



GEORGIA DAIRYFAX

<http://www.ces.uga.edu/Agriculture/asdsvm/Dairyscience/dairyfaxpage.HTML2004>

September/October 2004

Dear Dairy Producers:

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

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Sincerely,

Dr. William M. Graves
Professor and
Extension Dairy Scientist

County Extension Director or County
Agent

/sar

DAIRYFAX NEWSLETTER

Southeast Dairy Herd Management Conference

Dr. Lane Ely
Extension Dairy Scientist

The 2004 Southeast Dairy Herd Management Conference will be held November 16-17, 2004 at the Georgia Farm Bureau Building in Macon. The conference this year has been approved for three continuing education credits for certified animal feeding operators. (1 credit is approved for day 1 and 2 credits for day 2 of the conference.)

Tuesday, November 16, 2004

Morning

9:00-Noon Georgia Farm Bureau Building
(5th Floor Dining Room)

11:30 **Conference Registration**

Afternoon

1:00 **Welcome**
Dr. Steve Nickerson

1:15 **Recent Trends in Reproductive Performance of Southeast DHIA Herds**
Dr. Dan Webb

1:45 **Improving Reproductive Management**
Dr. Jeff Stevenson

2:30 **Practical Applications of Ultrasound**
Dr. Paul Fricke

3:00 **Refreshment Break--
Sponsored by Zinpro Corporation**

3:30 **Embryo Transfer as a Tool for
Increasing Fertility During Heat Stress**
Dr. Peter Hansen

4:00 **Sorghum Silage Management**
Dr. Keith Bolsen

4:30 **On the Horizon- Odor**
Dr. Dennis Frame

5:00 **Interaction of Vaccination Schedules and
Reproduction**
Dr. Jon Rosenberg

6:00 **Dinner--
Sponsored by Fort Dodge Animal Health**

Wednesday, November 17, 2004

Morning

8:00 **Conference Registration**

9:00 **Welcome**
Dr. Steve Nickerson

9:15 **Dairying in Hot Weather: Managing
Nutrition & Reproduction**
Dr. Joe West

9:45 **How Best to Get Cows Pregnant**
Dr. Jeff Stevenson

10:15 **Refreshment Break--
Sponsored by Prince Agri Products Inc.**

10:45 **Are Problem Cows Really the Problem?**
Dr. Paul Fricke

11:30 **Using Teat Sealant to Improve Udder
Health**
Dr. Ann Wilkinson

12:15 **Lunch--
Sponsored by Pfizer Animal Health**

Afternoon

1:15 **How to be a Good Neighbor**
Dr. Dennis Frame

2:00 **Important Management Practices for
Silage Production**

2:45 **Questions**

3:00 **Adjourn**

If you have any questions, please call at 706-542-9107 or e-mail laneely@uga.edu. Hope to see you at the Conference.

Permits and NMPs, Owner of Record.

Thomas Bass
UGA Cooperative Extension Service

The regulatory and permitting system of animal feeding operations is largely based on size. The permits and nutrient management plans are also tied to specific persons, required to be certified operators under most situations. Therefore, it is very important to notify the appropriate agencies when an operation changes in size, ownership or status of operation.

Mr. Vernon Jones, of the GA Dept. of Agriculture (GDA), reports, "Producers need to be aware that even though they sell their AFO to someone else, who continues the AFO or the producer decides to cease operation. They are still the "owner of record" on the permit." Any violations or complaints would be traced back to this person. If a farm ceases operation it is in the owner's interest to be removed from the list of operating permitted farms.

For a more detailed explanation of changing your permit status, Tom Hopkins of the Environmental Protection Division (EPD) offers the following, "If a farm reduces herd below permit threshold, the permit should be terminated. We don't have a notice of termination form, but a simple letter of explanation to EPD will suffice. A copy of the original permit application should be included with termination letters. To resume coverage if herd size goes back up to previous levels, another application should be filed within 180 days. This won't trigger new or expanding requirements since the farm was previously permitted under the existing rules. EPD response time is generally 60 to 90 days. Producers should not "flip" their permit coverage too frequently. Abuse of the system could trigger additional compliance inspections and issuance of an individual permit."

Some producers have opted to operate under certain permits even if they are below the size threshold. This means they must follow the provisions and requirements described in the permit. If they wish to reduce regulatory burdens when reducing size then the permit must be terminated. Regardless of size or permit, nutrient management planning and related best management practices are highly recommended.

In conclusion, producers must notify the Environmental Protection Division (EPD) of a change in ownership or operating status for their permitted AFO. Also, GDA should be notified regarding drastic changes in the NMP and reduction in size or closure that affects the NMP requirement. These offices can be reached by phone at (404) 362-2680 for EPD and (404) 656-9383 for GDA.

Potential Impact of Tropical Storms on Whole Cottonseed Quality

Dr. John Bernard
Dairy Research and Extension

The hurricanes that have hit the Southeast this fall have not only reduced cotton yields, but will reduce lint and seed quality of part of the crop as well. This is especially true for cotton that was ready for harvest when the storms hit, but later maturing cotton may not be as badly impacted. In the presence of excess moisture and high temperatures, the lint changes color and loses tensile strength decreasing its value. These conditions also result in lower quality seed and in extreme cases sprouted seed.

One of the components that cotton gins and oilseed mills measure as an indicator of quality is the proportion of free fatty acid (FFA) in the oil. Oil from whole cottonseed with elevated FFA does not have the stability or cooking characteristics desired by the consumer. In a normal year, the FFA rarely exceeds 12% which will not be an issue. Feeding cottonseed with higher concentrations of FFA may impact performance. We have conducted several trials to determine the impact of feeding whole cottonseed containing elevated FFA concentrations. The results of our research indicate that feed intake and milk yield are not affected by feeding diets containing cottonseed with over 30% FFA in the oil. However, we have observed a decrease in milk fat percentage and an increase in milk urea nitrogen when whole cottonseed with high concentrations of FFA are fed. We are currently examining the reasons for these changes, but suspect that the higher concentrations of FFA, especially long chain fatty acids, alter ruminal fermentation and protozoa concentrations.

In 2002 when a majority of the cotton crop in the Southeast was damaged and seed quality was poor, reports of decreased intake and milk yield were not uncommon from dairy producers. In many cases, producers received cottonseed with higher than normal moisture concentrations. Wet cottonseed are susceptible to mold growth which results in a musty smell that would reduce palatability. Cottonseed with high moisture concentrations may heat and reduce protein availability and quality. Also, many off-quality cottonseed have lower concentrations of protein and fat as well as high concentrations of FFA reducing their nutrient value. Feeding this type of seed may reduced intake and milk yield. Even if intake isn't reduced, nutrient intake would be lower than formulated if the nutrient content of the seed was not taken into account.

If "wet" cottonseed are purchased, producers should take steps to dry the seed so that moisture concentrations are less than 12%. Storing seed in a silage bag should be considered if seed are to be stored for several months. Research at this stations has shown that this approach works well; however producers need to check for holes in the bag and seal them immediately to keep oxygen out. It would be advisable to consider using additives that retard mold growth in the stored seed, but these must be mixed uniformly into the seed for best results. A representative sample of each load should be collected for chemical analyses, including an aflatoxin screen, so rations can be adjusted for any changes in protein or fat concentrations.

Producers may want to consider purchasing graded seed, but this will come at a premium.

Another option is to set minimum standards for moisture, protein, oil and free fatty acids in the oil, not only for cottonseed, but all ingredients purchased. When minimum standards are used for purchasing, both the buyer and seller have a basis for discussing any potential problems.

Feeding cottonseed with elevated concentrations of FFA should not negatively impact intake or milk yield although milk fat percent may be slightly lower when FFA exceeds 18%. Wet cottonseed should be dried to prevent nutrient losses and molding which may reduce intake and performance. Producers should also consider developing minimum quality standards for purchasing cottonseed, as well as all other ingredients, to avoid problems.

Southeast PDHGA Annual Workshop

Dr. John Bernard
Dairy Research and Extension

The Southeast Region Dairy Heifer Workshop and Tour will be held on October 28, 2004 in Ocala, FL. The meeting is co-sponsored by Professional Dairy Heifer Growers, the University of Florida and the University of Georgia. The program will begin at 8:00 a.m. with a tour of M&B Dairy near Lecanto, FL. After the tour, attendees will be treated to presentations on “Heifer Economics’ by Geoff Benson (North Carolina State University) and “AI Versus Bull Breeding” by Albert deVries (University of Florida). An open discussion of “protocols for vaccination programs” will be led by John Bernard (University of Georgia). In the afternoon, the group will tour two area calf raising farms; Telfair Farm (Art Studley) and Hancock Farms (Richard & Francine Hancock).

For more information, contact Russ Giesy, University of Florida Extension Dairy Science 352-793-2728 or Dr. John Bernard, University of Georgia Department of Animal and Dairy Science 229-391-6856.

Florida Dairy Business Conference

Dr. John Bernard
Dairy Research and Extension

The Dairy Business Conference will be held at the Marion County UF/IFAS Extension Center in Ocala, FL starting at 9:45 a.m. on Wednesday, October 27, 2004. The theme of the conference is “Rolling with the Waves”. Presentations will focus on methods of coping with milk price volatility. Speakers for the conference include: Scott Peelin & Tom Rugie, Brian Perkins (Monsanto), Russ Giesy (UF/IFAS), Genean McKinnon (dairy lobbyist), Albert deVries (UF/IFAS), Geoff Benson (North Carolina State University) and Ron Schmidt (UF/IFAS). Additionally, there will be a dairy producer panel on “How We Manage to Ride the Waves” with producers Don Bennink, Terry Reagon and Joe Nickerson. For more information, contact Russ Giesy, University of Florida Extension Dairy Science 352-793-2728.

What's Happening at the UGA Teaching Dairy

Dr. Lane Ely
Extension Dairy Specialist

As summer has ended and the fall semester is kicking off, the UGA Teaching Dairy is preparing for another year. Class schedules having been made so hiring student workers becomes the next order of business. The reduction in cow numbers and staff has increased the importance of scheduling in order for students to have adequate exposure to the animals. One change that occurs with each new semester is a turn over in our student labor force. About 75% of students leave each semester. We have to find and train new students which can be time consuming. Finding and keeping good employees is critical to the success of the UGA Teaching Dairy.

Our brown mid-rib sorghum crop was not in good shape. Germination was not very uniform and growth was stunted due to lack of rain. Growth improved with rain but the damage had already been done. The crop never fully recovered. We were ready to harvest when the rains from Frances arrived. Although brown mid-rib sorghum has a very small stalk, the crop was no match for Francis. High winds caused a lot of lodging; surprisingly, many of the plants have recovered. We are hopeful that the crop will continue to stand back up as we wait for the ground to dry for harvesting.

The solid separator has been poured, and we are waiting for clearance so we can start using it. Milk production has stayed constant over the summer and somatic cell counts have stayed around 250,000. With all the new student employees, we have been trying to emphasize the importance of cow health and cleanliness.

Don't miss the opportunity to stop by the UGA Teaching Dairy next time you are in Athens.

****Dates to Remember****

October 10, 2004	Commercial Dairy Heifer Show, GA National Fair, Perry
October 15-17, 2004	Open & Junior Dairy Shows, GA National Fair, Perry
October 27, 2004	Florida Dairy Business Conference, Ocala, Florida
October 28, 2004	Southeast Region Dairy Heifer Workshop and Tour, Ocala, Florida
November 16-17, 2004	Southeast Dairy Herd Management Conference, Farm Bureau Bldg., Macon

Teamwork

Dr. Warren Gilson
Extension Dairy Scientist

I recently had the opportunity to watch a horse pulling contest. It had been a number of years since I had seen such an event and it got me to thinking, "It's not just the horses doing the work and working together. There is a great deal of teamwork involved in a successful pull."

For those who may not be familiar with a horse pulling contest, two horses are hitched together with a harness adapted for quickly attaching a "sled". The sled is constructed with a platform on runners and a cable attached to both ends. Weight is added to the sled to provide resistance. The horses must pull the sled and weight 20 feet for a "full pull". If they don't pull the complete distance, then the actual distance is measured. Weight is added after each team has three opportunities to pull the sled the complete distance.

There are several teams which must function properly for a successful pull to occur. The most obvious are the horses themselves. If they don't pull together as a team, they are doomed to failure. On numerous occasions I observed smaller teams working together to pull the complete distance, while larger teams did not pull together and as a result were not successful.

Another team was the handler and the horses. If they don't work together, the horses may pull before the sled is securely attached; causing obvious problems and wasted energy. This happened on numerous occasions and I was surprised that no one dislocated a shoulder or was seriously injured.

The handler is accompanied by two other individuals who attach the harness to the sled. This can be a tricky task and if they do not work together the process may not be smooth or it may not be accomplished at all. The handler must also position the team so that the harness can be easily attached to the sled.

You can see that teamwork is important in accomplishing the task. In one division, the winning team worked together to make a "full pull"; meanwhile, an obviously larger team could only pull the sled 18 inches. Quite a contrast in results.

There are many similarities to the horse pull on the dairy farm. The milkers, the feeders and everyone who work on the farm must work together as a team for it to be successful. Even those who only visit on a periodic basis such as the veterinarian, the nutritionist, etc. must work with the other members of the team to insure maximum success. Evaluate your team today. Is everyone working together or are they working independently of each other? It is the manager's responsibility to insure that everyone is working as a team. As the old adage goes: Together Everyone Achieves More (TEAM).

TOP 20 DHIA HERDS BY TEST DAY FAT PRODUCTION

Herd	County	Br.	Mo.	Cows	Test Day Average				Yearly Average				
					% Days in Milk	Milk	Fat		Milk	Fat		Protein	
							%	Lbs.		%	Lbs.	%	Lbs.
Williams Dairy	Morgan	H	7	514	87	67.5*	3.7	2.5	25347	3.8	969	2.9	739
Marvin Yoder	Macon	H	6	137	94	63	3.9	2.4	22089	3.6	795	3	661
Dave Clark	Morgan	H	7	836	88	69.3*	3.4	2.4	25166	3.2	812	2.9	739
Irvin R. Yoder	Macon	H	6	141	91	65.1	3.5	2.3	23559	3.6	851	3	715
Williams Dairy	Taliferro	H	7	123	87	59.9	3.7	2.2	20579	3.7	754	3	625
Krulic Dairy Farm, Inc.	Screven	H	7	120	81	57.7	3.8	2.2	22001				
Russell Johnston	Screven	H	7	98	89	56.7	3.9	2.2	19361	3.8	736	3.1	599
Agri-Fresh Dairy	Laurens	H	7	207	95	64.5*	3.4	2.17	24668	3.2	794	2.9	722
Gin Branch Farm	Laurens	H	7	47	94	56.7	3.6	2	22485	3.8	844	3	680
Coastal Plain Exp. Station	Tift	H	7	164	94	54.5	3.7	2	18836	3.9	735	3.1	575
Ralph Adamson Jr.	Lamar	H	7	466	83	56.3*	3.6	2	20455	3.6	727	3	618
Vista Farm	Jefferson	H	7	77	90	56.2	3.6	2	22339	3.5	780	3.1	686
Mark E. Yoder	Macon	H	7	114	93	57.3	3.5	2	21875	3.5	755	3	666
Troy Yoder	Macon	H	7	138	89	52.3	3.7	2	20320	3.6	739	3	613
G & H Dairy	White	H	7	91	90	50.9	3.8	1.9	17640	3.5	611	3.1	543
Lazy S Dairy	Worth	H	7	266	92	53.9	3.5	1.9	19555	3.5	689	3	588
University of GA Dairy Farm	Clarke	H	7	90	84	51.2	3.7	1.9	19446	3.7	727	3	591
Robert Paul Yoder	Macon	H	7	89	83	51.1	3.7	1.9	19129	3.4	646	3	576
David L Moss	Morgan	H	7	117	79	45.6	4.1	1.9	18122	4.1	734	3.1	554
Eugene King	Macon	H	7	82	95	51.3	3.7	1.9	18948	3.7	708	3.2	602

¹Minimum herd 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 HERDS BY TEST DAY MILK PRODUCTION

Herd	County	Br.	Mo.	Cows	Test Day Average				Yearly Average				
					% Days in Milk	Milk	Fat		Milk	Fat		Protein	
							%	Lbs.		%	Lbs.	%	Lbs.
Dave Clark	Morgan	H	7	836	88	69.3*	3.4	2.4	25166	3.2	812	2.9	739
Williams Dairy	Morgan	H	7	514	87	67.5*	3.7	2.5	25347	3.8	969	2.9	739
Irvin R. Yoder	Macon	H	6	141	91	65.1	3.5	2.3	23559	3.6	851	3	715
Agri-Fresh Dairy	Laurens	H	7	207	95	64.5*	3.4	2.2	24668	3.2	794	2.9	722
Marvin Yoder	Macon	H	6	137	94	63	3.9	2.4	22089	3.6	795	3	661
Brooksco Dairy	Brooks	H	7	2432	90	60.3*			22346				
Williams Dairy	Taliaferro	H	7	123	87	59.9	3.7	2.2	20579	3.7	754	3	625
Al & Richard Kinder	Hart	H	7	317	93	57.8	3	1.7	20718	3.3	679	3	622
Krulic Dairy Farm, Inc.	Screven	H	7	120	81	57.7	3.8	2.2	22001				
Wayne Stoffell	Peach	H	7	878	90	57.7*			21573				
Mark E. Yoder	Macon	H	7	114	93	57.3	3.5	2	21875	3.5	755	3	666
Maco Farm	Macon	H	7	120	98	57.2	3.1	1.8					
Moriah Dairy Inc.	Brooks	H	7	447	89	56.8*	3	1.7	19179	3.3	636	3	572
Russell Johnston	Morgan	H	7	98	89	56.7	3.9	2.2	19361	3.8	736	3.1	599
Gin Branch Farm	Laurens	H	7	47	94	56.7	3.6	2	22485	3.8	844	3	680
Ralph Adamson Jr.	Lamar	H	7	466	83	56.3*	3.6	2	20455	3.6	727	3	618
Vista Farm	Jefferson	H	7	77	90	56.2	3.6	2	22339	3.5	780	3.1	686
Robert Paul Yoder	Macon	H	6	87	85	55.1	3.3	1.8	19072	3.4	642	3	575
Johnson Dairy Farm	Warren	H	7	315	91	55.1			17952				
Rufus Yoder Jr.	Macon	H	7	130	88	54.8	3	1.7	20346	3.6	732	3.1	636

¹Minimum herd 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).

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Herd	County	Br.	Mo.	Cows	Test Day Average				Yearly Average				
					% Days in Milk	Milk	Fat		Milk	Fat		Protein	
							%	Lbs.		%	Lbs.	%	Lbs.
Williams Dairy	Morgan	H	8	510	85	64.4*	3.7	2.40	25287	3.8	969	2.9	740
Curtis Strange	Morgan	J	7	13	100	50.0	4.4	2.22	15443	4.1	640	3.3	508
Krulic Dairy Farm, Inc.	Screven	H	8	119	80	59.5	3.7	2.21	21990				
Marvin Yoder	Macon	H	8	138	90	54.7	4.0	2.20	22092	3.6	802	3.0	661
David L. Moss	Morgan	H	8	116	80	48.3	4.4	2.14	18219	4.1	744	3.1	558
Dave Clark	Morgan	H	8	822	80	62.6*	3.3	2.09	25490	3.2	822	2.9	750
Lazy S Dairy	Worth	H	8	278	94	55.7	3.7	2.07	19734	3.5	696	3.0	595
Irvin R. Yoder	Macon	H	8	140	81	52.5	3.8	1.99	23590	3.6	852	3.0	718
Agri-Fresh Dairy	Laurens	H	8	218	89	58.9*	3.3	1.97	24521	3.2	852	2.9	720
University of Georgia Dairy Farm	Clarke	H	8	92	86	52.5	3.7	1.96	19631	3.7	736	3.0	598
Berry College Dairy	Floyd	J	8	30	63	38.1	5.1	1.96	19500	5.1	1004	3.6	696
Martin Dairy L.L.P.	Hart	H	8	289	82	50.5	3.8	1.92	21449	3.5	757	3.0	651
G & H Dairy	White	H	8	94	88	52.1	3.6	1.87	17809	3.5	621	3.1	547
Ralph Kotal	Hart	H	8	54	83	51.9	3.6	1.86	18931	3.4	648	3.1	584
Beaverdam Farm L.L.C.	Hart	H	8	187	91	49.1	3.8	1.86	19405	3.8	747	3.1	603
Coastal Plain Exp. Station	Tift	H	8	199	94	46.3	4.0	1.83	18235	4.1	739	3.1	571
Franks Farm	Burke	H	8	82	95	45.2	4.0	1.83	15543	4.1	637	3.3	515
Hammock Dairy	Jones	H	8	173	91	53.3	3.4	1.82	19960	3.6	723	2.9	580
Scott Glover	White	H	7	94	77	51.0	3.6	1.82	21060	3.8	809	3.0	630
Ocmulgee Dairy	Houston	H	8	306	87	52.5	3.4	1.81	20204	3.5	716	3.0	610
Earnest R. Turk	Putnam	H	8	382	86	48.7	3.7	1.81	20805	4.0	827	3.0	626

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Herd	County	Br.	Mo.	Cows	Test Day Average				Yearly Average				
					% Days in Milk	Milk	Fat		Milk	Fat		Protein	
							%	Lbs.		%	Lbs.	%	Lbs.
Williams Dairy	Morgan	H	8	510	85	64.4*	3.7	2.40	25287	3.8	969	2.9	740
Dave Clark	Morgan	H	8	822	80	62.6*	3.3	2.09	25490	3.2	822	2.9	750
Krulic Dairy Farm, Inc.	Screven	H	8	119	80	59.5	3.7	2.21	21990				
Agri-Fresh Dairy	Laurens	H	8	218	89	58.9*	3.3	1.97	24521	3.2	785	2.9	720
Lazy S Dairy	Worth	H	8	278	94	55.7	3.7	2.07	19734	3.5	696	3.0	650
Marvin Yoder	Macon	H	8	138	90	54.7	4.0	2.20	19734	3.6	802	3.0	595
Robert R. Yoder	Macon	H	8	43	91	54.4	3.2	1.76	20551	3.3	688	3.0	612
Brooksco Dairy	Brooks	H	8	2418	88	54.3*			22195				
Wayne Stoffell	Peach	H	8	887	87	54.1*			21395				
Mark E. Yoder	Macon	H	8	113	87	53.9	3.1	1.67	21885	3.4	617	3.2	509
Hammock Dairy	Jones	H	8	173	91	53.3	3.4	1.82	19960	3.6	723	3.2	580
Wright, Whitty, & Davis Dairy	Appling	H	8	1141	86	52.6			22634				
Irvin R. Yoder	Macon	H	8	140	81	52.5	3.8	1.99	23590	3.6	852	3.0	718
University of Georgia Dairy Farm	Clarke	H	8	92	86	52.5	3.7	1.96	19631	3.7	736	3.0	598
Ocmulgee Dairy	Houston	H	8	306	87	52.5	3.4	1.81	20204	3.5	716	3.0	610
G & H Dairy	White	H	8	94	88	52.1	3.6	1.87	17809	3.5	621	3.1	547
Moriah Dairy Inc.	Brooks	H	8	432	85	52.0*	3.0	1.57	19514	3.3	640	3.0	584
Ralph Kotal	Hart	H	8	54	83	51.9	3.6	1.86	18931	3.4	648	3.1	584
Ed Boehs	Jefferson	H	7	115	84	51.8	3.5	1.79	19939	3.7	729	3.1	610
Scott Glover	White	H	7	94	77	51.0	3.6	1.82	21060	3.8	809	3.0	630

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