

Misconceptions About High Efficiency Electric Motors Greg Stark

Most of us take for granted the convenience and work savings that electric motors provide, except when the monthly electric bill shows up. In targeting areas for cost reduction around the dairy, many areas receive more attention than electric motors and rightly so. After all, if a motor is performing its intended function, there is not much reason to replace it unless it quits. Occasionally, motors do reach the end of their useful life or burn up. That is the time to consider installation of an energy efficient motor. Not only are you comparing and determining the purchase price of the replacement motor, your final selection between an energy efficient and standard efficiency motor determines the electrical operating cost for the motor for as long as you will use it.

Today, many electric utilities will actually give you a rebate or cash payment for installing certain energy efficient motors to help offset any additional costs. While not all utilities have programs like this, it never hurts to check and see if yours does. Typically, the payments apply to any electric motor over 1 to 3 horsepower that meets efficiency guidelines outlined by the utility. As an example, one of the utilities in Texas provides incentives of \$25, \$36, and \$56, respectively, for installation of energy efficient 3, 5 and 7.5 horsepower electric motors.

There are a number of common misconceptions regarding energy efficient electric motors.

These include:

It's Only Important for Large Motors - Some people think that switching to energy efficient motors is only important for large motors and do not worry about smaller sized motors. In reality, most larger horsepower electric motors (10 horsepower and over) are pretty efficient. For larger motors the difference in motor efficiency between a standard efficiency motor and an energy efficient motor is relatively small. On the other hand, there are large efficiency differences for smaller horsepower motors. As an example, a standard efficiency 1 horsepower motor is between 50 and 60 percent efficient, while a new premium efficiency 1 horsepower motor can be 75 or 80 percent efficient. Due to the large differences in efficiency, changing to an energy efficient motor for smaller motors is generally more cost effective.

Energy Efficient Motors Cost Too Much - This statement had more truth to it five to ten years ago. Today it is possible to purchase a high efficiency motor for only slightly more than a standard efficiency motor and in certain cases, the same price or less. Many times the catalog supply stores or national chains, that move large quantities of energy efficient motors, price their equipment very competitively. In any event, if you have time to shop around, you can find an energy efficient electric motor to buy that costs only slightly more, and in some cases the same or less, than a standard efficiency motor.

Educational programs conducted by the Texas Agricultural Extension Service serve people of all ages regardless of socioeconomic level, race, color, sex, religion, handicap or national origin

Energy Efficient Motors Burn Out Faster - This statement is farther from the truth than the previous misconceptions. High efficiency motors are generally built with much higher quality materials (better alloys, thicker windings and insulation). The better construction and higher quality materials were what made these types of motors cost so much more in the past. As a general rule, the higher the efficiency of the motor, the higher quality materials and construction required to manufacture it.

As a final note, most energy efficient motors are worth their extra price because they will reduce the electrical operating cost over the course of their lifespan by more than the difference in their purchase cost. This "payback period", as it is commonly called, typically is between 1 and 2 years for most energy efficient motors. Think of the concept this way, if a standard efficiency motor cost \$250 and an energy efficient motor cost \$300, but the operating cost of the energy efficient motor was 10 cents less per day, then the extra \$50 in purchase cost is made up in reduced electrical costs in 500 days or 1.4 years.

Texas Intercollegiate Teams at National Contest Chris G. Woelfel

East Texas State University and Texas A&M University competed at the 1993 National Intercollegiate Contest at Madison, Wisconsin, on September 28. East Texas State placed 18th and Texas A&M placed 20th out of 30 teams. This was the first appearance at the National Contest for East Texas State with team members Kris Hague, Steven Hague and Parker Friedrich and coach, Dr. James Norwood. The Texas

A&M team included Kevin Kleibrink, Loretta Muenchow, Eric Palla and Donald Zapalac.

The results from Madison are in the table below.

The Texas A & M team went on to compete in the contest at the Mid-South Fair, placing 3rd out of 10 teams. Kevin Kleibrink ranked 2nd overall, although he was tied for High Individual.

	TEAM RANK			
	East Texas State	Texas A & M		
Ayrshire	18	27		
Brown Swiss	11	16		
Guernsey	21	17		
Holstein	26	24		
Jersey	18	16		
Milking Shorthorn	13	11		
Overall	18	20		

4-H Dairy Judging Team Goes to National

The Cooke County 4-H Dairy Judging Team of Daryl Kupper, Werner Becker III, Jennifer Kupper, Todd Martindale, and Coach Ray Carson, represented Texas at the 72nd National 4-H Dairy Cattle Judging Contest in Madison, Wisconsin September 28.

The team was 23rd overall and in reasons out of 35 teams. They placed 5th in Ayrshires, 18th in Jerseys,

21st in Brown Swiss, 23rd in Holsteins, and 34th in Guernseys.

Out of 136 contestants, Jennifer Kupper placed 23rd in Ayrshires; Todd Martindale was 24th in Ayrshires and 32nd in Brown Swiss; and Daryl Kupper was 30th in Jerseys.

Texas Dairy Short Courses Set for Early November

Free dairy short courses for producers have been set for early November in five different locations. Sponsored by The Texas Agricultural Extension Service, the series begins on November 8 in Nacogdoches, travels on successive days to Winnsboro, Decatur, and Stephenville, concluding in Brenham on November 12.

Dr. Paul H. Risk, who directs the Center for Resource Interpretation at Stephen F. Austin University, will keynote each morning session on Surviving the Environmental Movement.

The morning session also features Dr. David Beede on *Modernizing Dairy Cattle Feeding Programs*. Dr. Beede is professor of dairy science at the University of Florida. In June, Beede received the Applied Dairy Nutrition award from the American Dairy Science Association.

City/Location

According to short course coordinator and Extension dairy specialist Dr. Michael Tomaszewski, "The afternoon session topics vary from site to site -everything from heifer raising, body condition scoring, a panel on free-stalls, an update on EPA regulations, meeting the new somatic cell count regulations, SPA (Standardized Performance Analysis) and economics, and a survey of Texas dairy herds."

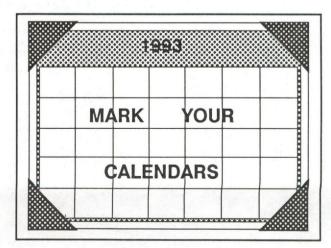
Registration and commercial exhibits begin at 9 a.m. Each one-day program runs from 10 a.m. to 3 p.m. Producers should check with their county Extension agent for information on specific afternoon topics at each location.

Major sponsors of the dairy short courses include Associate Milk Producers, Inc., West-Agro and COBA-Select Sires. No registration fee is required and lunch will be provided.

COMING EVENTS

Dure	<u>City Docution</u>
Nov 8	Texas Dairy Short Course, Fredonia
	Hotel, Nacogdoches
Nov 9	Texas Dairy Short Course, City Park
	Auditorium, Winnsboro
Nov 10	Texas Dairy Short Course, Sheriff's
	Posse Grounds, Decatur
Nov 11	Texas Dairy Short Course, Holiday
	Inn, Stephenville
Nov 12	Texas Dairy Short Course,
	Fairgrounds, Brenham
Feb 27 - Mar 1	National DHIA, San Antonio

Date



TEXAS SUMMARY FOR APRIL 1993

Information Summarized	4/30/92	3/31/93	4/30/93
DHI-DHIR Herds (cows)	511	505	505
DHI-DHIR COWS	105,278	108,027	108,606
Avg. Milk/Cow/Day	50.9	52.4	53.1
Avg. Percent Fat	3.5	3.6	3.6
Avg. Fat/Cow/Day	1.82	1.93	1.91
Avg. Feed Cost/Cwt. Milk	5.46	5.46	5.46
Private Herds	113	110	110
Private Cows	28,620	28,181	27,261
DHI-DHIR Herds (goats)	24	15	20
DHI-DHIR Goats	474	364	457
Total Herds Enrolled	648	630	635
Total Animals Enrolled	134,372	136,572	136,324

Ranking by Protein

Herd Owner	No. Cows	Milk (lbs)	Protein (lbs)
2X/Day Wilking			
Green Valley Dairy	315	70.8	2.42
Fine-Meadow Farm	218	70.9	2.26
James Veitenheimer Dairy	177	67.3	2.22
Wilfred A Hoff	245	64.8	2.22
Jeff Conrady Dairy	179	74.4	2.19
Dan Martin Dairies Inc	279	68.7	2.17
Kupper Bro Dairy	149	67.9	2.17
Davidson Dairy Inc	172	67.2	2.17
3X/Day Milking			
Kasbergen Dairy H-all	490	71.8	2.46
Cobb Dairy	557	73.2	2.33
Billy R Miller H-all	238	69.8	2.33
John Koster Dairy	513	69.4	2.29
Roy Roy Dairy Inc	193	73.6	2.26
Ray Johnston	1306	70.1	2.17
Jam-Dot Dairy	419	66.7	2.17
David Lawrence	212	70.0	2.15

These rankings are furnished by the DRPC at Raleigh for a given period of time. If a herd was tested late one month, it may cause that herd's average not to appear on that month's listing. The average would then be compared to other herd averages in the next month. Herds are ranked by test day averages. Only official herd averages are used. String averages are not used if they are not official. We have no control over how the herds appear on this list since it is a computer listing.

	Ranking	by	Milk	
-	1			

Herd Uwner	No. Cows	Milk (lbs)	Fat (%)	Protein (%)
2X/Day Milking				
Brian Vieth	60	75.9	3.6	2.8
Jeff Conrady Dairy	179	74.4	3.9	3.0
T M H Dairy	263	73.0	.0	.0
Fine-Meadow Farm	218	70.9	3.4	3.2
Green Valley Dairy	315	70.8	3.4	3.4
Frank Wolf	92	69.3	3.5	3.1
Hoffman Holsteins	265	69.2	3.3	3.1
Dan Martin Dairies Inc	279	68.7	3.4	3.2
3X/Day Milking				
Roy Roy Dairy Inc	193	73.6	3.3	3.1
Cobb Dairy	557	73.2	3.9	3.2
Kasbergen Dairy H-all	490	71.8	3.5	3.4
R W Hankins	102	71.3	3.3	2.9
Tony T Bos & Family	2681	70.8	3.4	2.9
Ray Johnston	1306	70.1	3.4	3.1
David Lawrence	212	70.0	3.6	3.1
Billy R Miller H-all	238	69.8	3.0	3.3

Top Ten 305-Day Lactation Records

Herd Ouner

Following are the ten highest DHI mature equivalent, 305-day lactation records for butterfat production reported to the Extension Dairy Science office during April from the Processing Center at Raleigh, North Carolina.

Herd Owner	Cow Identity	Breed	Date of Birth	% Fat	ME Milk	ME Fat
Jeff Conrady Dairy	74WDH1983	Н	01-18-90	4.5	27,955	1227
Ray Hoffman Jr Dairy	74WDE4174	Н	11-08-89	4.6	26,936	1227
Reiter & Sons Dairy	13488534	Н	09-01-88	3.9	32,006	1223
High Hill Dairy	13920549	Н	03-18-89	4.0	30,424	1195
Bud Shaw	12872683	Н	12-28-86	4.2	28,017	1178
High Hill Dairy	74WCV3655	Н	03-01-89	3.8	31,144	1169
Dr. Jimmy Horner	74WDH4908	Н	06-00-90	4.3	26,500	1148
Hinders Dairy Inc	13781262	Н	04-27-89	3.6	32,504	1145
Hinders Dairy Inc	14424008	Н	04-19-90	4.0	28,626	1145
High Hill Dairy	13959168	Н	05-23-89	4.1	27,989	1140

TEXAS SUMMARY FOR MAY 1993

Information Summarized	5/31/92	4/30/93	5/31/93
DHI-DHIR Herds (cows)	508	505	505
DHI-DHIR Cows	104,428	108,606	108,479
Avg. Milk/Cow/Day	49.7	53.1	51.8
Avg. Percent Fat	3.4	3.6	3.5
Avg. Fat/Cow/Day	1.72	1.91	1.85
Avg. Feed Cost/Cwt. Milk	5.49	5.46	5.50
Private Herds	114	110	110
Private Cows	28,668	27,261	28,601
DHI-DHIR Herds (goats)	25	20	21
DHI-DHIR Goats	494	457	488
Total Herds Enrolled	647	635	631
Total Animals Enrolled	133,590	136,324	137,568

High DHI Herds......Michael A. Tomaszewski

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Ranking by Protein

Herd Owner	No.	Milk	Protein
	Cows	(lbs)	(lbs)
2X/Day Milking			
Fine-Meadow Farm	216	72.1	2.26
Bobby J Traweek	66	63.2	2.17
Frank Wolf	92	70.3	2.16
Stanley J Haedge	193	67.8	2.13
Dan Martin Dairies Inc	281 .	66.1	2.10
Kupper Bro Dairy	148	68.1	2.09
Larry K Martindale	109	66.8	2.09
Ted Conrady Dairy	119	64.7	2.09
3X/Day Milking			
Roy Roy Dairy Inc	197	73.9	2.28
Cobb Dairy	557	76.0	2.24
Peter Boekhorst H-all	494	66.7	2.20
Winn Dairy	180	70.8	2.19
Ed Spain	32	69.9	2.19
Billy R Miller H-all	230	62.7	2.18
Ray Johnston	1302	70.3	2.14
Rancho De Leche	136	67.0	2.13

Ranking by Milk

No.	Milk	Fat	Protein
Cows	(lbs)	(%)	(%)
216	72.1	3.4	3.1
92	70.3	3.7	3.1
245	69.7	.0	.0
148	68.1	3.5	3.1
193	67.8	3.6	3.2
181	67.4	3.7	3.0
109	66.8	3.5	3.1
134	66.7	3.8	3.0
577	76.0	3.7	3.0
197	73.9	3.5	3.1
180	70.8	3.0	3.1
1302	70.3	3.4	3.1
2674	70.2	3.3	2.9
32	69.9	3.0	3.1
210	68.8	3.3	3.1
112	67.2	3.1	3.1
	Cows 216 92 245 148 193 181 109 134 577 197 180 1302 2674 32 210	Cows (lbs) 216 72.1 92 70.3 245 69.7 148 68.1 193 67.8 181 67.4 109 66.8 134 66.7 577 76.0 197 73.9 180 70.8 1302 70.3 2674 70.2 32 69.9 210 68.8	Cows (lbs) (%) 216 72.1 3.4 92 70.3 3.7 245 69.7 .0 148 68.1 3.5 193 67.8 3.6 181 67.4 3.7 109 66.8 3.5 134 66.7 3.8 577 76.0 3.7 197 73.9 3.5 180 70.8 3.0 1302 70.3 3.4 2674 70.2 3.3 32 69.9 3.0 210 68.8 3.3

Top Ten 305-Day Lactation Records

Following are the ten highest DHI mature equivalent, 305-day lactation records for butterfat production reported to the Extension Dairy Science office during May from the Processing Center at Raleigh, North Carolina.

Herd Owner	Cow Identity	Breed	Date of Birth	% Fat	ME Milk	ME Fat
Leo A Hoff	13946603	Н	09-01-89	4.1	35,398	1411
Ray Johnston	43SMB2472	н	12-02-89	4.9	22,654	1280
Jeff Conrady Dairy	10887382	н	07-18-81	4.4	27,873	1243
Leo A Hoff	13724354	н	03-01-89	3.8	34,467	1229
Stanley J Haedge	14129697	Н	06-22-90	4.6	26,837	1210
Leo A Hoff	13566028	н	08-01-87	4.1	29,035	1202
George de Vries	74TQG6919	н	03-02-88	3.1	39,240	1201
High Hill Dairy	74TWG5164	н	03-19-89	4.1	29,348	1190
Leo A Hoff	13560686	н	11-26-88	3.4	35,651	1189
High Hill Dairy	14087744	Н	03-16-90	3.8	31,847	1180

TEXAS SUMMARY FOR JUNE 1993

Information Summarized	6/30/92	5/31/93	6/30/93
DHI-DHIR Herds (cows)	507	505	505
DHI-DHIR Cows	104,196	108,479	112,515
Avg. Milk/Cow/Day	46.7	51.8	49.2
Avg. Percent Fat	3.4	3.5	3.5
Avg. Fat/Cow/Day	1.59	1.85	1.72
Avg. Feed Cost/Cwt. Milk	5.57	5.50	5.65
Private Herds	110	110	106
Private Cows	28,790	28,601	26,737
DHI-DHIR Herds (goats)	24	21	21
DHI-DHIR Goats	480	488	471
Total Herds Enrolled	641	631	632
Total Animals Enrolled	133,466	137,568	139,723

High DHI Herds......Michael A. Tomaszewski

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Ranking by Protein

Herd Owner	No. Cows	Milk (lbs)	Protein (lbs)
- OV/Dov Million			(,
2X/Day Milking	SAL SEL		
Bobby J Traweek	63	67.4	2.17
John North Dairy	83	61.5	2.07
Frank Wolf	92	69.1	2.06
Kupper Bro Dairy	141	62.8	2.04
James Veitenheimer Dairy	173	60.2	2.03
Dan Martin Dairies Inc	284	62.8	2.02
Fine-Meadow Farm	212	65.9	2.00
Stanley J Haedge	200	64.6	2.00
3X/Day Milking			
Roy Roy Dairy Inc	193	69.7	2.18
Jam-Dot Dairy	410	61.2	2.16
Tony T Bos & Family	2769	68.0	2.04
Andrew Moerman	124	66.6	2.04
Ray Johnston	1313	66.3	2.03
Lester Backus H-all	81	62.1	2.03
Desperado Dairy	414	63.2	2.02
Jack Reese	100	65.8	1.98
VUCK NEEDE	100	05.0	1.70

Ranking by Milk

Herd Owner	No.	Milk	Fat	Protein
	Cows	(lbs)	(%)	(%)
2X/Day Milking	States 1			inter letter
Frank Wolf	92	69.1	3.6	3.0
Bobby J Traweek	63	67.4	3.4	3.2
Fine-Meadow Farm	212	65.9	3.2	3.0
Stanley J Haedge	200	64.6	3.4	3.1
John S Wolf Dairy	131	64.6	3.0	3.0
Kainer Dairy	148	63.2	3.1	3.0
Ernie Prescher	146	63.0	3.4	3.1
Kupper Bro Dairy 3X/Day Milking	141	62.8	3.3	3.3
Roy Roy Dairy Inc	193	69.7	3.2	3.1
Ed Spain	29	68.3	2.9	2.9
Tony T Bos & Family	2769	68.0	3.4	3.0
Andrew Moerman	124	66.6	3.6	3.1
Ray Johnston	1313	66.3	3.5	3.1
Jack Reese	100	65.8	3.1	3.0
Don Smelley	193	65.2	3.0	3.1
Don Hinton Dairy	294	65.2	2.9	3.0

Top Ten 305-Day Lactation Records

Following are the ten highest DHI mature equivalent, 305-day lactation records for butterfat production reported to the Extension Dairy Science office during June from the Processing Center at Raleigh, North Carolina.

Herd Owner	Cow Identity	Breed	Date of Birth .	% Fat	ME Milk	ME Fat
Reiter & Sons Dairy	13586921	Н	10-25-88	3.9	40,445	1576
Green Valley Dairy	74WCQ9258	Н	03-10-89	4.3	32,266	1356
Hinders Dairy Inc	74WCU1101	Н	05-21-87	4.4	29,859	1340
Reiter & Sons Dairy	14570557	Н	10-25-90	4.3	27,529	1257
Kurt Averhoff	74WDE5568	Н	05-10-89	4.5	28,277	1247
Wilfred A Hoff	12508171	Н	11-28-85	4.2	29,679	1240
Green Valley Dairy	134860349	Н	09-04-88	3.8	32,775	1227
Hoffman Holsteins	74WD I 7286	Н	05-00-90	3.7	33,922	1215
Leo A Hoff, Jr	13531764	н	11-16-88	4.2	28,457	1193
Lane Jones	43SHK4234	Н	07-31-90	3.4	35,463	1191

TEXAS SUMMARY FOR JULY 1993

Information Summarized	7/31/92	6/30/93	7/31/93
DHI-DHIR Herds (cows)	516	505	506
DHI-DHIR Cows	104,956	112,515	112,852
Avg. Milk/Cow/Day	43.7	49.2	46.7
Avg. Percent Fat	3.3	3.5	3.5
Avg. Fat/Cow/Day	1.48	1.72	1.64
Avg. Feed Cost/Cwt. Milk	6.06	5.65	5.76
Private Herds	110	106	105
Private Cows	28,310	26,737	26,218
DHI-DHIR Herds (goats)	24	21	19
DHI-DHIR Goats	463	471	419
Total Herds Enrolled	650	632	630
Total Animals Enrolled	133,729	139,723	139,489

High DHI Herds.....Michael A. Tomaszewski

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Ranking by Protein

Herd Owner	No. Cows	Milk (lbs)	Protein (lbs)
2X/Day Milking			
Fine-Meadow Farm	212	64.6	2.09
Green Valley Dairy	342	59.1	2.08
)-Lar Dairy	68	64.6	2.07
ester Backus H-all	85	64.2	1.97
stanley J Haedge	194	58.7	1.94
leath Bamber Dairy Farm	53	63.8	1.93
eorge DeVries	1388	58.9	1.90
limmy Horner # 3X/Day Milking	70	61.6	1.88
ay Johnston	1310	70.1	2.13
oy Roy Dairy Inc	200	68.6	2.10
am-Dot Dairy	403	63.7	2.06
on Smelley	199	67.1	2.04
d Spain	32	68.5	2.00
riple X Dairy	519	57.5	2.00
ligh Hill Dairy	474	63.5	1.96
ony T Bos & Family	2810	63.8	1.93

Ranking by Milk

Herd Owner	No. Cows	Milk (lbs)	Fat (%)	Protein (%)
2X/Day Milking				
D-Lar Dairy	68	64.6	3.4	3.2
Fine-Meadow Farm	212	64.6	3.1	3.3
Lester Backus H-all	85	64.2	3.3	3.1
Heath Bamber Dairy Farm	53	63.8	3.4	3.0
Ernie Prescher	150	61.7	3.4	2.9
Jimmy Horner	70	61.6	3.4	3.1
Frank Wolf	92	61.5	3.6	3.0
Green Valley Dairy 3X/Day Milking	342	59.1	3.4	3.5
Ray Johnston	1310	70.1	3.5	3.1
Roy Roy Dairy Inc	200	68.6	3.1	3.1
Ed Spain	32	68.5	3.6	2.9
Don Smelley	199	67.1	3.3	3.1
Dusty Howze H-all	264	64.5	3.5	2.9
T M H Dairy	222	64.2	.0	.0
Tony T Bos & Family	2810	63.8	3.5	3.0
Jam-Dot Dairy	403	63.7	3.3	3.2

Top Ten 305-Day Lactation Records

Following are the ten highest DHI mature equivalent, 305-day lactation records for butterfat production reported to the Extension Dairy Science office during July from the Processing Center at Raleigh, North Carolina.

Herd Owner	Cow Identity	Breed	Date of Birth	% Fat	ME Milk	ME Fat
Owen & Janet Sieperda	34AVX4690	Н	10-25-87	4.4	32,451	1401
Leo Hoff, Jr	13584058	Н	03-04-88	4.0	32,843	1305
Texas A&M University	13247012	н	10-28-87	4.5	27,320	1223
Jeff Conrady Dairy	74WDB1370	н	09-06-88	3.6	34,965	1221
Larry K Martindale	13611731	н	12-18-88	4.3	28,726	1214
Kurt Averhoff	74WCP2903	н	08-09-85	4.7	26,000	1209
Danny Schenk	74TZA7322	н	07-26-89	4.2	28,956	1207
Dale Wolf Dairy	74TED5834	н	03-10-87	4.0	29,938	1198
James Veitenheimer Dairy	14131064	Н	08-01-89	3.6	33,609	1185
Tony T Bos & Family	74DEG2586	Н	02-23-82	4.1	28,415	1184

TEXAS SUMMARY FOR AUGUST 1993

Information Summarized	8/31/92	7/31/93	8/31/93
DHI-DHIR Herds (cows)	511	506	503
DHI-DHIR Cows	105,310	112,852	112,319
Avg. Milk/Cow/Day	42.3	46.7	43.9
Avg. Percent Fat	3.4	3.5	3.5
Avg. Fat/Cow/Day	1.47	1.64	1.56
Avg. Feed Cost/Cwt. Milk	6.00	5.76	6.13
Private Herds	108	105	107
Private Cows	27,909	26,218	26,278
DHI-DHIR Herds (goats)	22	19	18
DHI-DHIR Goats	442	419	411
Total Herds Enrolled	641	630	628
Total Animals Enrolled	133,661	139,489	139,008

High DHI Herds......Michael. A. Jomaszewski

These rankings are furnished by the DRPC at Raleigh for a given period of time. If a herd was tested late one month, it may cause that herd's average not to appear on that month's listing. The average would then be compared to other herd averages in the next month. Herds are ranked by test day averages. Only official herd averages are used. String averages are not used if they are not official. We have no control over how the herds appear on this list since it is a computer listing.

Ranking by Protein

Herd Owner	No. Cows	Milk (lbs)	Protein (lbs)
2X/Day Wilking			
Leo Hoff, Jr	158	54.1	1.79
Tom Hoff	107	56.4	1.78
George De Vries	1388	55.7	1.78
Bud Shaw	94	53.3	1.76
Charles H Vieth	135	55.5	1.75
James Veitenheimer Dairy	168	52.2	1.74
Wilfred A Hoff H-all	268	55.0	1.72
Hinders Dairy Inc.	254	54.5	1.72
a 3X/Day Milking			
Desert View Dairy	1536	58.9	1.82
Don Smelley	188	54.4	.1.77
Gores #4	428	52.8	1.75
Triple X Dairy	512	55.6	1.72
Donald & Cheri De Jong	1456	55.7	1.71
Keith Broumley	406	54.5	1.68
Highland Cattle Company	791	53.7	1.68
Carr Dairy	170	51.6	1.68

Ran	king	by	MI	lk

Herd Owner	No.	Milk	Fat	Protein
	Cows	(lbs)	(%)	(%)
2X/Day Milking				
Bobby J Traweek	62	64.5	3.5	3.2
Brent Eady	338	61.6	3.4	3.1
Lester Backus H-all	84	60.8	3.1	3.2
Fine-Meadow Farm	213	58.1	3.4	3.3
Green Valley Dairy	346	57.4	3.4	3.5
Tom Hoff	107	56.4	3.5	3.2
Jimmie & Lynda Bowen	10	55.9	3.8	3.0
George De Vries	1388	55.7	3.1	3.2
3X/Day Milking				
Roy Roy Dairy Inc	199	68.3	3.1	3.1
Ed Spain	30	66.0	3.3	3.0
Ray Johnston	1341	65.0	3.4	3.1
Dusty Howze H-all	277	64.3	3.4	3.3
Rio Grande Dairy	1869	62.0	3.5	3.1
Tony T Bos & Family	2804	60.8	3.4	3.0
High Hill Dairy	470	59.4	3.5	3.3
Desert View Dairy	1536	58.9	3.5	3.1

Top Ten 305-Day Lactation Records

Following are the ten highest DHI mature equivalent, 305-day lactation records for butterfat production reported to the Extension Dairy Science office during August from the Processing Center at Raleigh, North Carolina.

Cow Identity	Breed	Date of Birth	% Fat	ME Milk	ME Fat
74TRP9047	Н	10-07-88	4.3	31,159	1290
74TLT4521	Н	06-19-87	4.0		1267
74WDJ1111	Н	09-00-89	4.1		1266
74WDH6752	Н	06-00-89	4.1		1227
74WDE4345	Н	07-22-89	4.2		1224
74TXZ6350	Н	10-08-89	3.9		1221
13621220	Н	02-05-89	4.0		1219
13402229	Н	05-24-88	3.9		1210
14018008	Н				1202
13416238	Н	01-07-88	4.1	29,992	1197
	74TRP9047 74TLT4521 74WDJ1111 74WDH6752 74WDE4345 74TX26350 13621220 13402229 14018008	74TRP9047 H 74TLT4521 H 74WDJ1111 H 74WDH6752 H 74WDE4345 H 74TXZ6350 H 13621220 H 13402229 H 14018008 H	74TRP9047 H 10-07-88 74TLT4521 H 06-19-87 74WDJ1111 H 09-00-89 74WDH6752 H 06-00-89 74WDE4345 H 07-22-89 74TXZ6350 H 10-08-89 13621220 H 02-05-89 13402229 H 05-24-88 14018008 H 03-27-90	74TRP9047 H 10-07-88 4.3 74TLT4521 H 06-19-87 4.0 74WDJ1111 H 09-00-89 4.1 74WD46752 H 06-00-89 4.1 74WD6752 H 06-00-89 4.1 74WD6752 H 07-22-89 4.2 74TX26350 H 10-08-89 3.9 13621220 H 02-05-89 4.0 13402229 H 05-24-88 3.9 14018008 H 03-27-90 3.6	74TRP9047 H 10-07-88 4.3 31,159 74TLT4521 H 06-19-87 4.0 32,645 74WDJ1111 H 09-00-89 4.1 32,030 74WDH6752 H 06-00-89 4.1 30,386 74WDE4345 H 07-22-89 4.2 30,221 74TXZ6350 H 10-08-89 3.9 32,678 13621220 H 02-05-89 4.0 30,906 13402229 H 05-24-88 3.9 31,754 14018008 H 03-27-90 3.6 34,419