

2022 Ozark Empire Fair Hay Show



SPRINGFIELD, MISSOURI

**Held in Cooperation with the Custom Laboratory, Inc.
Monett, Missouri
and University of Missouri Extension**

In Memoriam

Eldon Cole

1940-2022

The 2022 hay show is dedicated to the late Eldon Cole. Eldon served as superintendent of this show from its inception in 1985 until 2021. His 37 years of support and promotion of this show reflected his efforts for increased livestock producer education regarding improved hay quality in Missouri. Eldon served the people of Missouri as a field specialist in livestock with University of Missouri Extension for an amazing 58 years. His dedication was unparalleled and thousands of farmers and ranchers benefited by his educational programs.



2022 OZARK EMPIRE FAIR HAY SHOW

The Hay Show gives producers an opportunity to have their hay evaluated, placed in competition and to be displayed at the Ozark Empire Fair. Each entry consists of at least ten representative bales from a field which were sampled by extension personnel using forage samplers. The samples are chemically analyzed by the Custom Laboratory Inc. in Monett.

Beginning in 2017, the lab computes a Relative Forage Quality (RFQ) based on Total Digestible Nutrient (TDN) and Neutral Detergent Fiber to estimate dry matter intake. Final placings are determined using the RFQ with no subjective evaluation. The RFQ was designed for fully mature alfalfa to have a RFQ of 100.

Following are the revised national hay test guidelines adopted by USDA for Market News reporting on alfalfa, alfalfa/mix hay and grass hay. Reporters use the test measurement most prominent in their trade area along with visual characteristics to determine hay quality. Do not use RFQ to develop a ration, use TDN, crude protein, etc.

Table 1: Alfalfa/Mix Hay Testing Guidelines

Quality Designation	Relative Feed Value (RFV*)	Acid Detergent Fiber (ADF)
Supreme	Over 185	Under 27
Premium	170-185	27-29
Good	150-170	29-32
Fair	130-150	32-35
Utility	Under 130	Over 35

Quantitative factors are approximate, and many factors can affect feeding value. Based on 100% dry matter.

*Calculated value based on American Forage and Grasslands Council formula.

*Note: $RFV = (DDM \times DMI) / 1.29$ $DDM = 88.9 - 0.779 \times ADF\%$ $DMI = 120 / NDF$

Table 2: Categories and RFQ Ranges used in the Southeastern Forage Quality System

Quality Designation	Relative Forage Quality Value (RFQ)
Premium	≥ 140
Good	110-139
Fair	90-109
Utility	< 90

Revised Hay Quality Designations:

Supreme: Very early maturity, pre bloom, soft fine stemmed, extra leafy. Factors indicative of very high nutritive content. Hay is excellent color and free of damage.

Premium: Early maturity, i.e., pre-bloom in legumes and pre head in grass hays, extra leafy and fine stemmed factors indicative of high nutritive content. Hay is green and free of damage.

Good: Early to average maturity, i.e., early to mid-bloom in legumes and early head in grass hays, leafy. fine to medium stemmed, free of damage other than slight discoloration.

Fair: Late maturity, i.e. mid to late-bloom in legumes, head- in grass hays, moderate or below leaf content and generally coarse stemmed. Hay may show light damage.

Utility: Hay in very late maturity, such as mature seedpods in legumes or mature head in grass hays, coarse stemmed. This category could include hay discounted due to excessive damage and heavy weed content or mold. Defects will be identified in market reports when using this category.

Abbreviations Used:

RFV - Relative Feed Value

NEL - Net Energy Lactation

TDN - Total Digestible Nutrients

NDF - Neutral Detergent Fiber

RFQ - Relative Forage Quality

ADF - Acid Detergent Fiber

DMI - Dry Matter Intake

DDM - Digestible Dry Matter

CP - Crude Protein

2022 - Hay Show Results

Dry Hay Classes

CLASS I - LEGUMES				
PLACING	EXHIBITOR	HAY ID	RFQ	RFV
1	Glenn & Toni Obermann	Alfalfa - (WL372)	214	193
2	Jason Hudson	Alfalfa - (WL359)	203	178
3	Glenn & Toni Obermann	Alfalfa - (Americas)	187	176
4	Jason Hudson	Alfalfa - (WL359)	176	164
5	Byron Stine	Alfalfa	166	152
6	Ryan Bilyeu	Alfalfa - (WL)	150	140
7	Byron Stine	Alfalfa	144	131
8	David Hazelrigg	Alfalfa - (WL372)	143	135
9	Ryan Bilyeu	Alfalfa - (Ameristand)	141	131
10	Ryan Thater	Alfalfa - (Pioneer 54VR10)	131	126

CLASS II - GRASS (COOL SEASON)				
1	Kevin Dotson	Fescue - (Ky31)	139	114
2	Marcia Moreland	Fescue - (Ky31)	137	117
3	Gene Cowherd	Orchardgrass - (Hallmark)	137	104
4	Lindell Mitchell	Fescue Mixed - (Ky31)	133	114
5	Ryan Bilyeu	Orchardgrass - (Hallmark)	121	106
6	Earlybird Feed & Fertilizer	Fescue - (Cajun II)	119	97
7	Lindell Mitchell	Fescue - (Ky31)	118	97
8	Kevin Dotson	Fescue - (Ky31)	116	96
9	Friend Farms	Fescue	112	104
10	Byron Stine	Fescue - (BarOptima)	97	88
11	Fire Sweep Ranch	Fescue - (Ky31)	95	88
12	Randy Severson	Orchardgrass	92	88
13	Jason Hudson	Fescue - (Ky31)	90	87
14	Jason Hudson	Fescue - (Ky31)	88	87

CLASS III - GRASS (WARM SEASON)				
1	Lindell Mitchell	Bermudagrass - (Midland 99)	136	111
2	Gene Cowherd	Bermudagrass - (Wrangler)	125	106
3	Hedeman Farms	Bermudagrass - (Midland 99)	117	93
4	Gene Cowherd	Bermudagrass - (Wrangler)	116	99
5	Lindell Mitchell	Bermudagrass - (Greenfield)	116	97
6	Hedeman Farms	Bermudagrass - (Midland 99)	115	101
7	Jill Mobley	Bermudagrass - (Midland)	105	90

CLASS IV - GRASS - LEGUME				
1	Glenn & Toni Obermann	Alfalfa / Orchardgrass	241	217
2	Marcia Moreland	Alfalfa / Orchardgrass	132	114
3	Matt Garbee	Alfalfa / Orchardgrass	117	104
4	Mark Terrey	Orchard / Fescue / R. Clover	106	97
5	Fire Sweep Ranch	Fescue / R. Clover	104	100
6	John Downing	Fescue / W. Clover	103	92

CLASS V - SUMMER / WINTER ANNUAL GRASS				
1	Randy Severson	Oats	97	90

CHAMPION:	Glenn & Toni Obermann	RESERVE CHAMPION:	Glenn & Toni Obermann
	Alfalfa / Orchardgrass		Alfalfa

2022 - Hay Show Results

Haylage Classes

CLASS I - LEGUME HAYLAGE				
PLACING	EXHIBITOR	HAY ID	RFQ	RFV
1	Groves - McDonald	Alfalfa - (Becks)	205	187
2	Groves View Dairy	Alfalfa - (W357)	204	187
3	Charles Kruger	Alfalfa - (Americas)	192	174
4	Groves View Dairy	Alfalfa - (Pioneer)	190	174

CLASS II - GRASS HAYLAGE (COOL SEASON)		
1	Kevin Dotson	Fescue
		104
		89

CLASS IV - GRASS - LEGUME HAYLAGE		
1	John Staiger	Alfalfa/Orchardgrass
		189
		170

CLASS V - WINTER / SUMMER ANNUAL HAYLAGE		
1	Leon Kleeman	Wheat
		106
		94

CHAMPION:	Groves - McDonald	RESERVE CHAMPION:	Groves View Dairy
	Alfalfa		Alfalfa

Hay Classes - 2022

CLASS 1- LEGUMES										
Name	Address	Type	Date Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Glenn & Toni Obermann	Monett	Alfalfa (WL372)	7/4	214.00	193	24.64	33.55	0.73	70.90	23.4
Jason Hudson	Jenkins	Alfalfa (WL359)	5/9	203.00	178	27.01	35.46	0.70	68.38	21.5
Glenn & Toni Obermann	Monett	Alfalfa (Americas)	7/16	187.00	176	27.23	35.68	0.70	68.10	16.5
Jason Hudson	Jenkins	Alfalfa (WL359)	7/7	176.00	164	29.66	37.23	0.70	65.55	18.8
Byron Stine	Clever	Alfalfa	6/11	166.00	152	27.87	41.20	0.69	67.50	16.9
Ryan Bilyeu	Ozark	Alfalfa (WL)	6/20	150.00	140	32.78	42.06	0.63	62.23	18.4
Byron Stine	Clever	Alfalfa	5/9	144.00	131	33.68	44.36	0.62	61.27	19.3
David Hazelrigg	Ash Grove	Alfalfa (WL372)	6/21	143.00	135	33.34	43.21	0.62	61.63	18.3

CLASS I - LEGUMES Continued										
Name	Address	Type	Date Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Ryan Bilyeu	Ozark	Alfalfa (Ameristand)	6/25	141.00	131	33.54	44.51	0.62	61.41	19.0
Ryan Thater	Clever	Alfalfa (Pioneer 54VR10)	6/17	131.00	126	34.99	45.54	0.60	59.87	20.3
Average 10 -- Entries				165.50	153	30.47	40.28	0.66	64.68	19.2

CLASS II - GRASS (Cool Season)										
Name	Address	Type	Date Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Kevin Dotson	Billings	Fescue (Kentucky 31)	7/10	139.00	114	29.73	53.64	0.64	63.43	10.3
Marcia Moreland	Crane	Fescue (Kentucky 31)	6/27	137.00	117	30.07	52.16	0.64	63.15	18.0
Gene Cowherd	Purdy	Orchardgrass (Hallmark)	6/11	137.00	104	32.77	56.73	0.62	60.93	16.1
Lindell Mitchell	Seligman	Fescue Mixed (Kentucky 31)	6/10	133.00	114	26.90	55.30	0.67	65.80	17.7
Ryan Bilyeu	Ozark	Orchardgrass (Hallmark)	6/1	121.00	106	33.14	55.31	0.61	60.62	14.3
Earlybird Feed & Fertilizer	Marionville	Fescue Mixed Cajun II	6/16	119.00	97	32.20	61.37	0.62	61.40	12.8
Lindell Mitchell	Seligman	Fescue (Kentucky 31)	5/8	118.00	97	32.20	60.90	0.62	61.38	14.7

CLASS II - GRASS (Cool Season) Continued										
Name	Address	Type	Date Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Kevin Dotson	Billings	Fescue (Kentucky 31)	5/7	116.00	96	32.51	61.71	0.62	61.14	14.8
Friend Farms	Elkland	Fescue	5/31	112.00	104	32.23	57.18	0.62	61.40	14.5
Byron Stine	Clever	Fescue (BarOptima)	5/28	97.00	88	36.19	64.26	0.58	58.10	13.0
Fire Sweep Ranch	Verona	Fescue (Kentucky 31)	5/30	95.00	88	36.19	64.26	0.58	58.10	9.3
Randy Severson	Mt. Vernon	Orchardgrass	5/26	92.00	88	38.52	62.54	0.56	56.18	9.0
Jason Hudson	Jenkins	Fescue (Kentucky 31)	6/18	90.00	87	38.10	62.96	0.56	56.52	9.3
Jason Hudson	Jenkins	Fescue (Kentucky 31)	6/10	88.00	87	38.23	63.04	0.56	56.41	9.6
Average 14 -- Entries				113.86	99	33.50	59.38	0.61	60.33	13.1

CLASS III - GRASS (Warm Season)										
Name	Address	Type	Date Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Lindell Mitchell	Seligman	Bermudagrass (Midland 99)	6/27	136.00	111	28.87	55.88	0.65	64.14	11.9
Gene Cowherd	Purdy	Bermudagrass (Wrangler)	7/13	125.00	106	26.15	60.18	0.68	66.39	14.3

CLASS III - GRASS (Warm Season) Continued										
Name	Address	Type	Date Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Hedeman Farms	Lockwood	Bermudagrass (Midland 99)	7/16	117.00	93	29.72	65.59	0.64	63.40	16.6
Gene Cowherd	Purdy	Bermudagrass (Wrangler)	6/12	116.00	99	29.64	61.76	0.65	63.51	12.8
Lindell Mitchell	Seligman	Bermudagrass (Greenfield)	6/28	116.00	97	29.57	63.05	0.65	63.57	9.8
Hedeman Farms	Lockwood	Bermudagrass (Midland 99)	6/10	115.00	101	28.67	61.26	0.65	64.31	10.6
Jill Mobley	Kennett	Bermudagrass (Midland)	6/14	105.00	90	31.23	66.96	0.63	62.20	10.9
Average 7 - Entries				118.57	100	29.12	62.10	0.65	63.93	12.4

CLASS IV - GRASS - LEGUME										
Name	Address	Type	Date Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Glenn & Toni Obermann	Monett	Alfalfa / Orchardgrass (WL 357 / Persist)	7/13	241.00	217	22.62	30.50	0.76	73.06	20.9
Marcia Moreland	Crane	Alfalfa / Orchardgrass WL257 & Persist	6/13	132.00	114	31.91	52.36	0.62	61.64	13.7
Matt Garbee	Billings	Alfalfa/Orchardgrass VNS Alf/Hallmark	6/12	117.00	104	36.49	54.02	0.58	57.85	15.1
Mark Terrey	Crane	OG/Fescue/Red Clover	6/13	106.00	97	35.28	58.72	0.59	58.85	12.9

CLASS IV - GRASS - LEGUME Continued			Date							
Name	Address	Type	Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Fire Sweep Ranch	Verona	Tall Fescue / Red Clover (Ky 31 & Kenland)	5/30	104.00	100	35.19	57.34	0.59	58.90	12.5
John Downing	Osceola	Fescue/White Clover	6/15	103.00	92	35.13	62.15	0.59	58.98	9.2
Average 6 -- Entries				133.83	121	32.77	52.52	0.62	61.55	14.1

CLASS V - SUMMER / WINTER ANNUAL GRASS			Date							
Name	Address	Type	Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Randy Severson	Mt. Vernon	Oats	6/30	97.00	90	37.20	62.21	0.57	57.30	9.4
Average 1 -- Entry				97.00	90	37.20	62.21	0.57	57.30	9.4

HAYLAGE CLASSES - 2022

CLASS I - LEGUMES										
Name	Address	Type	Date Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Groves-McDonald	Billings	Alfalfa (Becks)	5/9	205.00	187	25.67	34.36	0.71	69.81	20.7
Groves View Dairy	Billings	Alfalfa (Pioneer)	5/31	204.00	187	26.74	33.89	0.71	68.66	21.5
Charles Kruger		Alfalfa (America's)	6/15	192.00	174	28.23	35.80	0.69	67.08	19.9
Groves View Dairy	Billings	Alfalfa (Pioneer)	5/9	190.00	174	27.25	36.19	0.70	68.12	21.7
Average 4 -- Entries				197.75	181	26.97	35.06	0.70	68.42	20.9

CLASS II - GRASS (Cool Season)										
Name	Address	Type	Date Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Kevin Dotson	Billings	Fescue (Kentucky 31)	5/16	104.00	89	36.53	63.04	0.58	57.82	12.6
Average 1 - Entry				104.00	89	36.53	63.04	0.58	57.82	12.6

CLASS IV - GRASS - LEGUME										
Name	Address	Type	Date Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
John Staiger	Billings	Alfalfa - Orchardgrass (Cisco429 Alf/Devour OG)	7/5	189.00	170	27.65	36.80	0.69	67.70	19.8
Average 1 - Entry				189.00	170	27.65	36.80	0.69	67.70	19.8

CLASS V - ANNUALS-WINTER/SUMMER										
Name	Address	Type	Date Cut	RFQ	RFV	ADF	NDF	NEL	TDN	CP
Leon Kleeman	Miller	Wheat	5/27	106.00	94	36.07	60.05	0.58	58.20	9.5
Average 1 - Entry				106.00	94	36.07	60.05	0.58	58.20	9.5

Abbreviations Used:

RFV - Relative Feed Value

NEL - Net Energy Lactation

TDN - Total Digestible Nutrients

NDF - Neutral Detergent Fiber

ADF - Acid Detergent Fiber

DMI - Dry Matter Intake

DDM - Digestible Dry Matter

RFQ - Relative Forage Quality

Ca - Calcium

P - Phosphorus

CP - Crude Protein

YEAR BY YEAR AVERAGES

CLASS I - LEGUMES

Year	Entries	RFQ	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
1985	23		137.6	-	33.1	20.4	.64	62.8	1.35	.31
1986	40		148.1	-	28.5	21.9	.69	67.8	1.43	.32
1987	34		128.3	45.0	34.3	21.5	.62	61.5	1.41	.31
1988	23		144.9	40.8	27.5	21.2	.69	67.8	1.43	.27
1989	24		133.1	46.1	30.5	21.2	.65	64.6	1.39	.29
1990	12		126.2	47.2	33.3	20.8	.62	61.6	1.43	.32
1991	21		132.8	45.9	31.7	20.9	.64	63.4	1.51	.26
1992	5		155.0	40.8	28.4	18.7	.68	66.9	0.97	.24
1993	6		129.8	45.0	34.4	18.6	.61	60.5	1.30	.33
1994	24		135.1	45.0	31.8	18.3	.64	63.2	1.35	.28
1995	7		143.2	41.9	31.5	20.0	.64	63.6		
1996	13		148.3	41.3	30.5	20.8	.65	64.5		
1997	11		166.0	39.5	27.4	21.9	.69	67.9		
1998	14		158.5	39.4	29.1	22.9	.67	66.0		
1999	8		164.4	38.3	27.6	22.7	.69	67.7		
2000	16		154.4	40.0	29.4	22.2	.67	65.8		
2001	15		165.2	40.5	28.3	21.7	.68	67.0		
2002	8		147.9	41.7	30.7	22.2	.65	64.4		
2003	10		152.3	39.5	32.7	20.4	.63	62.3		
2004	7		155.3	38.4	32.7	21.5	.63	62.4		
2005	6		173.8	36.4	29.1	21.3	.68	66.1		
2006	6		170.0	36.4	29.1	21.3	.68	65.2		
2008	3		132.0	42.7	36.4	16.7	.58	58.0		
2009	10		150.0	40.0	33.3	19.9	.62	61.4		
2010	9		166.0	37.6	31.2	21.4	.65	64.1		
2011	8		177.0	36.6	30.7	20.9	.66	64.4		
2012	16		182.0	35.1	28.4	20.3	.69	66.9		
2013	8		157.0	38.6	32.4	21.2	.64	62.7		
2014	10		195.0	27.4	32.6	22.5	.70	67.2		
2015	7		174.0	35.8	30.7	22.3	.66	64.5		
2016	11		161.0	37.7	31.6	21.6	.64	63.2		
2017	6	197.0	174.0	35.7	30.0	22.3	.67	65.2		
2018	13	178.4	155.0	39.0	31.9	21.0	.64	63.2		
2019	6	176.6	154.0	39.0	33.5	21.0	.62	61.6		
2020	8	158.1	149.0	40.4	32.7	19.7	.63	62.2		
2021	4	195.5	174.0	35.5	29.6	21.0	.67	65.6		
2022	10	165.5	153.0	40.3	30.5	0.7	0.66	64.7		

YEAR BY YEAR AVERAGES

CLASS II - GRASS (Cool Season)

Year	# of Entries	RFQ	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
1985	19				37.0	12.5	.56	56.5	.51	.27
1986	23				36.9	12.2	.56	57.3	.47	.27
1987	18		83.3	67.8	40.4	13.0	.51	53.0	.47	.31
1988	15		88.2	67.5	36.5	11.1	.59	58.5	.38	.27
1989	14		86.4	66.8	35.0	14.0	.60	60.1	.54	.30
1990	11		81.0	68.4	38.6	13.6	.56	56.6	.56	.32
1991	7		89.6	64.3	35.1	14.6	.56	60.2	.56	.43
1992	11		95.1	61.4	34.5	14.4	.61	60.7	.35	.33
1993	12		83.1	66.5	38.3	12.0	.57	57.1	.44	.34
1994	14		88.4	64.9	36.0	11.4	.59	59.3	.39	
1995	7		93.1	61.0	37.1	12.2	.58	58.2		
1996	11		88.0	63.2	38.5	11.7	.56	56.9		
1997	6		99.3	60.8	38.4	14.8	.60	60.0		
1998	5		86.1	65.8	37.9	14.6	.57	57.4		
1999	3		81.8	67.2	39.5	14.8	.56	55.9		
2000	5		86.4	65.1	36.8	13.0	.58	58.5		
2001	8		97.1	59.9	35.7	14.8	.60	59.6		
2002	4		82.5	67.2	38.3	12.5	.60	57.1		
2003	9		85.6	62.4	41.1	10.7	.54	54.0		
2004	4		84.0	63.5	40.4	11.2	.55	55.0		
2005	10		95.4	58.6	37.1	11.8	.58	58.7		
2006	7		93.0	54.2	35.2	11.3	.52	52.2		
2007	5		93.0	59.2	38.4	11.4	.57	57.0		
2008	6		86.0	62.0	41.2	11.0	.50	54.1		
2009	8		95.0	58.5	37.4	14.1	.57	57.1		
2010	7		93.0	60.1	38.0	11.6	.56	56.6		
2011	3		79.0	64.9	43.2	8.9	.52	52.3		
2012	7		96.0	58.2	37.8	11.5	.57	56.8		
2013	4		76.0	67.4	43.9	10.3	.51	51.7		
2014	3		95.0	59.0	37.5	13.7	.57	57.0		
2015	6		90.0	61.1	39.0	13.8	.56	55.8		
2016	4		91.0	61.3	38.0	13.4	.56	56.6		
2017	8	101.0	93.0	100.0	32.6	10.7	.50	50.1		
2018	7	96.6	90.0	60.8	39.2	12.5	.60	55.6		
2019	9	78.1	76.0	67.7	43.3	10.2	.50	52.3		
2020	10	105.2	93.0	60.8	36.2	11.0	.58	58.1		
2021	13	87.9	79.0	58.5	36.5	10.4	.51	51.1		
2022	14	113.9	99.0	59.4	33.5	13.1	0.61	60.3		

YEAR BY YEAR AVERAGES

CLASS III - GRASS (Warm Season)

Year	# of Entries	RFQ	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
1988	2		84.7	70.1	34.9	7.9	.60	60.3	.28	.17
1989	2		66.9	78.0	42.2	7.8	.53	53.3	.26	.18
1990	5		77.0	71.4	38.4	8.3	.56	57.0	.43	.22
1991	7		73.4	72.5	41.2	8.2	.53	54.3	.33	.16
1992	2		76.5	70.8	39.5	9.7	.55	56.0	.31	.21
1993	1		74.8	73.9	38.9	11.5	.56	56.5	.56	.37
1994	7		75.3	72.7	38.8	8.4	.56	56.4	.33	.23
1995	4		80.7	67.5	39.0	10.0	.56	56.4		
1996	3		84.0	65.1	39.1	9.8	.56	56.3		
1997	2		92.3	61.0	37.7	14.0	.58	57.6		
1998	2		83.4	67.8	36.2	11.7	.59	59.1		
1999	4		83.0	68.0	40.3	12.6	.55	55.2		
2000	1		81.5	72.8	32.2	18.6	.63	60.5		
2001	1		89.7	67.9	30.1	12.8	.66	65.0		
2002	4		92.0	66.3	30.1	18.1	.66	65.0		
2003	2		109.5	56.0	30.1	19.5	.64	63.1		
2004	1		91.0	60.9	38.1	12.2	.57	57.3		
2005	3		104.0	56.8	32.3	17.0	.64	62.8		
2006	5		107.0	55.7	32.8	15.6	.63	62.4		
2007	4		95.0	59.5	36.7	13.2	.59	58.6		
2008	5		96.0	60.2	35.1	11.1	.60	59.7		
2009	3		113.0	52.6	33.2	15.9	.61	52.6		
2010	2		97.0	60.2	33.7	14.8	.61	60.2		
2011	1		115.0	53.0	30.0	18.7	.64	63.3		
2012	5		99.0	60.0	32.4	15.2	.62	61.3		
2013	1		100.0	57.7	34.1	12.9	.60	59.8		
2014	1		106.0	54.6	34.2	14.7	.60	59.7		
2015	2		95.0	59.6	36.0	12.1	.59	58.3		
2017	2	107.0	93.0	60.2	37.5	12.3	.57	57.0		
2018	2	127.3	107.0	55.6	32.9	14.9	.62	60.8		
2019	3	99.5	88.0	63.5	37.4	12.9	.57	63.5		
2020	3	101.0	87.0	64.5	36.7	12.8	.58	57.7		
2021	5	123.0	96.0	60.8	33.8	14.6	.61	60.1		
2022	7	118.6	100.0	62.1	29.1	12.4	0.65	63.9		

YEAR BY YEAR AVERAGES

CLASS IV - LEGUME-GRASS

Year	# of Entries	RFQ	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
1985	41				37.1	16.6	.58	58.2	1.02	.30
1986	59				32.3	19.3	.64	63.4	1.18	.32
1987	27		109.0	54.0	38.2	18.7	.56	56.7	1.17	.30
1988	25		135.3	45.4	29.4	19.0	.64	63.3	1.13	.27
1989	30		121.5	50.2	31.0	20.4	.63	62.5	1.20	.31
1990	27		119.7	49.2	33.6	20.0	.61	60.4	1.39	.34
1991	38		123.9	48.8	32.3	19.6	.62	61.3	1.36	.28
1992	11		108.5	55.0	35.7	16.5	.58	58.5	0.71	.29
1993	13		109.6	53.6	35.1	17.6	.59	59.0	0.98	.34
1994	26		109.0	55.2	34.3	15.2	.60	59.6	1.08	.35
1995	12		106.7	55.0	36.1	16.0	.58	58.2		
1996	21		134.6	46.2	31.4	18.2	.62	62.3		
1997	10		133.7	46.5	31.3	17.6	.62	62.1		
1998	20		136.2	45.6	31.0	20.2	.63	62.5		
1999	11		114.2	44.6	30.0	18.5	.55	55.3		
2000	14		125.3	47.6	33.4	19.4	.61	60.5		
2001	6		136.8	44.2	31.6	18.8	.62	61.9		
2002	8		117.8	51.1	33.5	18.0	.60	60.4		
2003	9		128.1	45.4	34.7	18.6	.60	59.3		
2004	6		125.5	45.6	36.2	18.2	.58	58.1		
2005	10		123.9	47.2	35.1	17.1	.59	59.0		
2006	7		134.0	44.7	33.2	18.0	.61	60.6		
2007	7		116.0	48.2	37.7	16.5	.57	57.5		
2008	4		94.0	57.1	42.7	12.0	.52	52.7		
2009	13		127.0	46.8	34.7	16.8	.60	59.3		
2010	7		136.0	44.1	32.7	18.3	.62	61.5		
2011	9		123.0	47.6	35.9	17.5	.59	58.4		
2012	8		140.0	43.8	33.4	18.7	.61	60.4		
2013	5		130.0	44.5	34.8	19.2	.60	59.3		
2014	2		128.0	44.8	35.5	17.9	.59	58.7		
2015	5		107.0	53.2	37.2	18.3	.57	57.3		
2016	3		115.0	48.8	34.6	15.0	.57	56.8		
2017	4	144.0	116.0	49.7	35.5	15.7	.59	58.7		
2018	7	158.9	117.0	49.5	35.2	17.2	.59	59.0		
2019	7	110.0	103.0	56.2	37.9	15.3	.57	57.1		
2020	7	123.9	113.0	52.2	34.2	14.6	.60	60.0		
2021	4	135.3	117.0	51.6	35.4	15.0	.60	59.1		
2022	6	133.8	121.0	52.5	32.8	14.1	.62	61.6		

YEAR BY YEAR AVERAGES

CLASS V - SUMMER/WINTER ANNUAL GRASS

Year	# of Entries	RFQ	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
1989	2		91.1	63.0	32.9	16.7	.63	62.3	.73	.31
1990	0		--	--	--	--	--	--	--	--
1991	1		83.8	65.8	36.0	14.5	.57	64.0	.47	.45
1992	2		95.7	60.4	36.0	14.3	.59	59.3	.44	.32
1993	2		82.5	67.0	37.8	9.3	.57	60.7	.57	.30
1994	1		82.0	65.8	39.6	10.4	.55	55.8	.30	.28
1995	1		91.9	58.9	39.4	15.3	.55	56.0		
1996	3		96.6	59.8	34.7	12.9	.61	60.5		
1997	1		103.8	55.9	34.1	6.7	.61	61.2		
1998	0									
1999	2		73.5	71.0	42.3	9.7	.52	53.2		
2000	2		104.3	56.4	33.2	11.4	.62	62.0		
2001	6		86.7	63.6	38.4	12.7	.57	57.0		
2002	1		104.4	54.8	35.2	8.1	.60	60.1		
2003	3		97.3	56.3	39.4	10.9	.55	60.1		
2004	1		74.0	68.3	44.5	7.8	.50	51.1		
2005	1		103.0	55.6	35.4	16.7	.60	59.9		
2007	5		90.0	60.0	39.7	11.0	.56	55.7		
2009	2		92.0	60.0	38.9	9.6	.56	55.9		
2010	1		89.0	62.6	37.3	12.9	.57	57.1		
2013	1		88.0	59.8	41.2	11.4	.53	54.0		
2014	1		124.0	50.2	28.3	11.4	.66	64.7		
2022	1	97.0	90.0	62.2	37.2	9.4	0.57	57.3		

CLASS XI - LARGE PACKAGE - Legume

Year	# of Entries	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
2004	2	119.5	46.5	38.1	16.7	.56	65.3		
2007	2	134.0	42.9	35.4	19.8	.59	58.8		
2012	1	189.0	33.3	27.1	20.3	.70	68.3		
2013	2	158.0	40.2	33.8	22.6	.61	62.1		

YEAR BY YEAR AVERAGES

CLASS XII - LARGE PACKAGE - Cool Season Grass

Year	# of Entries	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
2002	1	82.8	63.8	41.2	9.4	.53	54.3		
2003	1	101.0	56.0	36.2	12.1	.58	56.0		
2004	1	90.0	59.9	40.1	11.2	.55	55.3		
2005	1	73.0	70.0	43.4	7.9	.51	52.2		
2006	4	87.0	62.2	40.0	12.7	.56	55.5		
2007	2	95.0	58.3	39.3	11.7	.56	56.1		
2009	2	85.0	63.4	40.3	10.4	.54	54.7		
2010	1	87.0	62.7	38.8	12.7	.56	56.0		
2011	3	86.0	63.3	39.2	12.1	.55	55.6		
2012	3	79.0	66.6	41.7	10.7	.53	53.5		
2013	3	79.0	65.8	42.5	11.8	.52	52.9		
2014	2	88.0	62.0	39.2	15.1	.55	55.7		

CLASS XIII - LARGE PACKAGE - Warm Season Grass

Year	# of Entries	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
2003	1	87.0	59.2	42.7	8.2	.52	52.7		
2007	1	121.0	46.9	35.6	13.3	.60	59.7		
2008	1	71.0	71.4	44.5	7.7	.50	51.2		

CLASS XIV - LARGE PACKAGE - Grass Legume

Year	# of Entries	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
2003	1	122.0	48.3	32.9	19.3	.62	60.9		
2004	1	87.0	61.5	40.7	13.6	.54	54.4		
2005	1	99.0	55.5	38.6	10.7	.56	56.1		
2007	1	85.0	61.9	41.4	10.6	.53	53.8		
2009	4	116.0	49.5	35.3	14.7	.59	58.9		
2010	3	123.0	46.4	36.1	18.4	.58	58.2		
2011	4	89.0	61.0	40.1	11.4	.55	54.9		
2012	3	107.0	50.7	39.1	13.9	.56	55.7		
2013	1	77.0	64.7	45.5	9.7	.49	50.4		
2014	4	102.0	55.2	36.8	14.1	.58	57.6		

CLASS XV - LG PACKAGE - Summer/Winter Annual Grass

Year	# of Entries	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
2009	1	87.0	61.0	40.7	10.2	.54	54.4		
2010	1	81.0	64.2	41.9	10.6	.53	53.4		
2012	1	91.0	61.7	36.4	13.0	.58	57.9		

YEAR BY YEAR AVERAGES - HAYLAGE

CLASS I - LEGUMES

Year	# of Entries	RFQ	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
2017	6	137.0	139.0	41.6	35.8	20.2	.60	59.3		
2018	3	164.9	152.0	39.5	31.3	21.2	.65	63.8		
2019	2	210.3	179.0	34.8	28.5	22.2	.67	66.8		
2020	5	219.8	199.0	30.3	25.5	18.8	.72	70.0		
2021	2	230.5	202.0	32.5	26.8	19.4	.71	68.6		
2022	4	197.8	181.0	35.1	27.0	20.9	0.70	68.4		

CLASS II - GRASS

Year	# of Entries	RFQ	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
2019	1	100.5	81.0	65.4	41.3	11.2	.53	53.9		
2020	2	97.0	89.0	62.3	38.3	11.6	.56	56.4		
2022	1	104.0	89.0	63.0	36.5	12.6	0.58	57.8		

CLASS IV - LEGUME-GRASS

Year	# of Entries	RFQ	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
2017	1	118.0	110.0	50.9	37.0	15.2	.57	57.4		
2019	1	220.0	189.0	34.1	25.1	22.3	.69	67.2		
2020	2	182.5	162.0	38.3	28.9	20.5	.67	66.3		
2021	2	190.0	155.0	41.4	29.3	15.5	.68	66.0		
2022	1	189.0	170.0	36.8	27.7	19.8	0.69	67.7		

CLASS V - SUMMER/WINTER ANNUAL GRASS

Year	# of Entries	RFQ	RFV	NDF	ADF	CP	NEL	TDN	Ca	P
2017	2	109.0	99.0	58.8	36.1	17.8	.59	58.2		
2018	2	151.2	111.0	54.5	30.8	18.8	.63	62.6		
2019	2	133.2	117.0	50.5	32.7	16.0	.61	60.1		
2020	3	125.7	102.0	56.2	35.6	12.4	.59	58.6		
2021	1	219.0	179.0	36.3	24.7	18.1	.69	67.6		
2022	1	106.0	94.0	60.1	36.1	9.5	0.58	58.2		