Telephone: (706) 542-2581 Fax: (706) 542-9316

http://www.ads.uga.edu/extension/newsletters.html



#### Dear Dairy Producers:

The enclosed information was prepared by the University of Georgia Animal and Dairy Science faculty in Dairy Extension, Research & Teaching. We trust this information will be helpful to dairy farmers and dairy related businesses for continued improvement of the Georgia Dairy Industry.

#### **INSIDE THIS ISSUE: October November December 2016**

The 4th Annual Southern Quality Milk Initiative Conference in Tifton a great success By: Dr. Stephen C. Nickerson	Page 2 - 3
UGA dairy students learn consulting, networking at Southern Regional Dairy Challenge By: Sharon Dowdy	Page 4 - 5
Nutrition, feed management and milk quality By: Dr. John Bernard	Page 6 - 7
A preliminary study to evaluate cooling in grazing dairy By: Dr. Sha Tao, Ruth M. Orellana Rivas, and Dr. John Bernard	Page 8 - 12
Important dates	Page 13
Top 20 DHIA high herds by test day milk and fat production & low herds for SCC score	Page 14 - 22

Sincerely,

Sha Tao

Assistant Professor



# The 4<sup>th</sup> Annual Southern Quality Milk Initiative Conference in Tifton a great success **Stephen C. Nickerson**, Professor

706-340-3367

scn@uga.edu

The Southern Quality Milk Initiative (SQMI) held its 4<sup>th</sup> Annual Conference in Tifton, GA on Wednesday and Thursday, November 16-17, 2016. The SQMI is a program designed to enable dairy farmers to lower herd SCC and move profitably toward production practices compatible with the concept of a sustainable dairy industry in the Southeast. This program was developed by milk quality professionals from six Southeast Land-Grant Universities, and targets both challenged dairy farms as well as those operations producing superior quality milk as demonstration herds. The SQMI group has integrated outreach, education, and research initiatives to lower SCC, improve milk quality, and contribute to lower costs and greater revenues on-farm.

This year's conference was a great success, with 80 individuals in attendance, including dairy producers, veterinarians, dairy industry and government representatives, and university faculty members and students; approximately 35,000 cows were represented (Figure 1). Attendees were offered information on optimizing feeding programs to maximize milk quality, mastitis decision making tools, interpreting bulk tank bacteria and somatic cell counts, motivating employees to improve milk quality, how genetics and the environment influence mastitis, and managing heat stress. A producer panel of successful dairymen (Figure 2) provided their sage advice on best management practices to lower SCC, and an afternoon trip to the UGA Tifton Dairy provided workshops on milking procedures and equipment training, bedding management for low SCC, and transition cow management.

The SQMI membership certainly appreciates the audience attendance at this conference, and thanks our speakers and panel discussants for helping to make this meeting as success. The 5<sup>th</sup> annual conference will take place in Knoxville, TN on November 16-17, 2017.

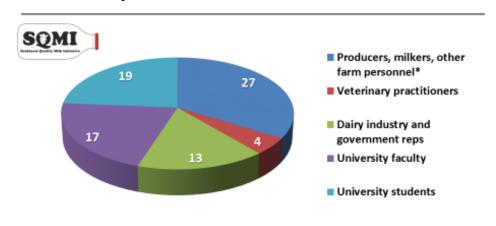


Figure 1. Audience Demographics at the 2016 SQMI Annual Conference, Tifton, GA



<sup>\*35,000</sup> cows represented based on dairy farms attending the conference.



**Figure 2.** Producer Panel from left to right: Scott Glover, Mark Rogers, and Eric Diepersloot.



## UGA dairy students learn consulting, networking at Southern Regional Dairy Challenge

#### Sharon Dowdy, Senior Public Relations Coordinator

College of Agricultural and Environmental Sciences

University of Georgia

Phone: 770-229-3219, Email: sharono@uga.edu

Georgia dairyman Adam Graft listened carefully as teams of college students give their educated opinions on how he manages his 3,200-acre Americus, Georgia, dairy farm.

More than 80 students from 15 agricultural colleges across the Southeast visited Graft's farm as part of the annual Southern Regional Dairy Challenge held in Cordele, Georgia, Nov. 13-15. Hosted this year by the University of Georgia College of Agricultural and Environmental Sciences, the event is designed to prepare college students for careers in the dairy industry.

Divided into intercollegiate teams, the students toured Graft's farm, Leatherbrook Holsteins, on Monday, Nov. 14. They then collaborated to develop recommendations on farm management and presented their findings before Graft and a team of dairy industry judges on Tuesday, Nov. 15. Each team gave their recommendations based on nutrition, reproduction, milking procedures, animal health, housing and financial management. They also had to take into consideration the farm operation's ultimate goal and vision.

"The students' recommendations and thoughts are organized into the strengths, weaknesses, opportunities and threats they observe on the farm. In other words, what is the farm doing well and where are there some opportunities for improvement?" said UGA animal and dairy science Assistant Professor Jillian Fain Bohlen.

"They must provide the farmer with an outline of how to improve and what this will ultimately mean to him in the long run, normally for enhanced profitability," said Bohlen, who hosted and organized this year's event on behalf of UGA.

A 2000 animal health graduate of UGA's Department of Animal and Dairy Science, Graft knows the students need to evaluate farm operations in order to learn to be agricultural consultants. After practicing at a dairy in California for four years, Graft returned to Georgia in 2005 to lease a dairy. He and his wife purchased their current 6,000-cow dairy farm in 2008.

Since then, the farm couple has steadily expanded, adding several freestall barns and a rotary parlor, and increasing their acreage from 1,000 acres to 3,200 acres.

"Our dairy is a clean slate for the students to pick through," Graft said. "I was told to be ready to have really thick skin, and I do. The students had some really valid points. This experience teaches them how to consult on a facility. It's great to learn in a classroom, but this helps them take it to the next level."

Following the presentations, the judges evaluated the student team's recommendations. As a whole, they reminded the students to listen to the farmer and not to evaluate based solely on farm records.

"[Dairy farming] is a way of life and we all enjoy it, but at the end of the day, it's about the money. Did you bring any dollars to the table? What happens if [the farmer] does this versus this?" said Andy Fielding, a senior dairy technical consultant for Purina Mills and one of this year's Southern Region Dairy Challenge judges. "If there is a problem, a consultant's job is to



identify what the farmer can do and how he can make money."

This was CAES student Nathan Webb's third dairy challenge event. Webb, who plans to earn a doctorate in dairy nutrition and to someday own his own dairy, enjoys meeting and working with dairy science students from other universities.

"It's surprising how many of these students I run into later at American Dairy Science Association events and the national dairy challenge event," said Webb, who will be attending the North American Intercollegiate Dairy Challenge in March 2017.

Bohlen says the regional conference also prepares her students for the North American challenge, which will be held in Visalia, California.

"This was a fantastic opportunity for these students to learn on such a tremendous dairy operation and from the industry professionals at the conference," Bohlen said.

For more information on studying animal and dairy science at CAES, go to www.caes.uga.edu/departments/animal-dairy-science.html.



**Image:** CAES students were among those competing at the 11th Annual Southern Regional Dairy Challenge in Cordele, Georgia. Pictured left to right are Sarah Jane Thomson, Kayla Alward, Nathan Webb and Mary Wright.



# Nutrition, feed management and milk quality Dr. John K. Bernard,

Professor, Dairy Nutrition and Management

Phone: 229-391-6856, Email: jbernard@uga.edu

Proper nutrition is important for providing nutrients in support of milk production and reproduction. Nutrition also affects milk quality by providing the necessary nutrients needed to maintain optimum immune function and minimize metabolic disease. In addition to providing the proper balance of nutrients, management decisions that insure cows consistently receive the ration that was formulated and provide the proper environment to fully utilize those nutrients are also important. While there are supplements or additives that have been proven to improve milk quality as part of a properly managed program, there are no feed supplements or additives that will completely prevent or cure poor milk quality!

Supplements that improve immune function and maintain lower a somatic cell count (SCC) normally function to reduce oxidative stress which occurs through normal metabolism as well as instances where excess oxidizers are consumed through water or feed or occur as a result of disease. Several trace minerals and vitamins are components of enzymes that function as an antioxidant to neutralize oxidative radicals. These include selenium, copper, zinc, manganese, vitamin A, vitamin C, and vitamin E. It is important to have adequate amounts of each of these nutrients in the diet, but research has shown that the form of trace mineral provided also makes a difference compared to their traditional inorganic sources. Trace minerals in the form of chelated minerals in which the mineral is bound to a metal ion, protein, or amino acid have improved absorption and availability. Some are also available as mineral complex which is a mixture the mineral and organic compound. Most companies that produce these products have controlled research data to validate the efficacy and potential for maintaining lower SCC and reducing the number of clinical mastitis cases. There is considerable variation in research trials which is often due to other factors such as deficiencies of other nutrients, management or environmental issues, or other confounding factors that did not allow the product to perform as designed. For most of these products, results from multiply research trials are used to validate their effectiveness.

The importance of balance when supplementing minerals and vitamins has been demonstrated numerous times. In the case of selenium and vitamin E, if selenium is not provided in adequate amounts no or a limited response will be observed when additional vitamin E is fed. Although both work together, one will not substitute for the other. As mentioned above, organic selenium sources have been shown to improve immune function compared to inorganic sources. Also, the old adage: if a little bit work good, then more should be better is not the case for mineral supplementation. One example is copper. Copper is a component of enzymes involved with immunity, metabolism and normal organ function. Feeding adequate amounts is important for normal, but feeding too much copper will cause toxicity.

Other additives that function to improve immunity have also been reported to reduce somatic cell count. The key for all supplements and additives is to evaluate them based on data from controlled research trials. Be cautious of products that claim to work just as good as proven products but do not have the data to support their claims.

Another important aspect for reducing new cases of mastitis and maintaining or lowering SCC is nutrition management. Most new cases of mastitis occur around dry off and calving. In the Southeast, our hot, humid climate results in heat stress which reduces intake and immunity even



more for cows during the transition period. This is frequently aggravated by moving cows from pen to pen during the transition period increasing social stress at a time when they are most vulnerable to metabolic diseases. Management practices that reduce heat stress, maintain or increase intake, minimize the degree of negative energy balance, and reduce the stress from pen moves will maintain a more viable immune system that can fight off any mastitis challenges that would increase SCC or result in a new case of mastitis. This is an area of management that many producers have made advances which have contributed to healthier cows (reduced rates of metabolic disease) and lowered SCC.

Like other aspects of your operations, it is good to review practices related to nutrition and nutrition management that will help reduce or maintain low SCC. Today most cooperatives and processors pay premiums for low SCC as well as penalize those who do not make efforts to improve milk quality. As stated earlier, there are no magic additives that will correct lower SCC or prevent mastitis completely. However, there are supplements that can be used as part of a balanced nutrition program that is properly managed and have been shows to reduce SCC through improvements in immune function.



#### A preliminary study to evaluate cooling in grazing dairy

Sha Tao, Ph.D., Assistant Professor,

229-386-3216 / stao@uga.edu

Ruth M. Orellana Rivas, Graduate Student,

ruth.orellanar25@uga.edu

John K. Bernard, Ph.D., PAS, Dipl. ACAN, Professor

jbernard@uga.edu

Department of Animal and Dairy Science, UGA-Tifton

The research in heat stress management in grazing dairies is lacking. In addition to the impaired productivity and reproduction, for grazing dairy cattle, heat stress causes reduced grazing activity, lower forage intake, and inefficient utilization of pasture. Therefore, heat stress not only negatively impacts animal performance but also substantially influences the entire plant/animal systems. However, compared with confinement dairies in which cooling settings have been standardized, optimal cooling strategies in grazing dairies have not been identified. In Georgia, cooling cows using sprinklers on irrigation pivots is widely used for heat abatement on pasture during summer time along with misting systems in the holding pen before milking. In addition to pivots and holding pen misting, however, other cooling strategies may or may not exist and varies from farm to farm. Additionally, the diversity of the cooling options in grazing dairies increases the difficulties to make one general recommendation from one farm for all. Thus, it is necessary to conduct heat abatement evaluations for individual dairies to provide individual recommendations.

This past summer, 2016, we conducted a preliminary study to evaluate the cooling systems used by three hybrid dairies operated by Beryl Landis. These 3 dairies located near Waynesboro, GA all share a similar climate. The dairies have the same nutritionist, and use similar general management, and nutritional plans. All three dairies have rotary parlors with open holding pens equipped with misters overhead for cooling. While grazing, cows in all three diaries were cooled by a sprinkler system attached to pivots. Cows were milked twice daily at a similar time in the morning and afternoon, and fed a partial TMR (pTMR). The differences among three dairies are the schedules for pTMR feeding and the cooling settings in the dry lot or feeding pen (Figure 1).

To explore differences between the cooling options among these three dairies, in August 2016, we randomly selected 10 lactating cows from each dairy and inserted a temperature probe coupled to a CIDR to measure the vaginal temperatures every 10 min over a 3 day period. To assess the degree of heat stress, the environmental data were extracted from local weather stations. As shown in Figure 2, within a day, the lowest air temperature appeared around 5 am, and the highest temperature was in the afternoon around 3 pm but the wind speed was the strongest in the afternoon as well.

The body temperature data are shown in figure 3, 4, and 5 for three dairies, along with our interpretation based on ambient environment and the management. In general, for all three dairies, the holding pen cooling effectively reduced cow body temperature before going to parlor, and the pivot cooling on pasture during the day was also effective to maintain body temperature but cannot further reduced it. In all three dairies, the body temperature of the cow increased when going back to pasture after milking and pTMR feeding, especially after the PM



milking, and cows accumulated more heat (higher increases in body temperature) before midnight when no cooling was provided on pasture. When comparing the body temperature patterns among three dairies, cows at the Pineland dairy had much higher increases in body temperature after going back to pasture during afternoon, indicating the time moving back to pasture can influence the heat load received by cows. The cooling setting in the feedlot of Birdsville dairy (overhead misters) seems to be the most effective among all three dairies. From these data, we offered several recommendations: 1. Install existing lane showers to cool cows after milking and feeding, especially after feedlot, to maintain cow body temperature while walking back to pasture; 2. Provide additional cooling before midnight on pasture, perhaps by keeping the sprinklers on the pivot operating; more research is needed to confirm the effectiveness of pivot cooling after dark; 3. If possible, moving cow back to pasture later in the afternoon when the air starts to cool off. In addition to the general recommendations, we provided specific recommendations for individual dairies during the face to face meeting after the evaluation.

This type of evaluation was very helpful for the producer to better minimize heat stress. As a result, we are planning to perform additional heat audits in other grazing producers within the state in 2017. In order to understand the current cooling setting of GA grazing dairies and help producers optimize their heat abatement strategies, we have proposed a study to evaluate the cooling option in individual dairies in GA. In this study, we will conduct the heat abatement evaluations during the summer time in dairies to examine current cooling setting on cow body temperature and behavior, make recommendations for individual dairies and present to producers. Further, if recommendations are adopted, we will perform the additional audit to confirm the effectiveness of the adopted technology. Currently we have several producers who have volunteered and we are hoping to have most, if not all, grazing producers in the state to participate this project. And if you are interested in, please contact Sha Tao (stao@uga.edu) or John Bernard (jbernard@uga.edu).



#### Birdsville dairy:

Cows stay in feedlot and have access to pTMR for 3.5 h after milkings. The cooling setting of feedlot includes overhead misters and only operates during afternoon feeding. No cover or fans



#### Pineland dairy:

Cows stay in feedlot and have access to pTMR from 2 h before until 2 h after milking. The feeding pen is a covered barn with an open ridge. The overhead sprinklering system is installed but only operates during afternoon feeding before milking.



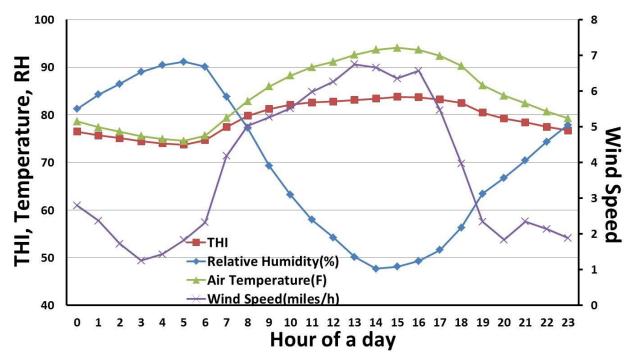
### Milky Way dairy:

In AM, cows stay in feedlot for 3 h after milking, while in PM. Cows stay in feedlot from 1 h before until 3-4 h after milking. The feeding pen is a covered barn with an open ridge and installed fans and soakers over the feed bunks operated by temperature controller similar to the one in a freestall barn.

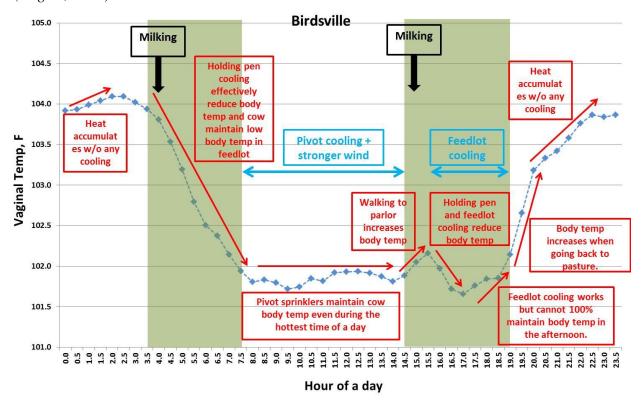


**Figure 1**. The cooling setting of three grazing dairies located near Waynesboro, GA.



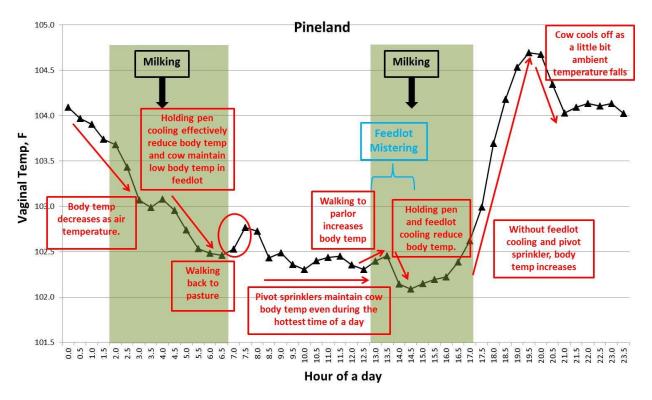


**Figure 2.** The ambient environment of Midville, GA during the 3 d period of heat audit (August, 2016).

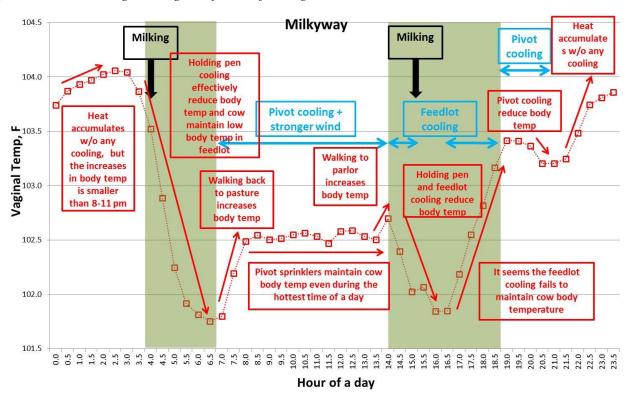


**Figure 3**. The body temperature of cows in Birdsville dairy and interpretation. Green shade represents time during milking and feedlot feeding.





**Figure 4.** The body temperature of cows in Pineland dairy and interpretation. Green shade represents time during milking and feedlot feeding.



**Figure 5.** The body temperature of cows in Milkyway dairy and interpretation. Green shade represents time during milking and feedlot feeding.



# 1mportant Dates 2016-2017

## **Georgia Dairy Meeting**

- January 16-18, 2017
- Savannah, GA
- <a href="http://www.gadairyconference.com/?utm\_campaign=GMP%2BEnews%2BAug19\_16&utm\_medium=email&utm\_source=Enews%2BSept9\_16">http://www.gadairyconference.com/?utm\_campaign=GMP%2BEnews%2BAug19\_16&utm\_medium=email&utm\_source=Enews%2BSept9\_16</a>



Top GA DHIA By Test Day Milk Production – September 2016												
					Test	Day Ave	rage		Yearly Avo	erage		
<u>Herd</u>	County	Br.	Test Date	<sup>1</sup> Cows	% Days in Milk	Milk	% Fat	TD Fat	Milk	Lbs. Fat		
RODGERS' HILLCREST FARMS INC.*	McDuffie	Н	9/14/2016	436	88	100.1	3.3	2.92	31283	1096		
DAVE CLARK*	Morgan	Н	9/5/2016	1180	88	92	3.5	2.77	29567	1050		
DANNY BELL*	Morgan	Н	9/8/2016	267	89	87.4	3.9	3.2	26171	1008		
J.EVERETT WILLIAMS*	Morgan	X	9/12/2016	1978	88	87.2	3.8	2.92	27304	1060		
SCOTT GLOVER	Hall	Н	8/26/2016	212	87	85.5	3.9	2.99	26823	1003		
EBERLY FAMILY FARM*	Burke/Butts	Н	9/20/2016	853	87	84.8	3.7	2.6	28269	1013		
PHIL HARVEY #2*	Putnam	Н	9/16/2016	1331	90	80.9	3.6	2.52	26265	925		
A & J DAIRY*	Wilkes	Н	9/30/2016	403	91	77.6			28129			
B&S DAIRY*	Whitfield/Wilcox	Н	9/23/2016	761	87	77	3.5	2.34	25823	909		
R & D DAIRY*	Laurens/Lee	Н	9/27/2016	377	90	76.7	3.8	2.48	26787	991		
DOUG CHAMBERS	Jones	Н	9/28/2016	442	90	74	3.5	2.24	25349	843		
COASTAL PLAIN EXP STATION*	Tift	Н	9/17/2016	276	88	71.4	5.9	3.64	24347	938		
LARRY MOODY	Ware/Warren	Н	9/29/2016	1024	88	68.9			23549			
CECIL DUECK	Jeff Davis/Jefferson	Н	8/15/2016	69	88	68.7	3.2	1.71	21875	736		
TROY YODER	Macon	Н	8/31/2016	246	89	67.6	3.8	2	24386	953		
AMERICAN DAIRYCO- GEORGIA,LLC.*	Miller/Mitchell	Н	9/7/2016	3911	90	67.4	3.4	2.04	24135	905		
HORST CREST FARMS	Burke/Butts	Н	9/26/2016	203	87	66.5	3.7	2.07	21863	824		
IRVIN R YODER	Macon	Н	9/5/2016	186	93	65.6	3.7	1.91	25365	903		
SOUTHERN SANDS FARM	Burke/Butts	Н	8/20/2016	82		64.1	3.6	1.73				
DAVID ADDIS	Whitfield/Wilcox	Н	9/3/2016	30	80	62.9	2.9	1.42	19187	550		

<sup>&</sup>lt;sup>1</sup>Minimum herd or permanent string size of 20 cows. Yearly average calculated after 365 days on test. Test day milk, marked with an asterisk (\*), indicates herd was milked three times per day (3X). Information in this table is compiled from Dairy Records Management Systems Reports (Raleigh, NC).



	Top GA DHIA By Test Day Fat Production – September 2016													
					Test	Day Ave	rage		Yearly Av	erage				
<u>Herd</u>	County	<u>Br.</u>	Test Date	Cows	% Days in Milk	Milk	% Fat	TD Fat	Milk	Lbs. Fat				
DANNY BELL*	Morgan	Н	9/8/2016	267	89	87.4	3.9	3.2	26171	1008				
SCOTT GLOVER	Hall	Н	8/26/2016	212	87	85.5	3.9	2.99	26823	1003				
RODGERS' HILLCREST FARMS INC.*	McDuffie	Н	9/14/2016	436	88	100.1	3.3	2.92	31283	1096				
J.EVERETT WILLIAMS*	Morgan	X	9/12/2016	1978	88	87.2	3.8	2.92	27304	1060				
DAVE CLARK*	Morgan	Н	9/5/2016	1180	88	92	3.5	2.77	29567	1050				
EBERLY FAMILY FARM*	Burke/Butts	Н	9/20/2016	853	87	84.8	3.7	2.6	28269	1013				
PHIL HARVEY #2*	Putnam	Н	9/16/2016	1331	90	80.9	3.6	2.52	26265	925				
R & D DAIRY*	Laurens/Lee	Н	9/27/2016	377	90	76.7	3.8	2.48	26787	991				
B&S DAIRY*	Whitfield/Wilcox	Н	9/23/2016	761	87	77	3.5	2.34	25823	909				
WALNUT BRANCH FARM	Washington	Н	8/17/2016	326	90	57	4.1	2.27	19801	716				
DOUG CHAMBERS	Jones	Н	9/28/2016	442	90	74	3.5	2.24	25349	843				
VISTA FARM	Jefferson	Н	7/30/2016	93	93	60.3	4.1	2.12	23455	902				
FRANKS FARM	Burke/Butts	В	8/16/2016	169	91	59.2	4	2.11	19656	781				
MARTIN DAIRY L. L. P.	Hart/Heard	Н	8/29/2016	327	91	61.1	4	2.09	24172	889				
HORST CREST FARMS	Burke/Butts	Н	9/26/2016	203	87	66.5	3.7	2.07	21863	824				
HICKORY HEAD DAIRY*	Brooks	Н	9/6/2016	2238	87	62.1	3.7	2.04	22675	760				
AMERICAN DAIRYCO- GEORGIA,LLC.*	Miller/Mitchell	Н	9/7/2016	3911	90	67.4	3.4	2.04	24135	905				
TROY YODER	Macon	Н	8/31/2016	246	89	67.6	3.8	2	24386	953				
ROGERS FARM SERVICES	Talbot/Tattnall	Н	9/19/2016	185	90	54.3	4.1	1.95	18301	645				
IRVIN R YODER	Macon	Н	9/5/2016	186	93	65.6	3.7	1.91	25365	903				

<sup>&</sup>lt;sup>1</sup>Minimum herd or permanent string size of 20 cows. Yearly average calculated after 365 days on test. Test day milk, marked with an asterisk (\*), indicates herd was milked three times per day (3X). Information in this table is compiled from Dairy Records Management Systems Reports (Raleigh, NC).



	Top GA DHIA By Test Day Milk Production – October 2016												
		Test	Day Ave	rage		Yearly Avo	erage						
<u>Herd</u>	<b>County</b>	Br.	Test date	<sup>1</sup> Cows	% Days in Milk	Milk	% Fat	TD Fat	<u>Milk</u>	Lbs. Fat			
RODGERS' HILLCREST FARMS INC.*	McDuffie	Н	10/19/2016	443	88	98.8	3.5	2.96	31443	1107			
DAVE CLARK*	Morgan	Н	10/3/2016	1174	88	90.9	3.6	2.8	29616	1051			
J.EVERETT WILLIAMS*	Morgan	X	10/10/2016	1994	88	84.9	3.8	2.78	27416	1064			
DANNY BELL*	Morgan	Н	10/6/2016	280	90	83.9	4	3.09	26353	1021			
EBERLY FAMILY FARM*	Burke/Butts	Н	10/24/2016	888	87	81.9	3.6	2.43	28235	1011			
PHIL HARVEY #2*	Putnam	Н	9/16/2016	1331	90	80.9	3.6	2.52	26265	925			
SCOTT GLOVER	Hall	Н	10/27/2016	218	87	79.5	3.6	2.65	26747	998			
B&S DAIRY*	Whitfield/Wilcox	Н	10/27/2016	754	87	78.6	3.5	2.4	25979	913			
A & J DAIRY*	Wilkes	Н	10/27/2016	396	91	78.4			28089				
DOUG CHAMBERS	Jones	Н	10/26/2016	433	90	77	3.5	2.3	25263	842			
R & D DAIRY*	Laurens/Lee	Н	9/27/2016	377	90	76.7	3.8	2.48	26787	991			
COASTAL PLAIN EXP STATION*	Tift	Н	10/17/2016	268	88	73.3	3.6	2.16	24307	955			
IRVIN R YODER	Macon	Н	10/18/2016	192	92	73.2	3.7	2.14	24997	896			
TROY YODER	Macon	Н	10/17/2016	256	89	71.8	4	2.36	24186	946			
AMERICAN DAIRYCO- GEORGIA,LLC.*	Miller/Mitchell	Н	10/5/2016	3815	90	69.6	4	2.41	24087	901			
LARRY MOODY	Ware/Warren	Н	9/29/2016	1024	88	68.9			23549				
RAY WARD DAIRY	Putnam	Н	10/17/2016	136	88	67.6	3.6	2.05	23576	868			
OCMULGEE DAIRY	Henry/Houston	Н	10/24/2016	325	86	67.2	3.7	1.91	22205	775			
WILLIAMS DAIRY	Taliaferro	Н	10/10/2016	140	89	66.2	3.7	2.06	22774	812			
CECIL DUECK	Jeff Davis/Jefferson	Н	9/30/2016	69	88	65.5	2.7	1.51	21898	722			
HORST CREST FARMS	Burke/Butts	Н	10/25/2016	204	86	65.5	3.8	2.01	21751	818			

<sup>&</sup>lt;sup>1</sup>Minimum herd or permanent string size of 20 cows. Yearly average calculated after 365 days on test. Test day milk, marked with an asterisk (\*), indicates herd was milked three times per day (3X). Information in this table is compiled from Dairy Records Management Systems Reports (Raleigh, NC).



	Top GA DHIA By Test Day Fat Production - October 2016													
			•			Day Ave	erage		Yearly Average					
<u>Herd</u>	County	Br.	Test Date	<sup>1</sup> Cows	% Days in Milk	Milk	% Fat	TD Fat	Milk	Lbs. Fat				
DANNY BELL*	Morgan	Н	10/6/2016	280	90	83.9	4	3.09	26353	1021				
RODGERS' HILLCREST FARMS INC.*	McDuffie	Н	10/19/2016	443	88	98.8	3.5	2.96	31443	1107				
DAVE CLARK*	Morgan	Н	10/3/2016	1174	88	90.9	3.6	2.8	29616	1051				
J.EVERETT WILLIAMS*	Morgan	X	10/10/2016	1994	88	84.9	3.8	2.78	27416	1064				
SCOTT GLOVER	Hall	Н	10/27/2016	218	87	79.5	3.6	2.65	26747	998				
PHIL HARVEY #2*	Putnam	Н	9/16/2016	1331	90	80.9	3.6	2.52	26265	925				
R & D DAIRY*	Laurens/Lee	Н	9/27/2016	377	90	76.7	3.8	2.48	26787	991				
EBERLY FAMILY FARM*	Burke/Butts	Н	10/24/2016	888	87	81.9	3.6	2.43	28235	1011				
AMERICAN DAIRYCO- GEORGIA,LLC.*	Miller/Mitchell	Н	10/5/2016	3815	90	69.6	4	2.41	24087	901				
B&S DAIRY*	Whitfield/Wilcox	Н	10/27/2016	754	87	78.6	3.5	2.4	25979	913				
TROY YODER	Macon	Н	10/17/2016	256	89	71.8	4	2.36	24186	946				
DOUG CHAMBERS	Jones	Н	10/26/2016	433	90	77	3.5	2.3	25263	842				
COASTAL PLAIN EXP STATION*	Tift	Н	10/17/2016	268	88	73.3	3.6	2.16	24307	955				
IRVIN R YODER	Macon	Н	10/18/2016	192	92	73.2	3.7	2.14	24997	896				
WILLIAMS DAIRY	Taliaferro	Н	10/10/2016	140	89	66.2	3.7	2.06	22774	812				
RAY WARD DAIRY	Putnam	Н	10/17/2016	136	88	67.6	3.6	2.05	23576	868				
MARTIN DAIRY L. L. P.	Hart/Heard	Н	10/3/2016	325	90	62.8	3.9	2.05	24087	888				
EARNEST R TURK	Putnam	Н	10/25/2016	371	93	64.2	3.8	2.05	21356	792				
HORST CREST FARMS	Burke/Butts	Н	10/25/2016	204	86	65.5	3.8	2.01	21751	818				
WHITEHOUSE FARM	Macon	Н	9/29/2016	160		53.4	3.7	1.97						

<sup>&</sup>lt;sup>1</sup>Minimum herd or permanent string size of 20 cows. Yearly average calculated after 365 days on test. Test day milk, marked with an asterisk (\*), indicates herd was milked three times per day (3X). Information in this table is compiled from Dairy Records Management Systems Reports (Raleigh, NC).



Top GA DHIA By Test Day Milk Production – November 2016												
					Test	Day Ave	rage		Yearly Average			
<u>Herd</u>	County	Br.	Test Date	<sup>1</sup> Cows	% Days in Milk	Milk	% Fat	TD Fat	<u>Milk</u>	Lbs. Fat		
RODGERS' HILLCREST FARMS INC.*	McDuffie	Н	11/25/2016	456	87	100.4	3.4	2.88	31491	1109		
DAVE CLARK*	Morgan	Н	10/31/2016	1180	88	90.8	3.6	2.8	29566	1050		
J.EVERETT WILLIAMS*	Morgan	X	11/7/2016	2007	88	86.4	3.7	2.78	27515	1067		
A & J DAIRY*	Wilkes	Н	11/30/2016	406	91	84.7			28092			
DANNY BELL*	Morgan	Н	11/3/2016	287	90	82.8	4	3.04	26616	1034		
EBERLY FAMILY FARM*	Burke/Butts	Н	10/24/2016	888	87	81.9	3.6	2.43	28235	1011		
SCOTT GLOVER	Hall	Н	10/27/2016	218	87	79.5	3.6	2.65	26747	998		
B&S DAIRY*	Whitfield/Wilcox	Н	11/23/2016	800	88	78.5	3.4	2.4	26016	909		
DOUG CHAMBERS	Jones	Н	11/23/2016	438	89	78.2	3.4	2.28	25152	840		
TROY YODER	Macon	Н	11/26/2016	266	89	77.1	4	2.57	24154	947		
R & D DAIRY*	Laurens/Lee	Н	11/1/2016	386	90	76.7	3.8	2.48	26726	984		
AMERICAN DAIRYCO- GEORGIA,LLC.*	Miller/Mitchell	Н	11/2/2016	3806	90	75.3	3.7	2.41	24025	898		
RAY WARD DAIRY	Putnam	Н	11/14/2016	141	89	73.9	3.9	2.36	23536	867		
SOUTHERN SANDS FARM	Burke/Butts	Н	11/18/2016	88	87	72.7	3.6	2	21138	748		
MARTIN DAIRY L. L. P.	Hart/Heard	Н	11/4/2016	319	90	71	4	2.41	24034	888		
COOL SPRINGS DAIRY	Laurens/Lee	Н	11/18/2016	201	87	70.6	3.9	2.27	20930	764		
IRVIN R YODER	Macon	Н	11/22/2016	205	91	70.6	4	2.31	24679	893		
COASTAL PLAIN EXP STATION*	Tift	Н	11/15/2016	287	88	70.3	3.5	2.17	24315	951		
LARRY MOODY	Ware/Warren	Н	11/28/2016	1033	88	70.1	3.4	2.06	23373			
EARNEST R TURK	Putnam	Н	11/22/2016	368	93	67.8	3.8	2.32	21622	796		

<sup>&</sup>lt;sup>1</sup>Minimum herd or permanent string size of 20 cows. Yearly average calculated after 365 days on test. Test day milk, marked with an asterisk (\*), indicates herd was milked three times per day (3X). Information in this table is compiled from Dairy Records Management Systems Reports (Raleigh, NC).



	To	p GA l	DHIA By Test	Day Fat P	roduction – Novembe	er 2016				
					Test	Day Ave	Yearly Average			
<u>Herd</u>	County	Br.	Test Date	<sup>1</sup> Cows	% Days in Milk	Milk	% Fat	TD Fat	Milk	Lbs. Fat
DANNY BELL*	Morgan	Н	11/3/2016	287	90	82.8	4	3.04	26616	1034
RODGERS' HILLCREST FARMS INC.*	McDuffie	Н	11/25/2016	456	87	100.4	3.4	2.88	31491	1109
DAVE CLARK*	Morgan	Н	10/31/2016	1180	88	90.8	3.6	2.8	29566	1050
J.EVERETT WILLIAMS*	Morgan	X	11/7/2016	2007	88	86.4	3.7	2.78	27515	1067
SCOTT GLOVER	Hall	Н	10/27/2016	218	87	79.5	3.6	2.65	26747	998
TROY YODER	Macon	Н	11/26/2016	266	89	77.1	4	2.57	24154	947
R & D DAIRY*	Laurens/Lee	Н	11/1/2016	386	90	76.7	3.8	2.48	26726	984
EBERLY FAMILY FARM*	Burke/Butts	Н	10/24/2016	888	87	81.9	3.6	2.43	28235	1011
MARTIN DAIRY L. L. P.	Hart/Heard	Н	11/4/2016	319	90	71	4	2.41	24034	888
AMERICAN DAIRYCO- GEORGIA,LLC.*	Miller/Mitchell	Н	11/2/2016	3806	90	75.3	3.7	2.41	24025	898
B&S DAIRY*	Whitfield/Wilcox	Н	11/23/2016	800	88	78.5	3.4	2.4	26016	909
RAY WARD DAIRY	Putnam	Н	11/14/2016	141	89	73.9	3.9	2.36	23536	867
EARNEST R TURK	Putnam	Н	11/22/2016	368	93	67.8	3.8	2.32	21622	796
IRVIN R YODER	Macon	Н	11/22/2016	205	91	70.6	4	2.31	24679	893
DOUG CHAMBERS	Jones	Н	11/23/2016	438	89	78.2	3.4	2.28	25152	840
COOL SPRINGS DAIRY	Laurens/Lee	Н	11/18/2016	201	87	70.6	3.9	2.27	20930	764
COASTAL PLAIN EXP STATION*	Tift	Н	11/15/2016	287	88	70.3	3.5	2.17	24315	951
WHITEHOUSE FARM	Macon	Н	10/31/2016	181		63.3	3.7	2.13		
RUFUS YODER JR	Macon	Н	10/28/2016	137	92	61.2	3.9	2.1	23096	787
BUD BUTCHER	Cook/Coweta	Н	11/11/2016	349	90	60.1	4	2.1	20181	706

<sup>&</sup>lt;sup>1</sup>Minimum herd or permanent string size of 20 cows. Yearly average calculated after 365 days on test. Test day milk, marked with an asterisk (\*), indicates herd was milked three times per day (3X). Information in this table is compiled from Dairy Records Management Systems Reports (Raleigh, NC).



	Top GA Lows Herds for SCC -TD Average Score - September 2016													
<u>Herd</u>	County	Test Date	Br.	Cows	Milk-Rolling	SCC-TD- Average Score	SCC-TD- Weight Average	SCC- Average Score	SCC-Wt.					
DAVID ADDIS	Whitfield/Wilcox	9/3/2016	Н	30	19187	0.8	41	1.4	101					
TROY YODER	Macon	8/31/2016	Н	246	24386	1.5	94	2.2	152					
DANNY BELL*	Morgan	9/8/2016	Н	267	26171	1.5	116	1.9	139					
SCOTT GLOVER	Hall	8/26/2016	Н	212	26823	1.7	98	1.7	98					
DAVE CLARK*	Morgan	9/5/2016	Н	1180	29567	1.7	142	1.9	146					
J.EVERETT WILLIAMS*	Morgan	9/12/2016	X	1978	27304	1.8	141	1.6	114					
VISTA FARM	Jeff Davis/Jefferson	7/30/2016	Н	93	23455	1.9	131	2.2	199					
PHIL HARVEY #2*	Putnam	9/16/2016	Н	1331	26265	1.9	178	2.2	190					
JAMES W MOON	Morgan	9/5/2016	Н	126	17298	2	106	2	135					
IRVIN R YODER	Macon	9/5/2016	Н	186	25365	2	119	2.2	134					
BRUCE HARPER	Morgan	9/14/2016	Н	152	16121	2	175	3	355					
BRENNEMAN FARMS	Macon	9/24/2016	Н	122	17976	2	338	2.3	309					
UNIV OF GA DAIRY FARM	Clarke	9/22/2016	Н	128	19158	2.1	153	2.9	311					
RODGERS' HILLCREST FARMS INC.*	McDuffie	9/14/2016	Н	436	31283	2.1	190	2.3	204					
COOL SPRINGS DAIRY	Laurens/Lee	9/22/2016	Н	190	20611	2.3	227	2.4	231					
MARK E BRENNEMAN	Macon	9/21/2016	Н	145	19641	2.3	235	2.7	293					
RANDY W. RUFF. SR	Elbert/Emanuel	9/23/2016	Н	155	15582	2.3	271	3	317					
WILLIAMS DAIRY	Taliaferro	8/4/2016	Н	139	23089	2.3	307	2.6	235					
BERRY COLLEGE DAIRY	Fayette/Floyd	8/25/2016	J	38	16383	2.4	69	1.6	56					
DAN DURHAM	Grady/Greene	9/14/2016	X	88	16800	2.4	143	2.7	196					

<sup>&</sup>lt;sup>1</sup>Minimum herd or permanent string size of 20 cows. Yearly average calculated after 365 days on test. Test day milk, marked with an asterisk (\*), indicates herd was milked three times per day (3X). Information in this table is compiled from Dairy Records Management Systems Reports (Raleigh, NC).



	Top GA Lows Herds for SCC -TD Average Score - October 2016													
<u>Herd</u>	County	Test Date	<u>Br.</u>	Cows	Milk-Rolling	SCC-TD- Average Score	SCC-TD- Weight Average	SCC- Average Score	SCC-Wt.					
DAVID ADDIS	Whitfield/Wilcox	10/8/2016	Н	29	19076	0.6	25	1.3	81					
BERRY COLLEGE DAIRY	Fayette/Floyd	10/26/2016	J	33	16751	1.6	79	1.5	52					
COASTAL PLAIN EXP STATION	Tift	10/17/2016	Н	268	24307	1.6	149	2.3	199					
J.EVERETT WILLIAMS	Morgan	10/10/2016	X	1994	27416	1.7	125	1.6	115					
DANNY BELL	Morgan	10/6/2016	Н	280	26353	1.7	166	1.9	139					
SCOTT GLOVER	Hall	10/27/2016	Н	218	26747	1.9	107	1.6	95					
DAVE CLARK	Morgan	10/3/2016	Н	1174	29616	1.9	137	1.9	144					
PHIL HARVEY #2	Putnam	9/16/2016	Н	1331	26265	1.9	178	2.2	190					
RODGERS' HILLCREST FARMS INC.	McDuffie	10/19/2016	Н	443	31443	2.0	155	2.3	198					
JEFF WOOTEN*JEFF	Putnam	10/4/2016	Н	297	16379	2.0	165	2.4	245					
JAMES W MOON	Morgan	10/5/2016	Н	127	17447	2.0	186	2	144					
BRENNEMAN FARMS	Macon	9/24/2016	Н	122	17976	2.0	338	2.3	309					
BILL DODSON	Putnam	10/24/2016	Н	232	22978	2.1	124	2.2	183					
TROY YODER	Macon	10/17/2016	Н	256	24186	2.2	130	2.2	150					
HALE DAIRY	Oconee	10/4/2016	Н	134	15980	2.3	222	3.4	445					
COOL SPRINGS DAIRY	Laurens/Lee	9/22/2016	Н	190	20611	2.3	227	2.4	231					
MARK E BRENNEMAN	Macon	9/21/2016	Н	145	19641	2.3	235	2.7	293					
DAN DURHAM	Grady/Greene	9/14/2016	X	88	16800	2.4	143	2.7	196					
RAY WARD DAIRY	Putnam	10/17/2016	Н	136	23576	2.4	242	2.7	286					
DONALD NEWBERRY	Bibb	9/22/2016	Н	134	16464	2.5	208	2.8	249					

<sup>&</sup>lt;sup>1</sup>Minimum herd or permanent string size of 20 cows. Yearly average calculated after 365 days on test. Test day milk, marked with an asterisk (\*), indicates herd was milked three times per day (3X). Information in this table is compiled from Dairy Records Management Systems Reports (Raleigh, NC).



	Top GA Lows Herds for SCC -TD Average Score - November 2016													
<u>Herd</u>	County	Test Date	Br.	Cows	Milk-Rolling	SCC-TD- Average Score	SCC-TD- Weight Average	SCC- Average Score	SCC-Wt.					
DAVID ADDIS	Whitfield/Wilcox	11/6/2016	Н	29	18794	0.8	41	1.2	81					
JAMES W MOON	Morgan	11/3/2016	Н	122	17458	1.6	69	1.9	133					
BERRY COLLEGE DAIRY	Fayette/Floyd	10/26/2016	J	33	16751	1.6	79	1.5	52					
SCOTT GLOVER	Hall	10/27/2016	Н	218	26747	1.9	107	1.6	95					
BRENNEMAN FARMS	Macon	10/31/2016	Н	123	17943	1.9	201	2.1	262					
RONNIE ROBINSON	Spalding	11/12/2016	Н	98	16835	2	101	2.2	173					
RODGERS' HILLCREST FARMS INC.	McDuffie	11/25/2016	Н	456	31491	2	138	2.2	190					
J.EVERETT WILLIAMS	Morgan	11/7/2016	X	2007	27515	2	161	1.6	119					
DANNY BELL	Morgan	11/3/2016	Н	287	26616	2	170	1.9	143					
BILL DODSON	Putnam	11/26/2016	Н	253	22880	2.1	137	2.1	179					
JEFF WOOTEN*JEFF	Putnam	11/10/2016	Н	289	16595	2.1	164	2.3	239					
DAVE CLARK	Morgan	10/31/2016	Н	1180	29566	2.1	176	1.9	146					
DONALD NEWBERRY	Bibb	10/31/2016	Н	138	16539	2.1	216	2.7	239					
COASTAL PLAIN EXP STATION	Tift	11/15/2016	Н	287	24315	2.2	210	2.2	191					
TROY YODER	Macon	11/26/2016	Н	266	24154	2.3	166	2.2	147					
IRVIN R YODER	Macon	11/22/2016	Н	205	24679	2.4	141	2.2	138					
EUGENE KING	Macon	11/25/2016	Н	137	18239	2.4	204	2.3	214					
MARTIN DAIRY L. L. P.	Hart/Heard	11/4/2016	Н	319	24034	2.4	235	2.6	242					
R & D DAIRY	Laurens/Lee	11/1/2016	Н	386	26726	2.4	236	2.4	269					
MARK E BRENNEMAN	Macon	11/21/2016	Н	144	19685	2.5	202	2.5	266					

<sup>&</sup>lt;sup>1</sup>Minimum herd or permanent string size of 20 cows. Yearly average calculated after 365 days on test. Test day milk, marked with an asterisk (\*), indicates herd was milked three times per day (3X). Information in this table is compiled from Dairy Records Management Systems Reports (Raleigh, NC).

