



COOPERATIVE EXTENSION SERVICE
 Knapp Hall, LSU Campus
 Baton Rouge, Louisiana 70803
 Post Office Box 25100
 Baton Rouge, Louisiana 70894-5100
 (225)578-4141
 Fax: (225)578-2478
 Website: www.lsuagcenter.com



Louisiana

Dairy Digest

Your Herd Management Resource

EXTENSION PROGRAMS

Agriculture
 Economic/Community Development
 Environment/Natural Resources
 Families/Nutrition/Health
 4-H Youth Programs

Dairy Specialists:

Dr. Gary Hay
 Dr. Charles Hutchison
 225-578-2214

Dairy Herd Improvement

Joe Trabeaux
 Mark Williams
 225-578-6099

May-June 2004

Dairy Market News

Cary "Bill" Herndon

Department of Ag. Economics, Mississippi State University

May Advanced Class I Milk Jumps \$6.01 to \$22.75/cwt.

WOW! This simple statement understates the market tone currently being experienced in milk and dairy product markets. Class I milk prices rose sharply during April and May in reaction to sharp increases in butter and cheese prices. The May Class III Advanced skim milk price was the Class I mover (based on the value of skim milk used in cheddar cheese production) because it was greater than the corresponding Class IV price (representing skim milk value in butter and milk powder products). The USDA reports the May 2004 Advanced Class III skim milk price was \$11.50 per hundredweight (cwt.) compared to the Advanced Class IV Skim Milk price of \$6.04 per cwt. The difference between these respective Class III and Class IV prices (after factoring in butterfat prices) resulted in a \$5.27 per cwt. *higher* Class I base price (\$19.65 versus \$14.38). Thus, the USDA announced on April 23 that the May 2004 Advanced Class I "base" milk price would be \$19.65 per cwt. (for 3.5% butterfat milk). After adding the \$3.10 Class I price differential for the pricing zone which includes Atlanta and Starkville (Oktibbeha County) to this "base" price, the Advanced Class I milk price for May will be \$22.75 per cwt. Producers in south Mississippi and southeast Louisiana can add another \$.30 per cwt. bringing their Class I price to \$23.05 per cwt. Class I milk price has set an all-time record high; well-above \$20.00 per cwt. As a result, milk producers should be receiving more than \$20.00 per cwt. for milk produced in May. Keep in mind the May Class I price will be an important, but not only factor influencing revenues derived from the sale of milk produced during May. Since only about 60-80 percent of Louisiana and Mississippi milk is usually processed into Class I products, settlements checks received in mid-June as the final payment for milk produced and sold in May will reflect this Class I utilization. These up surging milk prices will also result in zero (\$0.00) Milk Income Loss Contract (MILC) payments for May.

Advanced Class I Milk Price @ 3.5% bf	Price per Cwt. in North Central MS Zone	Price Difference Versus May 2004	Percent Change Versus May 2004
May 2004	\$22.75	—	—
April 2004	\$16.74	-\$6.01	-35.9%
March 2004	\$15.04	-\$7.71	-51.3%
May 2003	\$12.81	-\$9.94	-77.6%
May 2002	\$14.36	-\$8.39	-58.4%

Market Conditions. WOW, WOW and WOW! The dairy industry is traversing unknown and previously uncharted territory as skyrocketing butter and cheddar cheese prices have pushed Class I milk prices to almost \$23.00 per cwt. This spiraling of milk prices is being attributed to a sharp drop in milk production which has many traders anticipating a shortage of milk supplies. Cheese and butter prices on the Chicago Mercantile Exchange (CME) have stabilized well-above the \$2.00 per pound level and cheddar cheese prices have risen to all-time record highs during April. Class III milk futures prices also reached record highs during March and April; with the April and May 2004 contract months approaching \$19.60 per cwt on April 28. What is most amazing is that these unbelievable prices occurred during the spring flush months when dairy markets are usually in the doldrums. The fundamental reasons for the unprecedented escalation of dairy products prices are: (1) sharp reductions in milk production caused by accelerated culling of dairy herds and the rationing of rBST by Monsanto and; (2) increasing dairy product demand brought on by the continuing recovery of the U.S. economy. The HUGE question is just how long milk prices will remain near the \$20.00 per cwt. level. Most analysts believe that these prices cannot be maintained and supported by the dairy market because demand for milk and dairy products is already starting to show resistance to higher prices. The realities of \$20-plus milk prices are causing extensive concerns about how consumers will react to much higher milk, cheese and butter prices. So, these “high” milk prices will likely start declining by mid-summer and plummet this fall. However, Class I milk prices are forecast to calm down and remain near the \$22.50 to \$23.50 price range for the Atlanta/Starkville zone for June.

Milk Production. The lingering effects of the dismal milk prices suffered by the industry in 2002 and most of 2003 continues to translate into sharp reductions in milk production because dairy farmers have either exited the business and/or reduced the size of their milking herds. In fact, the number of milk cows in the national dairy herd has been below nine million head since December 2003 and milk production has declined for 10 straight months. The lack of dairy replacements from Canada, fewer dairy farms, and restricted use of rBST have all contributed to declining dairy cow numbers and milk output. Comparing March 2004 to March 2003; the reduction in nationwide milk output was caused by a decline of 153,000 (-1.7%) cows in the national herd while production per cow also declined by 8 (-0.5%) pounds per cow. These two factors caused milk production nationwide to decrease 323 (-2.1%) million pounds from March 2003 to March 2004. Once again, the major western milk producing states contradicted this national trend by continuing to increase the number of milk cows on their farms. California added 27,000 cows; Idaho added 18,000 cows and New Mexico’s herd grew by 12,000 cows. This means dairy cow numbers plummeted by 210,000 head in the remaining 47 states. Monthly and 1st Quarter of 2004 milk production statistics are listed in the table below for selected states and the nation.

Comparing Specific Time Periods, 2004 versus 2003	March Percent Change in Production	1st Quarter Percent Change in Production	1st Quarter Percent Change in Cow Numbers
U.S. Total	↓2.1%	↓0.9%	↓1.7%
California	↓0.6%	↑0.5%	↑1.7%
Wisconsin	↓2.1%	↓0.8%	↓1.5%
Idaho	↑2.3%	↑4.2%	↑4.6%
New Mexico	↓0.2%	↑4.2%	↑3.8%
Indiana	↓0.8%	↑0.6%	↓1.4%
Florida	↑2.9%	↑2.5%	↓4.8%
Kentucky	↓5.9%	↓6.4%	↓7.5%
Virginia	↓7.6%	↓6.5%	↓11.2%
Texas	↑6.8%	↑9.0%	↓0.9%
Mississippi	Not Available	↓10.7%	↓12.5%
Louisiana	Not Available	↓6.0%	↓9.1%
Alabama	Not Available	No Change	↓5.6%
11-State Southeast Region	Not Available	↓5.6%	↓6.3%

Dairy Verification Projects

Gary Hay and Charles Hutchison, Dairy Specialists

Department of Dairy Science, LSU AgCenter

On-farm extension demonstration programs have been an integral part of extension education programs since the inception of the cooperative extension model at land grant universities. On-farm demonstrations can be powerful tools for exhibiting improved production and management techniques to agricultural producers. The extension dairy specialists with the Department of Dairy Science have initiated a dairy demonstration program in conjunction with the dairy research and teaching farm located on the LSU campus. The purpose of the program is to conduct demonstration projects to “verify” that the results of research programs can be practically and economically incorporated into the normal management routine of a commercial dairy.

The first three of these projects were initiated in fall 2003 and the first phase of the projects will be completed during spring 2004. One project will demonstrate the impact of incorporating mastitis treatments in pre-partum dairy heifers. Another project will compare the costs and benefits of traditional versus modern feeding regimes on dry cows and pre-partum heifers. A third project will demonstrate the use of estrus synchronization programs on breeding age heifers.

Results from the initial phase of all three projects will be reported in the Dairy Digest later this summer. Future plans will include setting up similar programs with commercial dairy operations around the state.

Dairy Science Club News

Bruce Jenny, Head

Department of Dairy Science, LSU AgCenter

Nine members of the Dairy Science Club traveled to Lexington, Kentucky on March 5-7, 2004 to attend the annual meeting of the Southern Student Affiliate Division of the American Dairy Science Association (SAD-ADSA). Also participating in the meeting were student delegates from universities in five other states. The Southern SAD-ADSA is a division of the American Dairy Science Association (ADSA). The SAD-ADSA works to develop leadership and promote scholarship among students interested in the dairy industry and to encourage students toward careers in the dairy industry.

The nine members attending the meeting were Tony Bridges, Melissa Brown, Mindy Chiasson, Tim Duckless, Mark Konzelman, Bridget Lyons, Justin Roberts, Conrad Spangler, and Laura Ward. The students participated in an activity symposium highlighting activities of the various chapters; a dairy quiz bowl; the SAD-ADSA business meeting; and competed in undergraduate paper competitions. Dr. Cathleen Williams accompanied the students as faculty advisor to the Dairy Science Club. Dr. Williams also serves as an advisor to SAD-ADSA.

Bridget Lyons and Justin Roberts both presented papers in the student paper competition. Ms. Lyon’s paper titled “An Industry Approach to Increasing the Consumption of Dairy Products” received first place in the dairy foods competition and Mr. Robert’s paper, “Managing an Ovulation Synchronization Program with PCDART”, received second place in the dairy production competition. The club received the Most Miles Traveled Award based on miles traveled and number of students attending and placed third in the overall chapter contest.

Laura Ward from Abita Springs, La. is the recipient of the 2004 SAD-ADSA Outstanding Student Award. The award is based on scholastic achievement and participation in local and regional activities. Laura is a senior in the Department of Dairy Science majoring in animal, dairy and poultry sciences with a concentration in dairy production. Laura has a 3.87 GPA and is an active member and leader in various organizations. She is currently President of the Dairy Science Club and has served on various committees since joining the club in her freshman year. Laura has represented the Dairy Science Club at regional and national meetings. She received first place in the dairy foods undergraduate paper contest at the 2003 Southern SAD-ADSA meeting and second place in the 2003 National SAD-ADSA meeting in Phoenix, Az. Laura is also a member of the Pre-Vet Club and the Les Voyageurs student speaker’s bureau which represents the College of Agriculture. She is a member of Gamma Sigma Delta Honor Society and received the Outstanding Sophomore Award from that organization. She is also a member of Golden Key Honor Society and Gamma Beta Phi Honor Society. Laura will receive her B.S. degree in May 2004 and plans to enter the LSU School of Veterinary Medicine in August to begin studies for the D.V.M. degree. She would like to pursue a concentration in large animals.

**MISSISSIPPI STATE UNIVERSITY
STATEWIDE DAIRY FIELD DAY
Location Buddy and Neville Rials Dairy
Kokomo, Mississippi**

MAY 27, 2004

(From Foxworth, take Hwy. 98 West toward Tylertown to Hwy. 586. Turn right onto Hwy. 586, and go approx. 8 - 10 miles. Before the Walthall County line, turn left onto Darbun Road. Travel approx. 1 mile and turn right onto Bennett Road. Rials Dairy is about 1 mile down Bennett road. From Tylertown, take Hwy. 98 East toward Columbia. Turn left onto Hwy. 585. Travel north approx. 10 miles to the intersection of Hwys. 585 and 586. Turn right (east) onto Hwy. 586. Travel one mile and turn right onto Darbun Road. Follow directions as above.) (Signs will be posted.)

REGISTRATION AND VIEW EXHIBITS.....8:30 a.m.

PROGRAM.....9:30 a.m.

LUNCH.....12:00 p.m.

MORNING TOUR PROGRAM

Critical National Issues That Will Affect The Southern Dairy Industry

Dr. Jim Watson, State Veterinarian, MS Department of Animal Health

First-Aid For Feet (Live Demonstration)

Dr. Doug Hostetler, Assistant Professor, MSU College of Veterinary Medicine

Coccidiosis in Dairy Calves

Dr. Cathy Williams, Associate Professor, Department of Dairy Science, LSU AgCenter, Baton Rouge, LA

Corn Grazing – A Summer Feeding Option?

Dr. Terry Smith, Assistant Professor, MSU Animal & Dairy Sciences Department

Mr. Joey Murphey, Superintendent, MAFES, Coastal Plain Experiment Station, Newton, MS

Milk Production And Changes In Intramuscular Fat (Ultrasound Demonstration)

Dr. Rhonda Vann, Assistant Professor, MAFES, Brown Loam Experiment Station, Raymond, MS

Susan Bowers, Graduate Student, MSU Animal & Dairy Sciences Department

*****FEATURED PRESENTATION*****

“Reducing The Risk Of Low Milk Prices”

Mr. Tom Gaughan

Partner, Downes-O’Neill, LLC

Featured Presentation Sponsored By: Downes-O’Neill, LLC

Downes-O’Neill, LLC, located in Chicago, Illinois, is the nation’s largest brokerage firm handling milk futures and options. This firm specializes in dairy markets and products using futures, options, and forward contracting to manage risk.

Upcoming Dairy Events

Mississippi Statewide Dairy Field Day - Thursday, May 27, Buddy and Neville Rials Dairy in Kokomo, MS

Washington Parish Dairy Day – Wednesday, June 2 – Breedlove Farms

Tangipahoa Parish Dairy Day – Thursday, June 3 – Tangipahoa Parish Multi-purpose Agricultural Facility

North Louisiana Dairy Festival - Saturday, June 5, 4-H barn in Grand Cane, La

St. Helena Parish Dairy Day – Friday, June 18 – Eugene Robertson Dairy

Walthall County Invitational Dairy Show - Saturday, June 12, 2004 - Southwest Events Center -

Tylertown, MS – Contact Lamar Adams, Walthall County Extension Director at 601-876-4021

Northwest Louisiana Dairy Day - Thursday, June 17 - North Desoto High School

Treating Clinical Mastitis

Donald E. Pritchard

Extension Dairy Specialist, North Carolina State University

A few months ago I wrote an article about reviewing your clinical mastitis treatment protocol. The article reported on the findings of a field study which evaluated the practice of withholding antibiotic treatment for clinical mastitis cases for 24-hours, so milk culture information could be obtained and used as the basis for what treatment procedure to use. By delaying the automatic intramammary infusion of an antibiotic when a clinical mastitis case was observed, the large herd in the study reduced the use of intramammary antibiotics by about 80%. The reduction occurred because most of the clinical mastitis cases were caused by environmental organisms which are usually non-responsive to antibiotics.

Another study that evaluated different clinical mastitis treatment methods has recently been published in the *Journal of Dairy Science*. In this study the researchers looked at four procedures for treating mild to moderate clinical mastitis infections. The methods studied were intramammary infusion of amoxicillin, frequent milk-out, a combination of intramammary infusion of amoxicillin and frequent milk-out, and no treatment (control). Clinical cases were considered cured if there were no clots or flakes in the milk for three consecutive days or two consecutive weeks without a relapse.

While the authors emphasized that the results should be considered preliminary and serve as the basis for further larger studies, the results reported are nevertheless interesting. The overall finding was that there was no significant difference in cure rate between the four groups. The small number of samples in each treatment group may have contributed to the non-significant finding. The researchers noted that the coliform intramammary infections, especially *E. coli*, appeared to be more likely to cure than environmental streptococci caused infections. Clinical cases caused by environmental streptococci were treated most effectively with intramammary amoxicillin. Frequent milk-out was not as effective as no treatment or amoxicillin infusion, and probably of no or limited value.

Another interesting finding was the effect of the treatments on milk production following the clinical mastitis cases. Cows in the no treatment (control) group had similar daily milk levels before and after the mastitis event, while cows in the other three treatment groups had decreases in daily milk of from four to nearly seven pounds. The researchers offered no possible reasons for this finding, but noted that other studies have reported similar as well as contrasting results.

The researchers noted what most producers already know, that intramammary amoxicillin may be beneficial in treating Gram-positive organisms such as environmental streptococci and coagulase-negative staphylococci, but of little value in treating Gram-negative (coliform) and fungal pathogens. Additionally, the best approach to use in treating clinical mastitis cases should be based upon culture results that are obtained within a timely manner (within 24 hours of sampling). This suggestion is the same approach to use in treating clinical cases that I reported on in the previous article I wrote.

I again encourage producers to establish a milk culture program (either with their veterinarian, a private or state lab, or set-up a culture lab on their farm) that will allow them to treat according to culture information. Rather than just routinely infusing all clinical mastitis cows, limit infusions to only the cases when the antibiotic may be effective. Greater profit and reduction in the use of antibiotics are likely benefits. Producers should discuss this mastitis treatment approach with their veterinarian, milk handler fieldman, extension agent, or other knowledgeable consultant.

Culling and Dry Cow Decisions

Charles F. Hutchison

Associate Professor

Department of Dairy Science, LSU AgCenter

As we move into the late spring and early summer, some of the cows in your dairy herd will be in late lactation and some will be well past 300 days in milk. Are those cows in late lactation or extended lactation pregnant or not? If they are not pregnant, then they will probably be culled when milk production drops below the level that it is no longer economically feasible to keep them in the milking herd. What is that level of production? Basically it varies from farm to farm because it is based on several factors such as price of milk, ration cost and overhead cost (the cost of feeding, milking and housing). If you know these factors then you can determine the level of milk in which it is no longer feasible to keep these cows in the milking herd. For example, if the ration cost is \$3.56 per cow per day and the overhead cost is \$1.75 for a total cost of \$5.31 per cow per day, then a cow producing less than 29 pounds of milk per day if milk is worth \$18.50 per cwt should be culled. However, if milk is worth \$20.00 per cwt then a cow producing less than 27 pounds of milk should be culled. In the next few months, dairymen in Louisiana should receive some extremely high prices for their milk. Due to rise in milk prices, it would probably be wise for you to determine based on your ration cost and overhead cost at what level of milk production, cows should be culled based on these high milk prices. Your local agent and I have a Microsoft Excel spreadsheet that you can have to enter your cost and price of milk to determine when cows should be culled based on level of milk production.

What should be done with the cows that are pregnant but have extended days in milk due to breeding problems or other factors? On most dairy farms you would keep the cow because a pregnant animal is a valuable commodity especially if the cow is still sound and is above herd average for milk production. Also, the cost of having her dry longer than 60 days is still cheaper than raising a replacement from birth. Is the level of milk production criteria used for culling the same as for drying off a cow that will have an extended dry period? The answer is no. The way to determine the level of milk production for drying off a cow with an extended dry period is similar but you also need to factor in the cost of maintaining the dry cow (ration cost and overhead cost). Using the previous example, the cost of keeping the cow in the milk herd will be \$5.31 per day and she is producing 20 lbs of milk at \$18.50 per cwt. The cost of \$5.31 minus the milk income of \$3.70 would mean you are losing \$1.61 per day. At first glance, you would recommend that she be dried off and removed from the milking string. However, let's look at the dry cow cost (ration \$1.44 and overhead \$0.25) for a total of \$1.69 per day. Remember that the dry cow cost for these cows with extended dry periods is an expense and will only be recouped when the animal is lactating again. Based on these cost factors, the level of production and the price of milk, if you continue to milk her you would lose \$1.61 per day on that cow and if you dry her off you would lose \$1.69 per day. Therefore, if you kept her in the milking string you would be losing \$0.08 per day less than drying the cow off at this level of milk production. The aforementioned spreadsheet can also do the calculations for cows with extended dry periods. If you would like a copy of this spreadsheet, call or email your local parish agent or me.

Web Site of the Month

The Department of Animal Sciences, University of Tennessee has a new web site devoted to current research and practical management information for the dairy industry. The URL for the site is: <http://www.southeastdairyextension.org/>. The site has up-to-date, useful information on a variety of subjects including dairy economics, nutrition, reproduction, genetics, facilities, grazing and several other subjects. Take a look at their site.

TOP HERDS BY AVERAGE TEST DAY ENERGY CORRECTED MILK (ALL COWS)

NAME	DATE	BR	COWS	DIM	ECM	FAT%	PRO%	RHA
SE LA EXP STATION	2/19	H	228	141	72.8	3.1	3.0	21128
C JOHNSON & W LITWILLER	2/18	H	109	95	68.4	3.2	3.3	21275
JOHN FAUNCE JR DAIRY	2/3	H	219	138	67.8	3.7	3.2	17241
BILLY ANDREWS	2/12	H	102	161	66.7	3.7	3.3	19715
CLIFFORD CHAMPLIN	1/30	H	227	235	66.4	3.6	3.2	19169
LSU DAIRY	2/26	H	69	196	62.9	4.4	3.0	19101
HALL BURFORD	2/10	H	165	154	61.4	3.4	3.3	19301
HILL FARM RESEARCH STATION	2/23	J	65	143	60.6	4.0	3.5	15964
MARVIN FLETCHER	2/12	H	154	165	59.2	3.1	3.0	19638
LOUISIANA TECH DAIRY	2/2	H	46	127	58.3	3.0	2.9	21057
J PAUL ALFORD	2/2	H	111	165	57.9	3.3	3.1	19295
KARIE AND BRAD BLADES	2/10	H	177	320	56.9	3.5	3.2	17841
RUSSELL AND RUSTY CREEL	2/12	H	80	201	55.8	4.2	3.4	17144
MOCKING BIRD DAIRY	2/10	H	86	164	55.8	2.5	3.1	18621
BOBBY GOINGS	2/18	H	119	193	55.6	3.8	3.4	18720
J W DOC SCHILLING	2/20	H	123	301	55.0	2.8	3.1	15320
CLINTON STEVENS	2/4	H	128	183	54.5	4.0	3.5	15257
ROBERT POTTS	2/18	H	160	152	54.4	3.8	3.3	16011
MARK WASKOM	1/30	H	92	155	53.8	3.5	3.2	16033
GALEN NIGHTINGALE	2/18	H	71	233	52.7	2.9	3.3	21061
FARMER'S DAIRY	2/4	H	42	253	52.3	3.2	3.2	17588
LOUISIANA TECH DAIRY	2/2	J	45	124	51.4	3.6	3.5	15774
MAYFIELD'S DAIRY	2/16	H	24	202	48.9	3.5	3.2	14740
RUSSELL AND RUSTY CREEL	2/12	H	36	268	48.0	3.9	3.5	17509
LEESFIELD DAIRY FARM	2/25	H	91	185	47.8	3.4	2.9	17586

TOP HERDS BY AVERAGE TEST DAY ENERGY CORRECTED MILK (ALL COWS)

NAME	DATE	BR	COWS	DIM	ECM	FAT%	PRO%	RHA
C JOHNSON & W LITWILLER	3/25	H	111	131	69.3	3.0	3.0	21609
J PAUL ALFORD	3/2	H	116	165	67.2	3.7	3.0	19511
JOHN FAUNCE JR DAIRY	3/2	H	211	139	65.1	3.3	3.0	17517
BILLY ANDREWS	3/11	H	108	166	64.2	3.4	3.3	19441
SE LA EXP STATION	3/18	H	223	141	63.9	3.0	2.9	21331
MARVIN FLETCHER	3/9	H	155	178	62.8	3.4	3.0	19809
LOUISIANA TECH DAIRY	3/3	H	45	149	62.0	3.1	2.9	20916
VICTOR WOMACK	3/30	H	105	99	60.6	3.5	3.0	11104
FARMER'S DAIRY	3/2	H	44	253	60.2	3.4	3.0	17875
MAYFIELD'S DAIRY	3/15	H	24	181	59.5	2.9	3.1	14652
HALL BURFORD	3/16	H	168	145	58.1	2.8	3.1	19443
CIRCLE G FARMS	3/23	H	161	125	57.2	2.8	3.0	16567
UDDER FRESH	3/10	H	111	201	55.8	3.4	3.2	17147
KIRBY VARNADO	3/2	H	92	174	55.6	3.6	3.0	20956
KARIE AND BRAD BLADES	3/25	H	168	306	55.4	3.2	3.2	18035
LADD BLADES	3/18	H	209	142	54.2	3.6	2.9	19099
RAYMOND SCHMIDT	3/9	H	81	181	54.0	3.7	2.8	16209
O B MITCHELL	2/27	X	52	193	53.6	4.1	3.1	17962
DUSTY SCHILLING	3/22	H	94	139	53.3	3.0	2.7	17732
GALEN NIGHTINGALE	3/18	H	71	226	53.0	3.0	2.8	21025

LSU AgCenter
Cooperative Extension Service
U.S. Department of Agriculture
Post Office Box 25100
Baton Rouge, LA 70894-5100

OFFICIAL BUSINESS

Penalty for Private Use, \$300



Louisiana

Dairy Digest

Your Herd Management Resource

Contact your county agent
for more information on any
dairy herd management topic.

COOPERATIVE EXTENSION SERVICE

Knapp Hall, LSU Campus
Baton Rouge, Louisiana 70803
Post Office Box 25100
Baton Rouge, Louisiana 70894-5100
(225)578-4141
Fax: (225)578-2478
Website: www.lsuagcenter.com

EXTENSION PROGRAMS

Agriculture and Forestry
Community Leadership
Economic Development
Environmental Sciences
Family and Consumer Sciences
4-H Youth Development
Natural Resources

Dairy Specialist