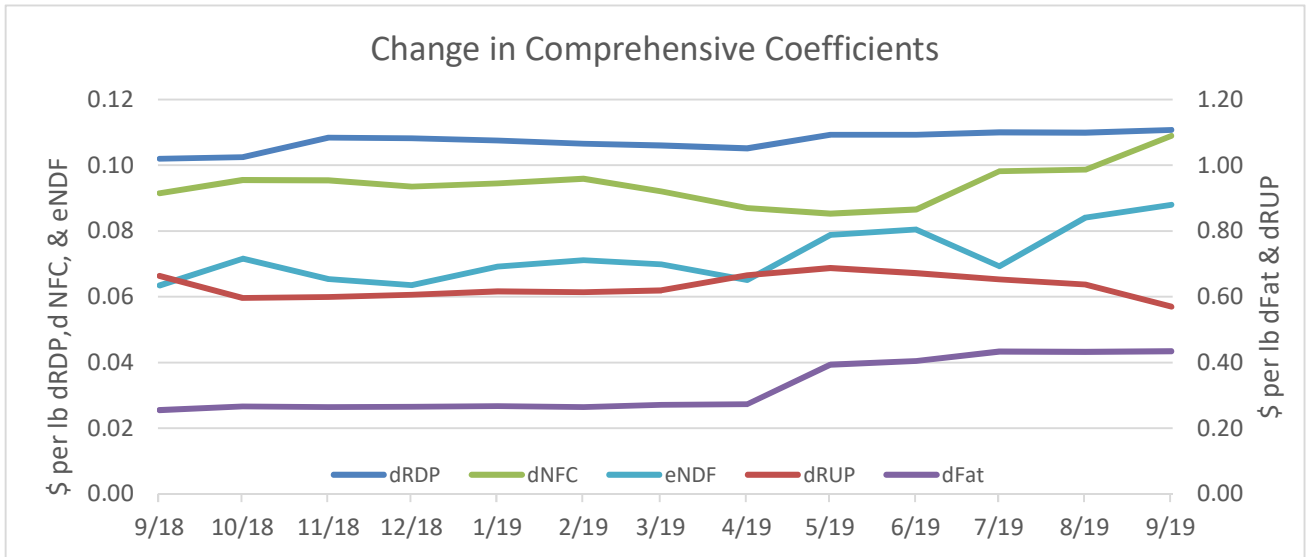
per lb
 dRDP = \$0.11
 dRUP = \$0.66

<i>Fiber Analysis</i>	Market Price (\$/T)	Predicted Value (\$/T)	Difference (\$/T)
Soyhulls	180	326	146
Corn Silage, 35% DM	50	83	84
Straw	175	229	54
Corn Gluten Feed	162	150	-12
Wheat Midds	160	98	-62
Distillers Grains	201	130	-71
Alfalfa - Good	240	153	-87
Brewers Grains, 30% DM	75	46	-88
Cottonseed	240	136	-104
Citrus Pulp	297	122	-175

per lb
 eNDF = \$0.09
 dNDF = \$0.28

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Non-Forage Purchased Feed Costs

A ration supporting 90 lbs milk at 3.9% fat and 3.2% protein was modeled in CNCPS at 56 lbs DMI. The ration was composed of 60% forage using 45% corn silage and 15% mostly legume forage. Composition of the forages were based on samples (+30,000) submitted to a commercial lab during 2018.

To complement the forages, grains, byproducts, minerals, vitamins, etc made up the remaining 40% of DM. The major ingredients of the starch and protein mix were ground corn (39.5%), canola meal (21.0%), bypass SBM (20.7%), soyhulls (14.8%), blood meal (3.6%), Mepron® (2.2%) and urea (2.2%). The remaining 3.5% of DM was composed of bypass fat, minerals, vitamins, and additives.

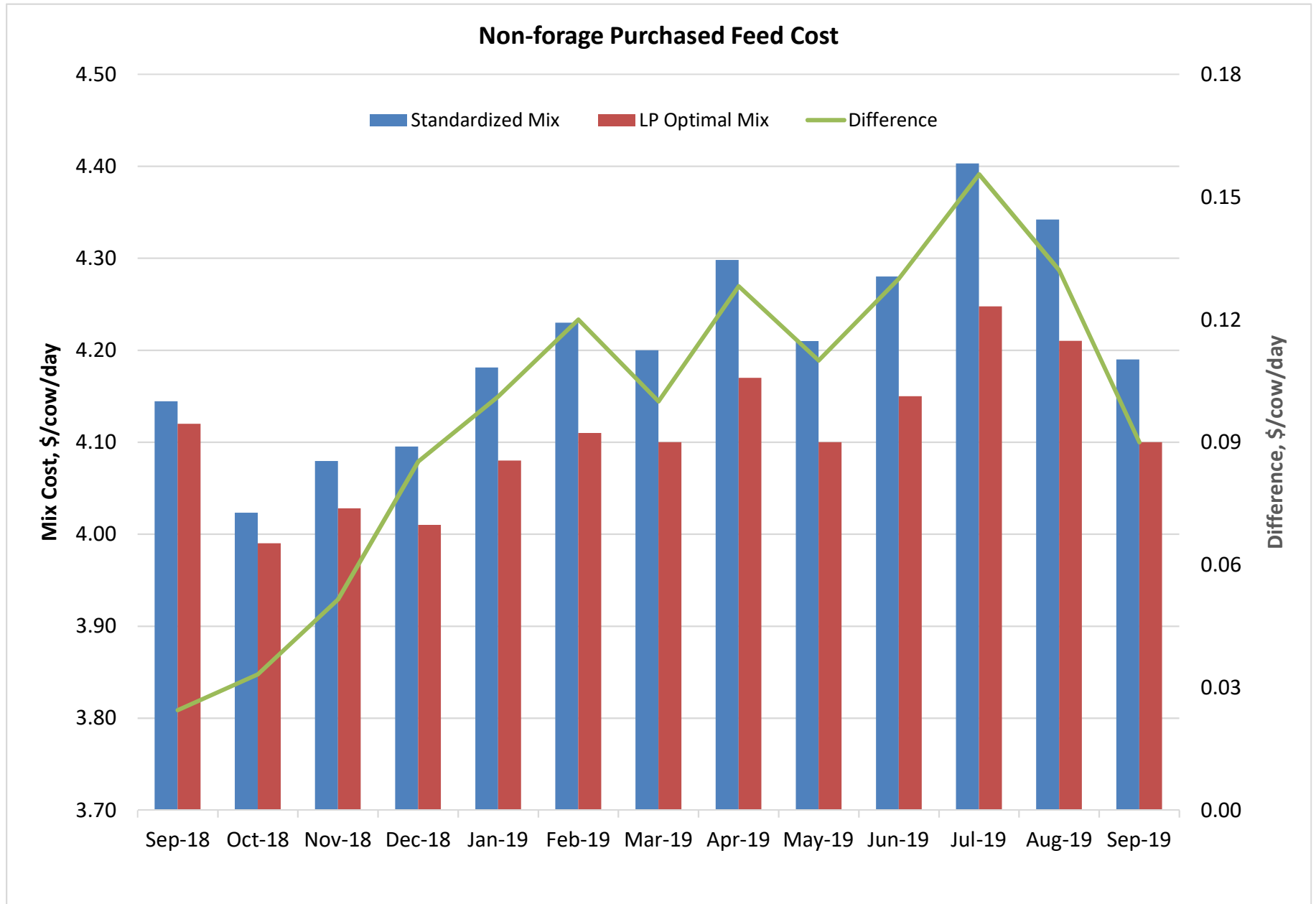
The nutrient composition (% DM) of the starch and protein mix, which will be referred to as the Standardized Mix, is 11.6% RDP, 13.5% digestible RUP, 28.4% starch, 5.5% sugar, 4.8% fat, 0.36% mMet, 0.81% mLys, and 0.3% mHis. Simple linear programming was used to find the optimal or minimal cost subject to the nutrient composition of the Standardized Mix using all the non-forage feed ingredients in Feed \$ense. The optimal mix will be referred to as the LP Optimal Mix.

Page 6 of Feed \$ense shows the changes in the Standardized Mix cost over the last 13 months which reached a high last month. For the most recent month, the Standardized Mix is \$4.19/cow/day which is a decrease of 15¢/cow/day from the previous month. Cost peaked in Jul and the 32¢/cow/day increase since Oct '18 was been driven by the increase in corn, blood meal, and soyhull prices over that period of time. On average, the LP Optimal Mix was 10¢/cow/day less than the Standardized Mix. In some months, such as last fall, there was little difference between the Standardized and LP Optimal Mixes.

The feeds that were pulled in that reduced cost were typically feeds the are undervalued in Feed \$ense. This is an illustration of the usefulness of the simple ranking in Feed \$ense. An 10¢/cow/day savings is very optimistic but savings of 4-5¢/cow/day may be achievable if undervalued feedstuffs fit in the ration. Use of undervalued feedstuffs may reduce ration cost, but value is only one of several factors that should be considered when evaluating the inclusion of a new ingredient. The most important rule is never sacrifice IOFC when attempting to reduce feed cost.

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Historical Undervalue/Overvalue of Feedstuffs (\$/T)

<i>Global Analysis</i>	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Alfalfa - Good	-54	-57	-61	-57	-52	-65	-67	-64	-61	-55	-39	-45	-38
Alfalfa - Premium	-61	-77	-69	-60	-50	-59	-61	-56	-52	-57	-50	-42	-47
Alfalfa - Supreme	-76	-84	-80	-66	-62	-66	-72	-81	-65	-60	-72	-56	-63
Bakery Byproduct	63	66	66	62	55	53	53	54	41	35	19	20	57
Barley Grain													-11
Blood Meal	-171	-112	-123	-128	-102	-113	-148	-231	-247	-273	-235	-223	30
Brewers Grains, 30% DM	72	54	55	57	61	60	62	75	59	55	52	49	35
Bypass SBM	64	51	47	54	57	51	58	78	83	78	52	54	20
Canola	27	20	9	4	4	5	21	21	37	34	18	26	-110
Citrus Pulp	-120	-117	-118	-120	-140	-103	-109	-114	-105	-90	-89	-93	62
Corn Gluten Feed	56	44	40	45	44	54	53	50	61	54	50	52	108
Corn Gluten Meal	79	36	37	33	11	0	20	86	129	171	165	148	32
Corn Grain	44	51	49	48	40	39	34	27	26	14	16	15	69
Corn Silage, 35% DM	42	49	45	42	48	50	47	41	47	49	50	61	20
Cottonseed	46	60	79	66	38	45	58	65	12	6	15	21	4
Cottonseed Meal	-52	-30	-18	4	-37	47	48	54	34	30	27	23	89
Distillers Grains	87	62	76	80	94	95	107	118	119	116	112	103	44
Hominy	41	55	59	73	71	72	69	67	53	54	68	67	-97
Molasses	-110	-105	-105	-108	-81	-109	-113	-119	-124	-122	-111	-111	-15
Roasted Soybeans	45	28	31	29	37	32	32	49	16	20	-2	2	17
Soybean Meal	10	5	14	18	19	17	23	32	41	37	20	17	-35
Soyhulls	-7	-7	-23	-29	-40	-55	-54	-53	-36	-43	-38	-34	14
Straw	22	31	24	22	29	32	29	24	34	36	27	9	-13
Tallow	-40	-38	-42	-40	-37	-43	-48	-56	-18	-17	-15	-15	-6
Urea	-5	-2	-4	-5	-2	-7	-9	-13	-13	-13	-9	-10	31
Wheat Midds	61	66	65	35	30	35	53	48	26	31	46	41	-157

<i>Carbohydrate Analysis</i>	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Alfalfa - Good	-6	-4	-6	-6	-7	-12	-11	-7	-15	-11	0	-13	-8
Alfalfa - Premium	-34	-43	-34	-29	-21	-27	-27	-22	-26	-34	-31	-27	-28
Alfalfa - Supreme	-71	-71	-67	-56	-52	-56	-60	-71	-64	-63	-76	-64	-63
Bakery Byproduct	-15	-17	-17	-19	-30	-24	-24	-21	-19	-22	-42	-40	-7
Barley Grain													-24
Citrus Pulp	51	52	52	47	46	58	57	59	56	60	58	55	57
Corn Grain	0	-7	-9	-7	0	-10	-13	-14	-12	-19	-20	-20	1
Corn Silage, 35% DM	79	81	80	77	75	92	90	90	90	94	87	89	84
Hominy	-19	-13	-9	6	7	4	0	2	0	5	16	16	-3
Molasses	4	4	4	6	10	6	5	4	4	4	11	11	0
Soyhulls	-3	2	-13	-22	-32	-49	-46	-46	-32	-41	-39	-37	-30
Wheat Midds	-29	-25	-27	-56	-59	-54	-35	-41	-45	-38	-24	-29	-34

<i>Protein Analysis</i>	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Blood Meal	-86	-22	-35	-41	-12	-23	-60	-146	-186	-211	-168	-153	-82
Brewers Grains, 30% DM	33	13	15	17	21	20	21	34	35	30	27	23	3
Bypass SBM	45	31	27	35	38	32	38	59	70	65	39	40	19
Canola	-3	-12	-23	-28	-27	-26	-3	-2	12	8	-10	-2	-10
Corn Gluten Feed	-20	-37	-39	-33	-36	-27	-26	-24	-16	-24	-32	-35	-31
Corn Gluten Meal	122	81	81	77	57	45	65	129	158	201	196	181	142
Cottonseed	-71	-65	-42	-55	-86	-79	-69	-60	-84	-92	-79	-82	-84
Cottonseed Meal	-79	-58	-45	-23	-64	19	20	26	24	20	17	13	-6
Distillers Grains	54	27	41	46	44	44	56	68	69	65	57	48	32
Roasted Soybeans	-45	-67	-62	-65	-57	-61	-64	-48	-32	-29	-53	-49	-67
Soybean Meal	-18	-24	-15	-10	-9	-13	-5	6	13	8	-12	-15	-19
Urea	6	9	7	5	9	4	0	-5	-7	-7	-2	-1	4

<i>Fiber Analysis</i>	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Alfalfa - Good	-97	-104	-107	-100	-95	-110	-111	-107	-107	-102	-88	-89	-87
Brewers Grains, 30% DM	-96	-95	-92	-90	-81	-82	-85	-84	-90	-89	-88	-89	-88
Citrus Pulp	-172	-172	-170	-168	-183	-148	-153	-152	-149	-134	-145	-150	-12
Corn Gluten Feed	-24	-31	-33	-25	-22	-12	-15	-20	-15	-20	-28	-25	84
Corn Silage, 35% DM	71	69	68	70	79	79	77	76	78	79	73	86	-71
Cottonseed	-118	-101	-82	-95	-124	-115	-106	-107	-128	-133	-123	-112	146
Distillers Grains	-73	-80	-64	-59	-70	-69	-61	-62	-68	-67	-70	-76	54
Soyhulls	156	159	150	150	155	138	133	136	141	135	141	142	-62

FEED \$ENSE MARGINS

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