Animal and Dairy Science Department
Rhodes Center for Animal & Dairy Science

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

GEORGIA DAIRYFAX

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

JULY, AUGUST, SEPTEMBER 2010

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: July, August, September 2010

- **An Udderly Good Time** by: **Megan Graves** **2**
- **Dr. Ely Wins the Southern ADSA's Award of Honor** **3**
- **Dates to Remember** **3**
- **Consumer Preferences for Dairy Versus Non-Dairy Products Revealed** by: **Shephard Cronomeyer & Dr. William Graves** **4**
- **8th Mid- Atlantic Dairy Grazing Conference & Organic Dairy Field Day & Registration** **7**
- **Impact of the Dairy Industry on the Environment** by: **Dr. John Bernard** **9**
- **Random Thoughts While Travelling Across Country** by: **Dr. Lane Ely** **11**
- **Getting Calves off to a Good Start by: Dr. John Bernard** **15**
- **Forages Are Critical** by: **Dr. Lane Ely** **16**
- **Top 20 DHIA Herds By Test Day Milk and Fat Production for June, July & August 2010** **18**
- **Top Low Herds for SCC Score for June, July & August 2010** **24**

Sincerely,

Wm. Graves

William M. Graves
Professor & Extension Dairy Scientist
wgraves@uga.edu

County Extension Director or County Agent

Dairyfax Newsletter

An Udderly Good Time

By: Megan Graves, Junior at UGA,
Grady College of Journalism

The 2010 University of Georgia Dairy Judging Team is well underway with another great season full of practice, travel, and competition.

Although they began practice in early August around Georgia, the team took their first big trip to the Maryland State Fair on Sept. 3. At the Maryland State 4-H Judging Contest they were able to see 10 classes on Saturday and 13 more on Sunday.

Next stop for the team was a trip to the All American Dairy Show in Harrisburg, Pa., on Sept. 17. With practices at Snebly's Guernseys, Winsor Manor Holsteins, and Palmyra Ayshires they prepared for the contest held on Monday Sept. 20. The team placed 10th out of 14 teams, and were eighth in oral reasons. Whitney Franks was fifth overall in Holsteins, and Patrick Savelle was fifth overall in Ayrshires.

The team leaves again Sept. 24 to the World Dairy Expo in Madison Wisconsin. Once in Wisconsin, they make multiple stops including: Cozy Nook Farm, Nic-Nat Jerseys, Mapleton Valley Farm, Hoard's Guernsey Farm, and Sunshine Genetics. The actual competition began Monday and involves six classes of cows and six classes of heifers, with six sets of oral reasons.

The team then makes an appearance on Oct. 15-16, at the Georgia National Fair in Perry, Ga. They will have the opportunity to watch open shows Friday night and Saturday morning, and then able to give reasons once back in Athens.

Finally the team leaves Nov. 5, for the North American Dairy Judging Contest in Louisville, Ky. They will have a practice on the way at Berry College Jersey Farm, Hickman Guernsey's and Osburn's Jerseys. The team will compete on Sunday Sept. 7.

The 2010 team consists of Senior Whitney Franks, Senior Katie Williams, Junior Anna Savelle and Sophmore Patrick Savelle. The team is coached by Dr. William Graves and Matthew London.

Good Luck team and have a great season!

Photo taken by W. Graves at Pa. Farm Show Complex.

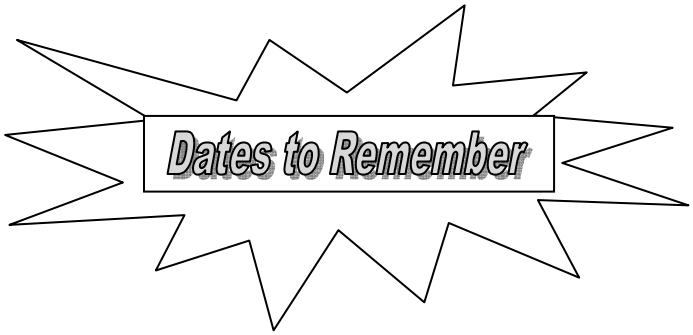
Dr. Ely Wins the Southern ADSA's Award of Honor

During the annual meeting of the American Dairy Science Association in July in Denver, Dr. Lane O. Ely of the University of Georgia received the Southern Branch of ADSA's Award of Honor. The Award of Honor is presented for distinguished service, dedication and professionalism to the dairy industry and association. Dr. Ely has served as Vice-President, President, and Past President of the Southern Branch of ADSA. He has also served on several committees for the Southern Branch and the national ADSA.

Dr. Ely first joined the Southern Branch when he became an Assistant Professor at the University of Georgia in 1974. He was stationed at the Griffin Experiment Station. In 1980, he joined the faculty at Colorado State University and in 1983 he rejoined the University of Georgia as an Associate Professor in Dairy Extension. At the University of Georgia, his appointment has included appointments in extension, research and teaching. He has taught both the Lactation and Dairy Production courses and coordinated the UGA Teaching Dairy. His research and extension activities have included forage management, silage fermentation, dairy management and financial management. He has participated in the development and continued management of the Southeast Dairy Herd Management Conference.

In his career, Dr. Ely has published 7 peer reviewed book chapters, 37 peer reviewed journals, 122 abstracts, 6 peer reviewed experiment station bulletins, 35 peer reviewed extension bulletins, 95 proceeding, 326 newsletter articles, 68 handouts, and 82 popular press articles. He has participated in 68 trainings for agents, 126 short courses or area meetings, and 389 county meetings. He has presented 119 invited presentations. He has been a member of 11 regional committees (including 28 years on the Dairy Management regional committee, NC 119, NC 1119 and NC 1042 through its progression of numbers serving as Chair in 1989).

Dr. Ely is currently Professor Emeritus working part-time in the Animal and Dairy Science Department. We congratulate Dr. Ely on this honor!



- Southeast Dairy Herd Management Conference, Macon Nov. 3 &4
- Georgia National Fair, Perry, GA Commercial Heifer Show Nov. 7th
  Registered Cattle Show Nov. 12th-14th

Consumer Preferences for Dairy Versus Non-Dairy Products Revealed

by
Shepherd Cronemeyer and
Dr. William Graves

Currently, there are many products on the market advertised and compared to milk. The "local is better" campaign commercial also has been adopted by many retailers, organic producers as well as local dairies. Several dairies in Georgia now bottle their own milk on the farm, making local milk more accessible to some consumers. Marketing strategists would greatly benefit from learning more about consumer taste preferences. In addition, recent research conducted with people who have lactose allergies concluded that those suffering from lactose intolerance are capable ingesting low levels of dairy products.

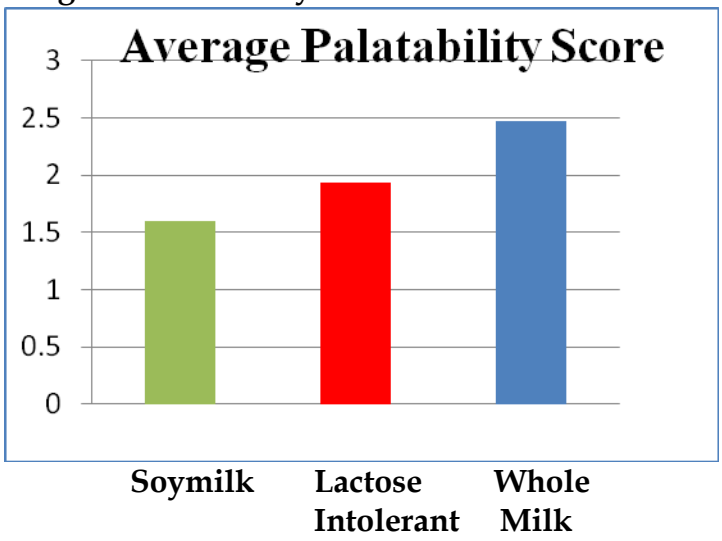
We first compared three types of milk: 1. A milk developed to help those lactose intolerant, 2. A soymilk and 3. A commercial whole milk. The participants were then asked to assign a number based upon taste preference to the individual samples. In the first group, a score of one designated the least palatable and three the most palatable.

Three ounce cups were labeled one to three and filled with 1.5 oz. The cups were then covered and placed on a tray in the refrigerator until ready to be consumed. In order to keep the samples as cold and fresh as possible, groups were poured in shifts and served as each participant arrived. This process was repeated until all participants received their samples. Results were compiled and analyzed by a two-way analysis of variance and then a post-hoc Tukey test.

An effort was made to poll a diverse group of individuals. A total of thirty undergraduate and graduate students as well as faculty and staff from the Animal and Dairy Science Department at UGA participated in the study. The participants' ages ranged from under twenty one to over sixty years old. Sixteen males and fourteen females were surveyed, the average individual being 22-25 years old. On average, the participants consumed 2.8 servings of dairy products daily and most frequently consumed milk with either a one percent or two percent fat content.

In the first study, palatability of the soy milk was significantly different from the lactose intolerant milk. People did not like the way it tasted based on its low score. These differences are shown in Figure 1.

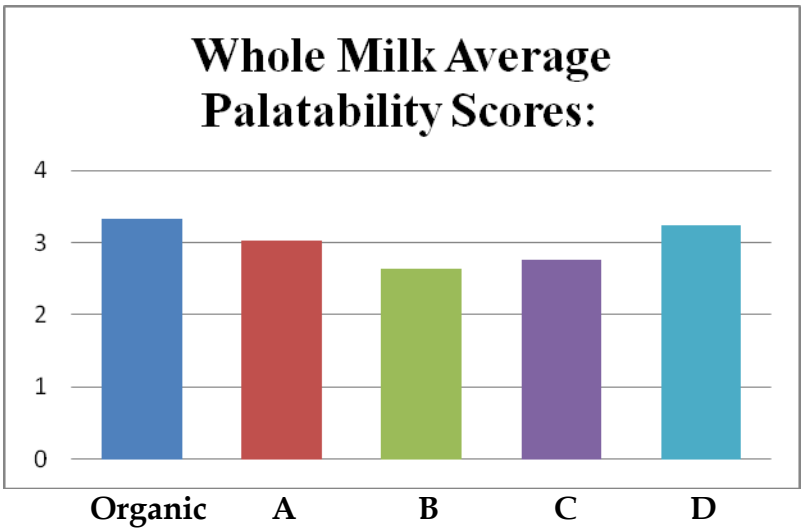
Figure 1- Average Score of Study 1



Variations in the means were possibly due to differences in ingredients, processing, and packaging. Upon comparison of ingredients, there are little differences between the milks. All brands contain milk, Vitamin D_3 , and similar sugar content. In addition to these ingredients, lactose intolerant includes the enzyme lactase to enable those who are lactose intolerant to consume milk. Lactase, however, does not affect the taste of milk. Soymilk, however, contains many alternative ingredients and about half as much sugar as the other brands. Soymilk contains all natural soymilk (filtered water, whole soybeans), all evaporated cane juice, calcium carbonate, sea salt, natural flavors, carrageenan, Vitamin A Palmitate, Vitamin D_2, Riboflavin (B_2), and Vitamin B_{12}. Carrageenans are a common food additive derived from red seaweed and frequently used in soy milk. Its gel-like consistency imitates the texture and thickness of whole milk. Because of the unique ingredients contained in soymilk, coupled with the fact that soymilk is a non dairy product, it is possible that participants detected a difference in taste or texture, which was reflected in the results.

A second study compared organic milk and three whole milks from a local grocery chain as well as milk at local dairy. Thirty percent gave the organic milk the highest rating. There was a clear relationship between price and palatability. The two most expensive milks, received the highest palatability scores. These results shown in figure 2. Less differences were seen than found in study 1.

Figure 2- Average Score of Study 2



Differences in processing methods may contribute to consumer perception. Most milk is processed through pasteurization and homogenization before being sold. However, several different methods of pasteurization were used among the brands in this study. Pasteurization involves heating milk to a specific temperature for a certain period of time in order to kill bacteria. There are three types of pasteurization: batch, continuous flow or High Temperature Short Time (HTST) and ultrahigh temperature (UHT), with the

batch and continuous flow processes being the most common. In batch pasteurization, a large amount of milk is heated in a vat until it reaches 149 degrees F and maintained at that temperature for thirty minutes.

In the HTST process, milk is passed under pressure through heated metal plates or pipes, during which it is heated to 161 degrees F for sixteen seconds. The heat is then recycled in a heat exchanger that warms new, cold milk before the pasteurized milk is cooled to 39 degrees F or less. The newest form of pasteurization is UHT, which heats the milk to 280 degrees F for 2-4 seconds. Due to the extreme temperature, the milk undergoes a Maillard browning reaction that alters both the taste and smell of the product. Organic milk may be processed through UHT, which accounts for its extended shelf life and unique taste. If unopened, some organic milk can last 6-9 months and does not require refrigeration. However, some organic milk, such as the organic milk used in this study, is refrigerated. The burning of sugars during the Maillard reaction gives the milk a sweeter flavor, and because of this, it may have been easier for participants to differentiate it from the others. The local milk seen in this study was also pasteurized differently from the other brands. It was heated to a temperature of 145 degrees Fahrenheit for thirty minutes.

Homogenization is another step in processing. Milk is homogenized in order to maintain a uniform consistency and prevent it from separating. Under natural conditions, milk left for 12-24 hours will separate due to differences in the density of its components. Fat is less dense than water, so the cream layer (composed mainly of fat) rises to the top while the milk with less fat remains beneath it. Upon separation, the top layer can be extracted and sold separately. Homogenization utilizes centrifugal cream separators and force to pressurize milk through thin tubes, breaking up the fat. Homogenized milk is more bland but creamier in taste, has a longer shelf life and is less likely to develop off flavors. The milk from the local dairy in study 2 was not homogenized, which could have been a distinguishing factor for the panelists. One of the whole milks tested, is bottled in yellow plastic to prevent fluorescent lights from giving it an off flavor, making it taste fresher to the consumer.

In conclusion, there are many factors that contribute to the taste of milk from the time it is produced in the mammary gland until it reaches the shelves of a grocery store. While factors such as processing, ingredients and packaging caused variations in the mean scores, overall, the only significant difference existed between the non-dairy Soymilk and the whole and lactose intolerant milks. Based on the results of this study, it can be concluded that consumers cannot statistically determine the difference in taste between higher priced products such as organic milk and economical. However, while not significant, there was a relationship between price and palatability in our second study.

References

Baumrucker, Craig. "Why does organic milk last so much longer than regular milk?". Pennsylvania State University. March 30, 2010 <http://www.scientificamerican.com/article.cfm?id=experts-organic-milk-lasts-longer>.

Jonsson, Randolph. "Raw Milk Facts". March 30, 2010 <http://www.raw-milk-facts.com/index.html>.

8th Mid-Atlantic Dairy Grazing Conference and Organic Dairy Field Day

October 11-13, 2010

Wytheville Meeting Center: www.wythevillemeetingcenter.com

333 Community Blvd,

Wytheville, VA.

Dairy graziers and dairy grazing enthusiasts from several states will be gathering in October to share and increase their knowledge about pasture-based and organic dairy production systems. The conference is based in Wytheville in Southwestern VA where Interstates 77 and 81 meet. The event begins with registration at the Wytheville Meeting Center on Monday October 11 at 3:00 and concludes on Wednesday, October 13 at 2:15 p.m. See http://vaforages.org/

The program will feature speakers from several states including Dr. John Niezen of the Greenstone Grazing Group in Louisville, Georgia, Jon Bansen of Double J Jerseys in Monmouth, Oregon, Mr. Joe Horner, Extension Economist with the University of Missouri, Columbia, Missouri, and Dr. Larry Tranel, Dairy Field Specialist, Iowa State University Extension, Dubuque, Iowa. Eric Crowgey of Wytheville and Jay Richardson of Sugar Grove are two local dairy graziers that have agreed to host on-farm visits during the 3-day event. We will also have involvement of other resource people from the region including other dairy producers, NRCS and Extension personnel, and various representatives of companies and organizations that provide services to dairy graziers.

The program will cover many aspects of dairy grazing systems applicable to both experienced and to beginning dairy graziers. Topics include financial strategies to become "millionaire model dairy farms," low-cost milking parlors, and management of cattle and pastures in various pasture-based and organic production systems. Some topic areas will be covered by presentations on farm and at the Meeting Center while other topics will be covered by panel discussions of dairy graziers and other speakers.

Contacts:
Program information: Steve Washburn
North Carolina State University
Steve_Washburn@ncsu.edu – (919) 515-7726

Local arrangements: Chase Scott
Virginia Cooperative Extension
miscott1@vt.edu – (276) 223-6040
Several hotels are available near the Wytheville Meeting Center

Sponsorships: John Welsh
Virginia Cooperative Extension
jlwelsh@vt.edu – (540) 564-3080
Sponsorships:Platinum ($1,000), Gold ($500), or Silver($250) levels

Program Registration
Mid-Atlantic Dairy Grazing Conference and Organic Dairy Field Day

Names_____($100)

2nd_____($50)

Additional_____($50)

_____($50)

Address_____

_____
City State Zip

County_____

Daytime Phone_____

Email_____

Registration: $100 early registration (by Sept 30) and $150 for on-site registration. Discounted rates of $50 in advance or $75 (on site) are available for students or family members from same farm.
Limited scholarships available.

Early registration: Post marked by September 30th, 2010

Registration confirmation by email.

Make Check Payable to:
VFGC

Mail Check and Registration to:

2010 Dairy Grazing Conf.
Ms. Margaret Kenny
3599 Indian Oak Road
Crewe, VA 23930

Impact of the Dairy Industry on the Environment

John K. Bernard
Dairy Research and Extension

Almost every week there is an article on the impact of agriculture on the environment. Unfortunately most are negative and many focus on the livestock industry. A report from the Food and Agriculture Organization (Steinfeld et al., 2006) suggested that the livestock were responsible for 18% of the total green house gas emissions in the world. This report put the livestock industry at the top of the list of greenhouse gas producers. The estimate was later revised to 5.8% of total emissions based on research at the University of California, but the perception still exists that livestock are a major problem.

There are many positive points that can be made regarding the livestock industry and the environment. Capper et al. (2009) published the results of a study in which they examined the environmental impact of the modern dairy compared to what it was in 1944. Some of the changes which have occurred in production during that time are summarized in Table 1. The changes in production that have occurred since 1944 shouldn't come as a surprise anyone in the dairy industry. These changes reflect the gains in production made through improved genetics, better understanding of how to feed cows including improved forages and use of supplements, improved facilities for minimizing stress, and overall improvements in management. These advances have allowed dairy producers to produce greater volumes of milk with fewer cows.

Table 1. Production Characteristics of the Dairy Industry in 1944 versus 2007[1].

Item	1944	2007	% Change 2007 vs. 1944
Total No. Milk Cows, million head	25.6	9.2	- 64.1
Total milk production, billion lbs.	117.1	185.6	+58.1
Average milk yield, lb/cow/year	4,572	20,267	+443.3
Average milk yield, lb/cow/day	14.8	64.6	+436.5
Age at first calving, mo.	27.0	25.5	- 5.5
Heifer:cow ratio	0.89	0.83	- 6.7
Breeding method	100% natural service	70% AI, 30% natural service	

[1]Adapted from Capper et al., 2009

From an environmental impact, the story has two sides. From the cow standpoint, higher producing cows eat more feed so each cow also produces more waste and greenhouse gases which are one of the negatives frequently cited. However, when the amount of waste and gas is measured on a per unit of milk produced, the story is very positive as outlined in Table 2. The maintenance requirements are the same for cows of the same body weight and reproductive status regardless of their level of milk production. For example a 1400 lb cow requires the same amount of nutrients for maintenance to produce 15 lb of milk as a cow producing 65 lb of milk, but the extra nutrients consumed by the higher producing cow are used more efficiency to produce milk.

Table 2. Environmental Characteristics of the Dairy Industry in 1944 versus 2007[1].

Item	1944	2007	% Change 2007 vs. 1944
		per billion kg milk	
Waste output			
Nitrogen, kg x 10^6	17.47	7.91	
Phosphorus, kg x 10^6	11.21	3.31	
Manure, freshweight, kg x 10^9	7.86	1.91	
Gas emissions			
Methane, kg x 10^6	61.8	26.8	
Nitrous oxide, kg x 10^6	412	230	
Carbon footprint, kg of CO_2 x 10^9	3.66	1.35	

[1]Adapted from Capper et al., 2009

In August, Swedish researchers (Smedman et al., 2010) published research comparing the environmental impact of different beverages typically consumed. The nutrient density of each beverage was calculated using recommendation daily allowances. The greenhouse gas emissions associated with the production and distribution of each beverage was used to calculate an index. The higher the value, the more environmentally friendly the beverage was based on the nutrients provided. The rankings in order were: 0.54 for milk (1.5% fat); .028 for orange juice (made from concentrated juice); 0.25 for soy drink (milk substitute); 0.07 for oat drink (milk substitute); 0.01 for red wine; and 0.0 for soft drinks, beer, and mineral water. These researchers concluded that the nutrient value of food should be considered along with greenhouse gas production. In this case, the use of the index showed that milk may be more environmentally friendly than other beverages others have suggested as a replacement to improve the environmental.

There is a lot of research needed to determine the effect of the livestock industry on the environment, but there are many positive points that can be made compared to most of what is reported. The dairy industry has made significant gains in reducing their total carbon footprint, but there are still improvements to be made. Producers should consider the use of ionophores in rations to reduce methane production and supplemental fat which is not fermented in the rumen so it doesn't produce methane. Researchers are currently examining many other products to determine their potential for reducing the amount of greenhouse gas produced by dairy cattle, so additional means of reducing the environmental impact will be available in the future. No one has calculated the positive effect of feeding the many byproducts from the production of food and fiber on the impact as well as other practices used routinely by the livestock industry. So if someone comments about the negative effect the livestock industry has on the environment, there are many positive points you can make to correct some of the perceptions many consumers have.

References:

Capper, J. L., R. A Cady, and D. E. Bauman. 2009. The environmental impact of dairy production: 1944 compared with 2007. J. Anim. Sci. 87:2160-2167.

Smedman, A., H. Lindmark-Mansson, A. Drewnowski, and A. M. Deman. 2010. Nutrient density of beverages in relation to climate impact. Food Nutr. Res. 54:5170-5177.

Steinfeld, H., P. Gerber, T. Wassenaar, V. Castel, M. Rosales, and C. De Haan. 2006. Livestock's Long Shadow - Environmental Issues and Options. Food and Agriculture Organization of the United Nations, Rome, Italy.

Random Thoughts While Travelling Across Country

By Lane O Ely
Professor Emeritus

This summer my wife and I travelled across the USA. We went to Denver for the American Dairy Science Association meeting. Then we went on to Seattle to visit family. We then drove back across the northern part of the country so we could go through North Dakota, as my wife wanted to go there to complete her visiting all the states.

These are some of the random thoughts and observations travelling across the country.

Speed Limit -

The speed limit rises in the middle part of the country west of the Mississippi River. We like to get off the interstate so we spent many miles on state and local highways. You know you are out west when on a rural 2 lane highway the speed limit is 75 mph. Not only are there a limited number of travelers but not many towns with a lot of ranch land to drive through.

Irrigation -

On early maps of the US, the Great Plains and the Great Basin were listed as the Great American Desert. The early travelers to the Gold fields of California and the fertile valleys of the Pacific Northwest passed through the area without stopping. Building the transcontinental railroad opened the area. With the railroads receiving land in payment to build the railroad, they began to actively to promote the area for settlement and farming. Also with the passage of the Homestead Act, free land was available for the settlement and improvement of the property. Agriculture changed from grasslands to cropping as a period of wet seasons allowed the growing of wheat, corn and alfalfa. With cropping and weather change, the Dust Bowl occurred. Over the years as we have driven through the area, land along the rivers was irrigated. Oasis's of green in the brown semi-arid landscape. Wheat was dry landed farmed with a crop every two years leaving the land fallow to collect moisture. The wheat harvest was beginning in much of the area as we travelled. The golden wheat waving in the breeze does look like the ocean. There is still land in the Great Basin where it takes a section to support a cow-calf.

On this trip it was surprising to see the increase in irrigation from deep wells. Driving through areas of sagebrush it is a shock to come over a rise and see a 320 acre field of alfalfa and corn under center pivot irrigation. That is one of the biggest changes I have noticed is the increase in crop land growing corn and alfalfa that used to be shipped into the area.

Another area of change was the increase in sugar beets. Many areas have gone out of sugar beets but on this trip I noticed more acres than in the past.

Windmills –

Windmills have always been a part of the plain states landscape. They are still prevalent on range lands pumping water for the stock tanks.

Today one also sees a growing number of wind farms with the giant wind turbines for electricity generation. There seems to be a large increase every year as we travel west. For the first time I saw crops or cattle grazing under the wind turbines.

Space –

The wide open spaces of the west are inspiring. Looking for 70 miles off a mountain pass or driving into a valley and seeing 20 miles of road in a straight line in front of you shows the openness of the landscape. It is different to drive alongside a combine harvesting a wheat field that is two miles long.

On the other hand, it was nice to return to east of the Mississippi River and see the trees and forest lands along the road, towns and fields.

Another indication of space in the west is to see signs saying "no services for the next 60 miles". It makes you realize how few people are in some states. At breakfast in Bismarck, ND, the two couples at the table next to us were farmers who had come to town with their wives. They had stayed overnight and were going to Wal-Mart before returning home.

The two farmers were talking about their children and farming. The most interesting comment was their conclusion that one needed to farm 12 or 13 sections to make a living. Big farms, big equipment.

The other indication of space is driving through Central Wyoming and finding only ONE radio station on the dial. At least it was NPR.

The Medicine Wheel –

There are old relics from the Native Americans that are still current today. One of these is the Medicine Wheel in Wyoming. It is on route 14A. The pass is 9600 feet and the road is closed in the winter. The road leaves the valley floor and starts a steep climb up the mountain with a 10% grade and switchbacks. There are wonderful views on the way up but you wonder how the car is doing. At the pass there are mountain meadows with cattle on summer grazing. A dirt road goes off at the pass for two miles to a parking lot. Then you have a 1.5 mile hike up to a shoulder off the mountain peak. At 9600 feet it is a slow hike for us flatlanders. On the shoulder of the mountain where 6 ancient trails cross is the medicine wheel. A large circle of stones with spokes to the center. Estimates from 800 to 1700 for its origins have been made, but it is not a relic of the past. It is still in use and considered a sacred location. There were many current offerings at the Medicine Wheel. It was very peaceful to stand on the pass with a breeze blowing across the mountain. You could look out into the valley on both sides. It was not easy to get there in a car and I was thinking what it would have been like walking or on horseback.

Empty Barns –

Over the years as we have driven across the country, I am amazed at the number of empty barns. The livestock are gone and crops are growing right up to the barn through the old cattle yard. Also on this trip I saw empty feedlots. Around these empty feedlots we saw less corn and alfalfa and an increase in wheat and soybeans. Agriculture is always changing but I miss seeing the animals and the small farms.

Lewis and Clark -

Much of the area we traveled this summer was along the Lewis and Clark route of exploration of the Louisiana Purchase. We stopped at several of their camp sites. One of the more interesting ones was the Headwaters of the Missouri River. It gave a very nice view of what the explorers had seen. Then standing on the bluff over-looking the river, we could hear then see a train coming through the valley and visualize the ease of travel with the coming of the railroad for the west.

A word about Sacajawea (Wyoming) or Sacagawea(North Dakota)

We stopped in Lander, Wyoming and the next morning, just north of Lander; we saw a sign that said Sacajawea burial place. So……we took a left and we never saw another sign for her grave.

We kept driving and saw a bunch of crosses and a statue off to the left, so we turn down the dirt road and into the cemetery, and there she was, a statue of Sacajawea. As we were taking pictures a car comes flying into the cemetery and parks behind us. A little woman with a straw hat jumps out and starts talking about how she saw the door to the chapel open and thought she would come close it. Then she let us know that she was on the heritage committee and that she had a book about Chief Washaki (Sacajawea's cousin, this woman's grandfather) for only $15. We declined, but she kept talking and we ended up purchasing the book. She also informed us that Sacajawea wasn't really buried here but somewhere up in the mountains "as was Indian custom."

Well as we travelled through Wyoming, Montana and North Dakota we learned that there are conflicting stories about this woman. In Wyoming the Shoshone woman told us that she died near Ft. Washakie when she was in her 90s and was buried somewhere in the mountains nearby. In Montana and North Dakota the story was that she died at the age of 25 at a fort and they claim that the woman in Wyoming was an imposter. The Wyoming Shoshone woman claimed, however, that the woman who died at the fort was Sacagawea's sister. She was married to a French Fur Trader and her two children were adopted by Clarke a year after the 1825 death. I have used two spellings of her name because the Wyoming uses a j and North Dakota uses a g in the middle of her name. Evidently, no one knows for sure what the true story of this woman is, but she played an important part in the history of these three states and the US.

Statue in Wyoming

Stature in North Dakota
Wild Horses

Many places had wild horses.

Images that many people associate with a lost time of mountain men, Indians, ranching, and farming.

Getting Calves Off to a Good Start

John K. Bernard
Dairy Research and Extension

There are several basic practices that are essential for getting calves off to a good start and keeping them healthy. Most of these practices we have know about for some time, but sometimes we or our employees get busy or side tracked and do not follow them as well as we should which results in higher rates of morbidity and mortality. Research has shown that calves that get sick early in life never grow as well and produce less milk well as cows, so keeping calves growing well and healthy is very important.

Clean Environment: Calves should be born in a clean environment. Depending on your operation this could be a good pasture or a freshly bedded stall. Calves born in an environment that is dirty will be exposed to pathogens which will make it sick. If a pathogen gets into the small intestine before colostrum, the pathogen wins and the calf loses. Because most dairies have one lot for calving year round, it is good to examine the calving area closely to determine if it is as clean as it should be.

Colostrum: Calves are born without any immunity and depend on colostrum for antibodies to protect against disease until they can produce their own. Colostrum quality starts with good dry cow nutrition and vaccination programs and is easily measured using a colostrometer. The antibodies in colostrum that has high bacteria concentrations are not absorbed as well by the calf which can result in failure of passive transfer of antibiotics. The equipment and techniques used to harvest colostrum should be the same as that used for harvesting milk to be sold. One gallon of high quality colostrum should be fed as soon as possible after the calf has been born. It is important to remember that antibody absorption in the small intestine decreases after birth and does not occur after 24 hours, so any delay may reduce the total quantity of antibody absorbed. A second feeding of 2 quarts approximately 12 hours after birth should provide additional antibodies as well nutrients to get the calf off to a good start. Feeding colostrum has also been shown to bind pathogens that may be consumed, so feeding transition milk for the following two days is a good practice.

If high quality colostrum is not available, there are several colostrum replacement products on the market. The key is providing more than 100 g of immunoglobulins so that passive transfer is achieved. Colostrum supplements do not provide this level of immunoglobulins and should only be used to supplement good or poor quality colostrum.

Clean Utensils: Calf bottles, water buckets, tubes, mixing utensils, and any other items used for feeding calves should be throughly cleaned after each feeding. Often times problems can be linked to poor cleaning and sanitation of calf bottles or buckets. Hot water, detergent, and sanitizer are just as important as the type of milk or milk replacer fed. Feeding utensils should also be allowed to dry between feeding as bacteria will grow on wet surfaces.

Calf housing: Whatever type of housing is used, it should be clean and provide some protection from heat stress of cold drafts. Most producers house calves individually, but there are group housing systems that can work just as well. Ideally, an all-in all-out system should be used so that the housing can be cleaned and sanitized between calves.

Nutrition: Producers have a choice of nutrition programs from feeding raw waste milk to high quality milk replacers. If whole or waste milk is fed, it should be pasturized to reduce the bacteria concentrations. Research has shown that calves fed properly pasturized milk grow better and have lower morbidity rates. Milk replacers have been used for years as a substitute for whole milk. Milk replacer should be fed at rates that will provide adequate nutrients for growth (more than 1 lb. of a 20/20 milk replacer). In addition to adequate liquid, calves should be encouraged to consume a high quality calf starter as soon as possible. Fresh calf starter should be fed daily in amounts that the calf will consume. Fresh, clean water is also essential starting at day one.

When properly managed, dairy calves should double their birth weight by weaning. Many operations can achieve this by six weeks of age. The practices outlined above have been shown to get calves off to a good start. If it has been a while since you have reviewed these basic practices with your employees, now would be a good time to revisit how calves are handled.

Forages Are Critical

Lane Ely
Professor Emeritus

Forages have always been an integral part of the feeding program for dairy cows. As a ruminant, the dairy cow needs forage in her diet. Whether the forages are grazed or fed as preserved feeds, they are critical to the success of the dairy cow and the dairy farm.

With the introduction of the proximate analysis system for feed evaluation, scientific feeding of dairy cows began. The composition of feeds could be determined (Crude Fiber, Crude Protein, Ether Extract and Minerals) and the requirement for the dairy cow was determined in these values. Through the years the system has been refined and our cows have improved but forages are still critical to our success.

Using corn silage, sorghum silage, alfalfa hay and bemudagrass hay, rations were calculated to show the value of forage quality and availability. Table 1 shows the composition and price of the four forages. The prices are from production budgets and do not reflect a market value. Your price can and probably will be different.

Rations were balanced for 1350 pound cow producing 60 pounds of 3.6% fat milk and 155 days in milk. The price of milk is $18.00/cwt. The concentrate mix used the amount necessary to balance the ration for each forage using the following ingredients with their prices: ground corn $3.25/bu; soybean meal 48 $285.00/ton; whole cottonseed $210.00/ton; corn gluten feed $165.00/ton; soyhulls $110.00/ton; limestone $65.00/ton; dical phosphate $320.00/ton; TM salt $140.00/ton and dynamate $100.00/ton. Your prices may vary from these.

Table 2 shows the rations and costs for each forage. The rations were balanced with only one forage. Forage quality of each forage was correlated with the amount fed and the forage and concentrate ratio of the ration. Alfalfa hay has an advantage because of the protein content and the mix of concentrate and protein sources.

What if the forage quality could be improved from the values in Table 1? If one could harvest the crop to get a 10% increase in crude protein, 10% increase in NEL and 10% decrease in NDF, how would the ration change with increased forage quality? Table 3 shows the rations with the increased forage quality. The result was decreased ration costs and increased IOFC for each forage. This was accomplished by increasing the forage and decreasing the concentrate except for sorghum silage. The sorghum silage ration was cheaper because it could feed more of the cheaper grains.

The last few years in the Southeast, the amount of forage produced was limited. The full amount of the forages were not available. On Table 4 rations are shown where the amount of forage was limited. For corn silage, alfalfa hay and bermudagrass hay the amount available was approximately 50% of the first rations. Sorghum silage was only cut 20% to maintain a minimum forage value for rumen function. With the limited amount of forage, ration cost increased as more concentrate was fed and IOFC decreased. Not only the quality of forage is critical but the quantity of forage available is critical.

An observation I have made over the years is that one of the indicators or signs of success in the dairy business is the availability of forage for the dairy. Farms that have more than a year's supply can weather the short crop years without paying premiums for forage and have the ability to feed different quality forage to different groups. Forages are critical to the success of the dairy cow and the dairy farm.

Table 1. Forages and Composition Used in the Rations

Forage	$/ton	DM%	NDF%	CP%	NEL
Corn Silage	25	30	51	9	.67
Sorghum Silage	30	28	58	8	.56
Alfalfa Hay	85	89	43	19	.60
Bermudagrass Hay	40	87	72	10	.55

Table 2. Ration Cost and Amount Feed

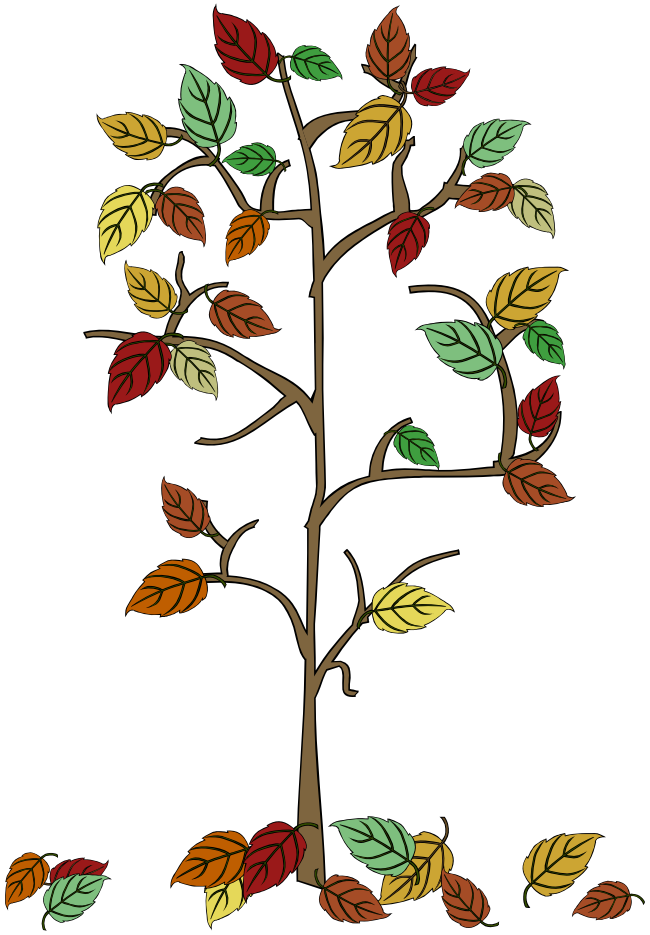
Forage	#/da	FiC	#Concentrate	Feed $	IOFC
Corn Silage	92.2	65:35	16.4	2.92	7.88
Sorghum Silage	39.2	36:64	33.6	3.26	7.54
Alfalfa Hay	40.7	80.20	10.3	2.50	8.30
Bermudagrass Hay	20.0	40:60	29.4	2.78	8.02

Table 3. Increased Forage Quality

Forage	#/da	FiC	# Concentrate	Feed $	IOFC
Corn Silage	102.8	74:26	12.2	2.84	7.96
Sorghum Silage	36.1	37:63	37.7	3.22	7.58
Alfalfa Hay	43.4	88:12	5.7	2.29	8.51
Bermudagrass Hay	20.0	40:60	28.9	2.71	8.09

Table 4. Limited Forage Availability

Forage	#da	FiC	# Concentrate	Feed $	IOFC
Corn Silage	40	42.58	30.4	2.99	7.81
Sorghum Silage	30	38:62	34.7	3.23	7.57
Alfalfa Hay	20	55:35	23.7	2.67	8.13
Bermudagrass Hay	10	38:62	34.2	2.88	7.92



Top 20 DHIA By Test Day Milk Production- June 2010

					Test Day Average				Yearly Average	
Herd	**County**	**Br.**	**Mo.**	**Cows**	**% Days in Milk**	**Milk**	**% Fat**	**TD Fat**	**Milk**	**Lbs. Fat**
J. Everett Williams	Morgan	H	6	383	85	2.8	3.2	2.75	26607	966
Rodgers' Hillcrest Farms Inc.	McDuffie	H	6	377	89	85.5	3.5	2.66	25823	913
Dave Clark	Morgan	H	5	939	88	81	3.5	2.65	26539	959
D & T Dairy	Wilkes	H	6	66	85	78.3			24943	
Irvin Yoder	Macon	H	6	194	88	77.6	3.4	2.37	23476	839
Agri- Fresh Dairy	Laurens	H	6	220	85	75.5	3.4	2.37	22409	788
Univ. of GA Dairy Farm	Clarke	H	5	113	86	75.5	3.5	2.49	22507	825
Lee Whitaker	McDuffie	H	5	261	86	73.8	3	1.99	20546	731
Doug Chambers	Jones	H	6	362	86	73.3	3.4	2.15	22188	807
J. Everett Williams	Morgan	X	6	567	89	73.2	3.9	2.35	22263	934
Dairy Production Systems-GA	Mitchell	H	6	3482	87	72.9	3.3	2.16	22585	801
Colin & Niamh Matthews	Jenkins	H	5	244	91	72.7	2.9	2.04	22806	
Brooksco Dairy	Brooks	H	6	2501	90	72.7			21706	
Phil Harvey #2	Putnam	H	6	693	89	72			23643	
Westbrook Dairy	Brooks	H	6	1307		71.9				
Cecil Dueck	Jefferson	H	5	68	89	71.8	3.2	2.17	21923	773
B & S Dairy	Wilcox	H	5	640	86	71.7	3.2	1.92	21338	733
Danny Bell	Morgan	H	6	245	89	71.6	3.2	2	21633	852
Bud Butcher	Coweta	H	5	363	88	70.7	3.2	1.99	21160	
Kent Walker	Greene	H	6	109	88	70.1	3.1	1.99	21783	773

1Minimum herd or permanent string size of 10 cows. Yearly average calculated after 365 days on test. (Mo.) column indicates month of 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 20 DHIA By Test Day Fat Production- June 2010

					Test Day Average				Yearly Average	
Herd	**County**	**Br.**	**Mo.**	**Cows**	**% Days in Milk**	**Milk**	**% Fat**	**TD Fat**	**Milk**	**Lbs. Fat**
J. Everett Williams	Morgan	H	6	383	85	92.8	3.2	2.75	26607	966
Coastal Plain Exp. Station	Tift	H	6	238	87	67.9	4.5	2.71	23064	1046
Rodgers' Hillcrest Farms, Inc.	McDuffie	H	6	377	89	85.5	3.5	2.66	25823	913
Dave Clark	Morgan	H	5	939	88	81	3.5	2.65	26539	959
J. Everett Williams	Morgan	X	6	54		67.7	3.8	2.5		
Univ. of GA Dairy Farm	Clarke	H	5	113	86	75.5	3.5	2.49	22507	825
Southern Rose Holsteins	Lee	H	6	107	86	67.8	3.7	2.45	22622	831
Irvin R. Yoder	Macon	H	6	194	88	77.6	3.4	2.37	23476	839
Agri- Fresh Dairy	Laurens	H	6	220	85	75.5	3.4	2.37	22409	788
R & D Dairy	Lee	H	6	114	87	68	3.5	2.36	23234	835
J. Everett Williams	Morgan	X	6	567	89	73.2	3.9	2.35	22263	934
Krulic Dairy Farm, Inc.	Screven	X	6	47	90	67.8	4	2.34	22149	919
Krulic Dairy Farm, Inc.	Screven	H	6	74	87	68.3	3.9	2.27	21866	871
Berry College Dairy	Floyd	J	5	30	77	55.6	5.3	2.26	13816	718
Ivan Peters	Jefferson	H	5	106	87	67.1	3.5	2.24	20105	778
Troy Yoder	Macon	H	5	162	88	69.2	3.3	2.23	20793	759
Stovall Dairy Inc.	Madison	H	6	134	86	63.8	3.6	2.22	19620	684
Russ Gilbert	Morgan	H	6	160	89	65.4	3.8	2.18	18202	701
Cecil Dueck	Jefferson	H	5	68	89	71.8	3.2	2.17	21923	773
Dairy Production Systems- GA	Mitchell	H	6	3482	87	72.9	3.3	2.16	22585	801

1Minimum herd or permanent string size of 10 cows. Yearly average calculated after 365 days on test. (Mo.) column indicates month of 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 20 DHIA By Test Day Milk Production- July 2010

					Test Day Average				Yearly Average	
Herd	**County**	**Br.**	**Mo.**	**Cows**	**% Days in Milk**	**Milk**	**% Fat**	**TD Fat**	**Milk**	**Lbs. Fat**
J. Everett Williams	Morgan	H	7	369	85	91.8	3.3	2.8	26651	958
Rodgers' Hillcrest Farms, Inc.	McDuffie	H	7	372	89	86.1	3.5	2.6	26416	933
Dave Clark	Morgan	H	6	941	89	80.9	3.4	2.46	26467	951
D & T Dairy	Wilkes	H	6	66	85	78.3			24943	
Doug Chambers	Jones	H	7	358	86	75.2	3.4	2.27	22251	808
Brooksco Dairy	Brooks	H	6	2501	90	72.7			21706	
Colin & Niamh Matthews	Jenkins	H	5	244	91	72.7	2.9	2.04	22806	
J. Everett Williams	Morgan	X	7	581	89	72.5	4	2.43	22317	932
Phil Harvey #2	Putnam	H	6	693	89	72			23643	
Westbrook Dairy	Brooks	H	6	1307		71.9				
Danny Bell	Morgan	H	6	245	89	71.6	3.2	2	21633	852
Dairy Production Systems- GA	Mitchell	H	7	3429	87	71.3	3.2	2.02	22613	798
Troy Yoder	Macon	H	7	166	89	70.6	3.1	2.13	21113	765
R & D Dairy	Lee	H	7	114	88	69.8	3.3	2.2	23465	842
Southern Rose Holsteins	Lee	H	7	104	86	69.6	3.5	2.14	22666	835
Stovall Dairy Inc.	Madison	H	4	129	86	69.2	3.5	2.34	19993	698
Irvin R. Yoder	Macon	H	7	187	88	69.1	3.5	2.22	23377	831
Coastal Plain Exp Station	Tift	H	7	242	87	68.3	4.2	2.27	22866	1040
Bill Dodson	Putnam	H	7	222	88	67.8	3.4	2.05	22600	796
Larry Nisley	Macon	H	7	148	95	67.7	2.7	1.69	22604	704

1Minimum herd or permanent string size of 10 cows. Yearly average calculated after 365 days on test. (Mo.) column indicates month of 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 20 DHIA By Test Day Fat Production- July 2010

					Test Day Average				Yearly Average	
Herd	**County**	**Br.**	**Mo.**	**Cows**	**% Days in Milk**	**Milk**	**% Fat**	**TD Fat**	**Milk**	**Lbs. Fat**
J. Everett Williams	Morgan	H	7	369	85	91.8	3.3	2.8	26651	958
Rodgers' Hillcrest Farms Inc.	McDuffie	H	7	372	89	86.1	3.5	2.6	26416	933
Dave Clark	Morgan	H	6	941	89	80.9	3.4	2.46	26467	951
J. Everett Williams	Morgan	X	7	72	99	66.2	3.9	2.46	23711	958
J. Everett Williams	Morgan	X	7	581	89	72.5	4	2.43	22317	932
Stovall Dairy Inc.	Madison	H	7	129	86	69.2	3.5	2.34	19993	698
Krulic Dairy Farm, Inc.	Screven	H	7	72	87	64.7	4	2.34	21826	866
Doug Chambers	Jones	H	7	358	86	75.2	3.4	2.27	22251	808
Coastal Plain Exp Station	Tift	H	7	242	87	68.3	4.2	2.27	22866	1040
Krulic Dairy Farm, Inc.	Screven	X	7	44	90	61.3	3.9	2.24	22189	916
Irvin R. Yoder	Macon	H	7	187	88	69.1	3.5	2.22	23377	831
R & D Dairy	Lee	H	7	114	88	69.8	3.3	2.2	23465	842
Southern Rose Holsteins	Lee	H	7	104	86	69.6	3.5	2.14	22666	835
Troy Yoder	Macon	H	7	166	89	70.6	3.1	2.13	21113	765
Visscher Dairy	Jefferson	H	7	695	84	60.7	3.8	2.09	18490	
Bill Dodson	Putnam	H	7	222	88	67.8	3.4	2.05	22600	796
Agri-Fresh Dairy	Laurens	H	7	217	85	64.3	3.5	2.05	22531	793
Williams Dairy	Taliaferro	H	6	124	91	64.1	3.4	2.05	22887	809
Colin & Niamh Matthews	Jenkins	H	5	244	91	72.7	2.9	2.04	22806	
Robert R. Yoder	Wayne	H	7	36	89	63	3.4	2.04	16077	590
Vista Farm	Jefferson	H	6	77	88	61.9	3.3	2.04	22213	688

1Minimum herd or permanent string size of 10 cows. Yearly average calculated after 365 days on test. (Mo.) column indicates month of 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 20 DHIA By Test Day Milk Production- August 2010

					Test Day Average				Yearly Average	
Herd	**County**	**Br.**	**Mo.**	**Cows**	**% Days in Milk**	**Milk**	**% Fat**	**TD Fat**	**Milk**	**Lbs. Fat**
J. Everett Williams	Morgan	H	8	354	85	86	3.2	2.4	26693	948
Rodgers' Hillcrest Farms Inc.	McDuffie	H	8	368	89	85.8	3.5	2.5	27003	955
Dave Clark	Morgan	H	8	942	88	79.4	3.4	2.22	26271	936
J. Everett Williams	Morgan	X	8	592	88	72.9	3.6	2.14	22384	926
Westbrook Dairy	Brooks	H	8	1742		71.4				
Doug Chambers	Jones	H	8	344	86	71.3	3.4	2.17	22479	811
Brooksco Dairy	Brooks	H	8	2225	90	68.8			21896	
J. Everett Williams	Morgan	X	8	77	98	67.9	3.6	2.16	23526	930
Dairy Production Systems- GA	Mitchell	H	8	3432	87	67	3.4	1.98	22611	796
Danny Bell	Morgan	H	8	248	88	66.3	4.1	2.45	21661	845
Irvin R. Yoder	Macon	H	8	184	88	65.7	3.6	1.98	23195	825
Coastal Plain Exp Station	Tift	H	8	242	86	65	4.4	2.28	22643	1027
R & D Dairy	Lee	H	8	111	89	64.9	3.3	1.8	23861	850
Larry Nisley	Macon	H	8	141	93	64.5	2.6	1.23	22289	684
Southern Rose Holsteins	Lee	H	8	118	86	63.7	3.8	1.85	22539	833
Scott Glover	White	H	8	81	86	62.9	3.9	1.96	23629	919
Troy Yoder	Macon	H	8	163	89	62.3	3.2	1.68	21578	774
Robert Paul Yoder	Macon	H	7	91	76	62.2	3.5	1.48	16251	597
Bud Butcher	Coweta	H	8	356	88	61.7	2.8	1.49	21437	
Willie Jones Jr. Dairy	Putnam	H	8	204	87	60.9				

1Minimum herd or permanent string size of 10 cows. Yearly average calculated after 365 days on test. (Mo.) column indicates month of 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 20 DHIA By Test Day Fat Production- August 2010

					Test Day Average				Yearly Average	
Herd	**County**	**Br.**	**Mo.**	**Cows**	**% Days in Milk**	**Milk**	**% Fat**	**TD Fat**	**Milk**	**Lbs. Fat**
Rodgers' Hillcrest Farms, Inc.	McDuffie	H	8	368	89	85.8	3.5	2.5	27003	955
Danny Bell	Morgan	H	8	248	88	66.3	4.1	2.45	21661	845
J. Everett Williams	Morgan	H	8	354	85	86	3.2	2.4	26693	948
Coastal Plain Exp Station	Tift	H	8	242	86	65	4.4	2.28	22643	1027
Dave Clark	Morgan	H	8	942	88	79.4	3.4	2.22	26271	936
Krulic Dairy Farm. Inc.	Screven	H	8	71	88	60.6	4	2.2	21768	863
Doug Chambers	Jones	H	8	344	86	71.3	3.4	2.17	22479	811
J. Everett Williams	Morgan	X	8	77	98	67.9	3.6	2.16	23526	930
J. Everett Williams	Morgan	X	8	592	88	72.9	3.6	2.14	22384	926
Visscher Dairy	Jefferson	H	7	695	84	60.7	3.8	2.09	18490	
Krulic Dairy Farm, Inc.	Screven	X	8	42	91	60.1	3.9	2.01	22101	911
Irvin R. Yoder	Macon	H	8	184	88	65.7	3.6	1.98	23195	825
Dairy Production Systems-GA	Mitchell	H	8	3432	87	67	3.4	1.96	22611	796
Scott Glover	White	H	7	81	86	62.9	3.9	1.96	23629	919
Robert R. Yoder	Wayne	H	7	37	90	59.4	3.4	1.86	16399	598
Southern Rose Holsteins	Lee	H	8	118	86	63.7	3.8	1.85	22539	833
Stovall Dairy Inc.		H	8	129	87	51.6	4	1.84	20327	713
R & D Dairy	Lee	H	8	111	89	64.9	3.3	1.8	23861	850
Eberly Family Farm	Burke	H	7	428	89	56.1	3.6	1.78	20584	647
David L. Moss	Morgan	H	8	113	75	56.9	3.7	1.77	19726	769

1Minimum herd or permanent string size of 10 cows. Yearly average calculated after 365 days on test. (Mo.) column indicates month of 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 20 Lows Herds for SCC Score- June 2010

Herd	County	Br.	Mo.	Cows	Milk-Rolling	SCC-TD-Average Score	SCC-TD-Weight Average	SCC- Average Score
Agri- Fresh Dairy	Laurens	H	6	220	22409	1.6	139	2.6
Irvin R. Yoder	Macon	H	6	194	23476	1.7	110	2.4
Doug Chambers	Jones	H	6	362	22188	1.9	154	2.7
Horst Crest Farms	Burke	H	6	149	19374	2	140	3.1
Danny Bell	Morgan	H	6	245	21633	2	220	2.4
Scott Glover	White	H	6	79	23862	2	136	2.2
Bud Butcher	Coweta	H	6	363	21160	2.1	233	2.4
Ivan Peters	Jefferson	H	6	106	20105	2.2	189	3
Rodgers' Hillcrest Farms Inc.	McDuffie	H	5	377	25823	2.2	294	2.8
Dave Clark	Morgan	H	5	939	26539	2.2	146	2.1
Thomas Bell	Morgan	H	6	150	17022	2.2	213	2.8
Dan Durham	Greene	X	5	116	15545	2.4	139	2.4
Marvin Yoder	Macon	H	6	162	20174	2.4	201	2.7
Troy Yoder	Macon	H	5	162	20793	2.4	204	2.9
Jones Dairy	Brooks	H	5	357	15606	2.5	193	3.4
Lee Whitaker	McDuffie	H	5	261	20546	2.5	332	2.7
Dairy Production Systems- GA	Mitchell	H	6	3482	22585	2.5	213	2.6
J. Everett Williams	Morgan	X	6	1004	24310	2.5	271	2.2
Curtis Strange	Morgan	X	6	356	15439	2.5	265	3.1
Russ Gilbert	Morgan	H	6	160	18202	2.5	168	2.7

Top 20 Lows Herds for SCC Score- July 2010

Herd	County	Br.	Mo.	Cows	Milk-Rolling	SCC-TD-Average Score	SCC-TD-Weight Average	SCC- Average Score
David Addis	Whitfield	H	6	64	17016	1.1	75	1.6
Berry College Dairy	Floyd	J	7	31	13785	1.7	82	3
Dave Clark	Morgan	H	6	941	26467	1.9	139	2.1
Green Hill Dairy LLC	Brooks	X	7	574		2	311	
Horst Crest Farms	Burke	H	6	149	19374	2	140	3.1
Agri-Fresh Dairy	Laurens	H	7	217	22531	2	171	2.6
Danny Bell	Morgan	H	6	245	21633	2	220	2.4
Scott Glover	White	H	6	79	23862	2	136	2.2
Charles Copelan	Greene	H	7	73	16306	2.1	203	3.1
Doug Chambers	Jones	H	7	358	22251	2.1	253	2.7
Jumping Gully Dairy LLC	Brooks	X	7	432		2.3	173	2.3
Grassy Flats Dairy LLC	Brooks	X	7	503		2.4	242	
Dan Durham	Greene	X	5	116	15545	2.4	139	2.4
Rodgers' Hillcrest Farms Inc.	McDuffie	H	7	372	26416	2.4	247	2.7
Marvin Yoder	Macon	H	6	162	20174	2.4	201	2.7
Green Glades Farms Inc.	Putnam	H	7	269	18369	2.4	266	3.2
Irvin R. Yoder	Macon	H	7	187	23377	2.5	232	2.5
Bruce Harper	Morgan	H	7	142	16561	2.5	258	3
Everett Williams	Morgan	X	7	1022	24294	2.5	289	2.3
Coastal Plain Exp Station	Tift	H	7	249	22754	2.5	202	2.7

Top 20 Lows Herds for SCC Score- August 2010

Herd	County	Br.	Mo.	Cows	Milk-Rolling	SCC-TD-Average Score	SCC-TD-Weight Average	SCC- Average Score
David Addis	Whitfield	H	6	64	17016	1.1	75	1.6
Scott Glover	White	H	7	81	23629	1.9	205	2.1
Green Hill Dairy LLC	Brooks	X	7	574		2	311	
Joel Keith	Troup	H	8	212	9997	2.1	299	3.4
Jumping Gully Dairy LLC	Brooks	X	7	432		2.3	173	2.3
Mark E. Yoder	Macon	H	7	112	17188	2.3	293	2.9
Williams Dairy	Taliaferro	H	8	121	22278	2.3	173	2.9
Coastal Plain Exp Station	Tift	H	8	249	22542	2.3	211	2.7
Dave Clark	Morgan	H	8	942	26271	2.3	192	2.2
Grassy Flats Dairy LLC	Brooks	X	7	503		2.4	242	
Danny Bell	Morgan	H	8	248	21661	2.4	261	2.4
Doug Chambers	Jones	H	8	344	22479	2.5	307	2.6
Irvin R. Yoder	Macon	H	8	184	23195	2.5	253	2.5
Dan Durham	Greene	X	8	115	15708	2.6	228	2.5
Russ Gilbert	Morgan	H	8	153	17975	2.6	204	2.7
Eberly Family Farm	Burke	H	7	428	20584	2.6	333	3
Cecil Dueck	Jefferson	H	8	74	21576	2.6	165	3.5
R & D Dairy	Lee	H	8	111	23861	2.6	223	2.7
J. Everett Williams	Morgan	X	8	1023	24271	2.6	271	2.3
Charles Copelan	Greene	H	8	73	16507	2.7	444	3
Agri-Fresh Dairy	Laurens	H	8	214	22527	2.7	319	2.6
Rodgers' Hillcrest Farms Inc.	McDuffie	H	8	368	27003	2.7	275	2.6

Cooperative Extension Service
Department of Animal & Dairy Science
University of Georgia
Athens, GA 30602

Dairyfax Newsletter Enclosed