



North Carolina Department of Agriculture
and Consumer Services

Steve Troxler
Commissioner

To: Senator Don East
Co-Chairman, Senate Appropriations Committee on Natural and Economic Resources and
Co-Chairman, Senate Agriculture / Environment / Natural Resources Committee

Senator Brent Jackson
Co-Chairman, Senate Appropriations Committee on Natural and Economic Resources and
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Senator David Rouzer
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Co-Chairman, Senate Agriculture / Environment / Natural Resources Committee

Representative Carolyn H. Justice
Co-Chairman, House Appropriations Subcommittee on Natural and Economic Resources

Representative Roger West
Co-Chairman, House Appropriations Subcommittee on Natural and Economic Resources

Representative James H. Langdon Jr.
Co-Chairman, House Committee on Agriculture

Representative Efton M. Sager
Co-Chairman, House Committee on Agriculture

From: Steven W. Troxler 
Commissioner of Agriculture

Date: March 31, 2012

Subject: Report on the Status of the North Carolina Dairy Industry

Pursuant to Session Law 2006-139, Section 2, the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) submits the following report to detail the status of the North Carolina Dairy Industry in 2011, threats to maintaining its economic viability, and opportunities for growth.

This report addresses the short- and long-term threats and opportunities facing the dairy industry in our state. North Carolina currently has 285 dairy operations and 45,000 head of dairy cattle, providing over \$1 billion in economic impact and employing approximately 2,500 people statewide.

(1) The short- and long-term problems associated with maintaining a viable dairy industry in the State

North Carolina's dairy industry continues to face many challenges. Short-term problems with maintaining a viable dairy industry include sky-rocketing input costs, rigorous permitting and regulation requirements and limited resources for financial assistance.

According to the U.S. Energy Information Administration, the price of diesel fuel increased on average 33% for 2011. According to the January Farm Market Report, corn prices rose from the 2010 average of \$5.18/bu. to an average of \$7.20/bu. in 2011. In part, these price fluctuations can be attributed to increasing demands for corn to be utilized for feed and fuel. Weather extremes can also contribute to extreme price volatility. Increases in milk cash receipts over the past year have helped to offset some of the rising input costs, but the net effect to N.C. dairy farmers has resulted in stagnant income. The industry is still recovering from the historically low milk prices of 2009.

The N.C. dairy industry faces rigorous environmental permitting requirements for expanding current operations or adding new dairies, slowing the process for expansion or growth in this industry. In some cases, the permitting process can take up to two years and cost thousands of dollars. Furthermore, the U.S. Food and Drug Administration is proposing both new and expanded milk sampling tests for antibiotic residues.

In addition to the other challenges facing the N.C. dairy industry, budget constraints at N.C. State University forced the elimination of an Extension Forage Specialist. This position had statewide duties including assisting dairy operations.

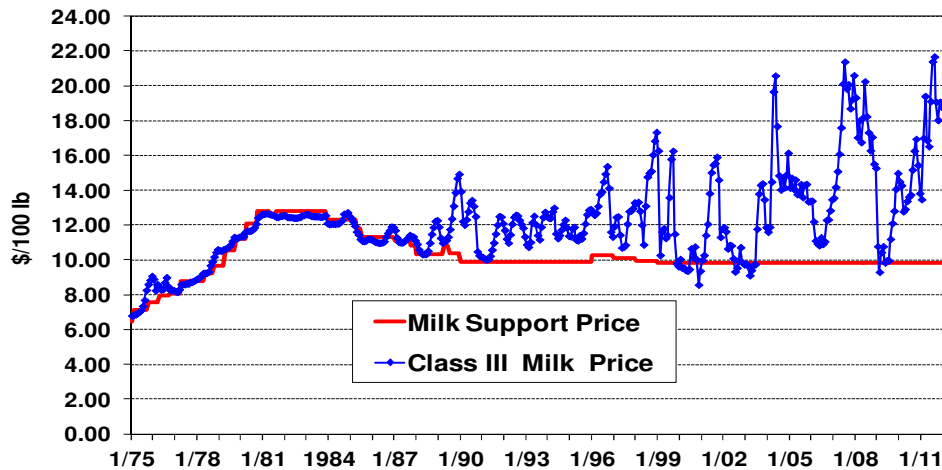
The long-term challenges facing the dairy industry in our state are three-fold. The first focuses on enabling our producers to maintain a sufficient profit margin and minimizing price volatility. The second challenge centers on maintaining a safe milk supply and protecting the environment while still providing a positive dairy business climate in North Carolina. The third is to maximize available resources to assist the dairy industry with management, finance, growth and marketing opportunities.

(2) Ways to sustain the dairy industry in North Carolina

On the national level, establishing a federal dairy margin insurance program may help insulate North Carolina dairy producers from volatile milk prices. We can also work to limit the expense N.C. producers incur by purchasing domestically imported milk into the state to meet consumer demand. In addition, we can support dairy farmers against burdensome and overreaching state and federal regulations. NCDA&CS is doing this through participation in the National Association of State Departments of Agriculture, and collaborating with other states to address multiple concerns facing the dairy industry. The chart below illustrates the volatility of the price of milk since 1975.

Figure 1.

Federal Dairy Support and Cheese (Class III) Milk Prices, Monthly, 1975-2011



In our state, the dairy industry is working on establishing a voluntary check-off program to provide additional funding to the North Carolina Dairy Stabilization and Growth Program, known as Dairy Advantage. The program would consist of each dairy farmer investing \$.01/cwt of production monthly and each processor investing a matching \$.01/cwt of North Carolina milk sales. This will provide Dairy Advantage with sustained funding that is needed to continue their operations. Allocating these funds to support Dairy Advantage would be in addition to our state's participation in the national dairy check-off program. Producers and processors will have the opportunity to participate in this voluntary check-off program to support Dairy Advantage in 2012.

(3) Maximize opportunities to expand the dairy industry, including attracting both new dairy producers and new processors to North Carolina

We can help maintain and grow our state's dairy industry by utilizing rural development grants to help build infrastructure, bio-mass digesters, grain storage and other capital improvements for expansion and relocation.

Dairy Advantage, whose membership includes NCDA&CS, N.C. State University, N.C. Farm Bureau and allied businesses, has actively assisted in providing relocation information and assistance to dairy producers from Texas, New Mexico, Pennsylvania, Virginia, Wisconsin and California with an expressed interest in potentially relocating to eastern North Carolina (defined as east of I-95). Dairy Advantage is currently assisting a family from Australia relocate their dairy farm to North Carolina. Dairy Advantage is also working with seven additional families that are considering adding dairies.

Dairy Advantage representatives travelled to Madison, Wisconsin, to exhibit at the 2011 World Dairy Expo (WDE). This event is the world's largest dairy exposition, hosting nearly 75,000 attendees from all over the world. Dairy Advantage was the only organization recruiting from the southeast and had the opportunity to showcase opportunities available in the North Carolina dairy industry with attendees.

Myers Farm, Inc. from Union Grove, NC, was the first southeastern dairy to be featured at the Virtual Farm Tour at the World Dairy Expo. Dairy Advantage nominated Myers Farm and produced a 20 minute video that was presented to a live audience at WDE. NCSU Dairy Extension Nutritionist, Dr. Shannon Davidson, prepared slides and coached the farm owners on the oral presentation that accompanied the video; the total presentation was about 1 hour long. To date, there have been over 600 YouTube views of the 2011 Virtual Farm Tour.

Matt Lange, Dairy Advantage Coordinator, continued efforts to form a dairy artisan network. This network includes roughly 52 cheese makers in N.C., and three farmstead milk bottlers in addition to those interested in becoming dairy artisans. This artisan network is comprised of individuals producing milk and processing a value-added product on the dairy. While Dairy Advantage is nearly 100% focused on development in bovine dairy, several alternative species dairy farms have requested assistance including goat and sheep producers.

Dairy producers are moving primarily in two directions; becoming larger to benefit from the economies of scale and become more efficient, or they are becoming vertically integrated and going to value-added, on-farm processing of their own milk. In 2011, the number of artisan cheese makers grew by 10%. Additionally, one large dairy located in Iredell County has completed building a drinkable-yogurt processing facility. Several other producers are planning to begin bottling their own milk to meet increasing consumer demand for the buy-local market.

(4) The contribution of dairy farms to the maintenance of prime agricultural land and the quality of life in the state

North Carolina dairies are utilizing approximately 300,000 acres of open space, in addition to the acres of cropland necessary to support these operations of approximately 1,000 acres per dairy. By reversing the current trend in declining dairy operations, we can ensure that more open space is maintained for future generations. The North Carolina dairy industry contributes \$1 billion to our state's economy, in addition to employing over 2,500 individuals. Current demand for dairy products has the potential to double production. The following chart illustrates the tremendous growth potential for the dairy industry in our state. Currently, we only produce half of the fluid milk that is consumed in North Carolina.

The dairy industry is currently domestically importing milk from Oklahoma, Texas and Michigan to meet consumer and industry demand for milk. Milk is imported from these other states year round. Consumers increasingly want to buy local and know where their food comes from.

North Carolina is the leader in the Southeast in organic milk production with six operating dairies. We hope to add two additional operations this year. These dairies sell through the Organic Valley Cooperative. However, they also have to import milk to meet consumer demand for organic milk products.

Efforts to stabilize the dairy industry include technical and monetary support to the Dairy Advantage program. The North Carolina Dairy Producers Association awards a \$24,000 grant annually to Dairy Advantage to provide operating support for the program. North

Carolina dairy farmers are also the most efficient in milk production per cow in the southeast, producing 20,044 pounds of milk per cow per year, N.C. milk production also places in the top fifteen in the U.S. Our state’s producers added an additional 1,000 milk cows in 2011.

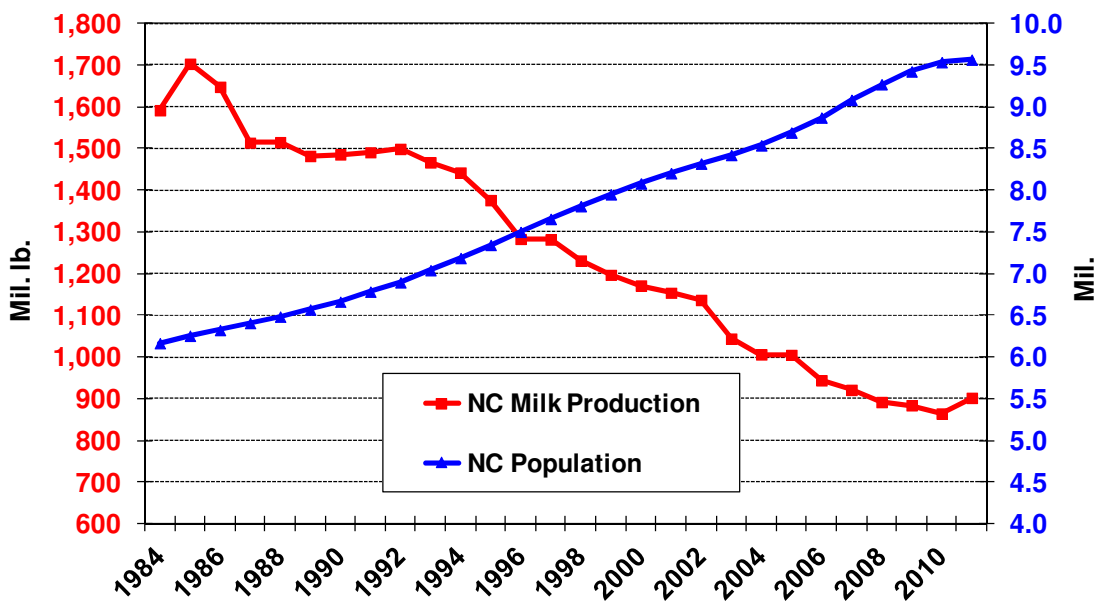
(5) An analysis of the effectiveness of the Dairy Stabilization and Growth Program in achieving the goals of maintaining a local supply of fresh milk for processing and consumption, facilitating the entry of young farmers into the dairy industry, and preserving green space along the urban fringe

Dairy Advantage is helping dairy farmers through farm assessment and profit teams, which focus on recommendations to enable farmers to become more efficient and lower production costs. In 2011, one dairy expanded operations, and we added four artisan cheese makers as a result of assistance received by Dairy Advantage. A Cheese Artisan Network was also formed to help these producers become more efficient in their operations. Dairy Advantage is currently working with seven additional farm families that are considering adding dairy operations. Approximately three hundred milking cows were added to the state’s herd through the opening of three new dairies in 2011 that were assisted by Dairy Advantage.

North Carolina has a huge customer base and growth potential. The state produces half of the fluid milk it consumes and currently must rely on imports from other states each month. Increasingly, consumers want a local supply of fresh milk. Currently, our state has the infrastructure necessary to support existing dairies and has room for expanding the number of operations. The chart below shows historic North Carolina milk production compared to the population growth.

Figure 2

North Carolina Milk Production and Population, 1984-2011



In 2011, North Carolina maintained the same number of dairies (source: January 2012 Farm Report) after losing thirty-one operations between 2007 and 2009. The industry also increased by 1% both the number of dairy cows and amount of milk produced. This change is due in part to the efforts of Dairy Advantage and its partners, including NCDA&CS, N.C. State University and N.C. Farm Bureau. Additionally, two extension dairy positions were added at NC State University as part of the efforts of Dairy Advantage: Dr. Shannon Davidson, Extension Nutritionist, and Mike Roberts, Extension Dairy Economist.

Matt Lange, the Dairy Advantage Coordinator, maintains the Dairy Advantage Facebook page, the Dairy Advantage website, publishes the quarterly newsletter, and organized participation in the World Dairy Expo. He worked with relocation tour groups that visited Greenville, Enfield, Lumberton, Pantego and other areas, and connected potential dairy operation owners with realtors in various areas of the state. He has spent a significant amount of time working with prospective dairy producers from Wisconsin, California, Michigan, Ohio, and Australia in addition to North Carolinians who have expressed interest in starting dairy operations. Mr. Lange is currently working with seven families that are evaluating their operations to maximize profit, production and potentially add dairies. He also partnered with NCDA&CS in planning, organizing and staffing the Artisan Cheese Booths at the Mountain State Fair in Fletcher, and the N.C. State Fair in Raleigh. Those booths showcased eight cheese artisans, distributing an estimated 60,000 samples and sold \$10,000 worth of cheese at these events. Those artisans are small and may not have been able to get this kind of marketing exposure on their own.

Dr. Shannon Davidson, Extension Dairy Nutritionist, visited thirty-four dairy farms in N.C. to consult on feeding and management issues. These farms account for over 11,000 dairy cattle, or nearly 25% of the state's dairy cattle inventory (45,000 in 2011). These visits were often followed up by providing specific recommendations that were intended to improve the farms' overall profitability. Dr. Davidson also trained dairy farmers, extension agents and dairy industry personnel through workshops and presentations on topics related to dairy feeding and management. She also consulted with a farm in Randolph County that built new housing and a milking center in order to expand their herd. This farm began milking in their new facility in November and has plans to add milk bottling and on farm processing in the next two years. Dr. Shannon also provided feed cost data to update budgets for two dairy herds; one with 700 cows using conventional management and the other has 200 cows utilizing a pasture-based management system. These budgets will help provide benchmarking data for NC dairies and was distributed in October 2011.

Additionally, Mr. Mike Roberts, Extension Dairy Economist, has written a Rural Cooperative Development Grant for \$10,000 in conjunction with North Carolina Market Ready for the purpose of working with N.C. dairy artisans to develop marketing, enterprise analysis and production skills to improve profitability. He is also working on a dairy data benchmarking grant, cooperating with the University of Minnesota. The benchmarked N.C. dairy data can be incorporated into a national database to develop budgets, enterprise analysis and risk management tools. Mr. Roberts is also working on a grant to publish weekly Roberts Commodity Agriculture Market Reports, which has a current outreach of 3,509 clients worldwide and over 900 web links. He is looking for further resources to implement a risk management education course and workshop series for N.C. dairy producers; and has consulted and benchmarked 17 dairies regarding financial and production economic data.

(6) Other factors that impact the dairy industry in the state

The dairy industry in North Carolina faces rigorous permitting requirements for both expanding current operations and adding new dairies. These requirements can slow down the process for adding new dairies. In some cases, the permitting process can take up to two years. These limitations make it increasingly important that we are able to keep existing dairies in business.

One suggestion to help current and prospective producers would be for the N.C. Department of Environment and Natural Resources to prepare a comprehensive checklist for producers wishing to expand or open a new dairy. Duplicative and/or conflicting requirements pose significant cost and time delays when these requirements are not known at the onset of a business decision. We intend to discuss the development of a comprehensive flow chart or checklist of the permitting processes required for current operators to expand or for new dairy operations to build with the Division of Water Quality in the upcoming year.

Dairies also face a challenge with feed supplies. A milking cow in production is like a finely tuned engine; she must have the right balance of nutrients to function properly in order to produce large quantities of nutritious milk. The Department is examining feed laws to be sure that dairies receive safe feed to produce safe milk for consumers. On farm grain storage can also help mediate the risk of grain price fluctuations and supply interruptions. Grants from the NC Rural Economic Development Center and other sources would help dairy farmers build the necessary storage.

The N.C. Dairy Security Committee, part of a NCDA&CS initiative, has made very positive strides in business continuity for the dairy business. The committee consists of representatives from processors, cooperatives, dairy farms and the Department. It has developed and vetted an emergency response plan to maintain business continuity in case of a foreign animal disease outbreak. Some major dairy states are looking at how to incorporate this program into a major national business continuity initiative.

Also of note, on July 1, 2011, the Grade A Milk Program transferred from the N.C. Department of Environment and Natural Resources to the N.C. Department of Agriculture and Consumer Services as part of the NCDA&CS Food and Drug Protection Division. Feedback from producers has indicated this has been a seamless transition with minimal impacts on producers. Of increasing interest to the dairy industry in our state is the dialogue regarding raw milk for human consumption. Thorough evaluation of this topic, including implications for current prospective dairy producers and processors in our state, must be taken into consideration. Currently, the Grade A Milk Program ensures the proper monitoring and testing for a safe milk supply to protect human health.

The N.C. State University Lake Wheeler Dairy Farm project is going against current trends in Land Grant Universities, many of whom are closing dairy research farms and on-campus processing facilities. The NC State dairy is updating both farm facilities and improving processing and teaching facilities focused on dairy and food sciences. The modernization of these facilities is being accomplished with the support of all aspects of the North Carolina dairy industry, and is primarily utilizing private resources to enhance these facilities.

Summary

North Carolina's dairy farmers are continuing to concentrate on production efficiencies. We lead the southeast by 1,000 more pounds of milk produced per cow than any state in the region, with more than 20,000 pounds of milk produced per cow as of 2011. The North Carolina Dairy Producers Association is helping fund the Dairy Advantage program with annual grants of \$24,000. N.C. State University is helping the industry by participating in assessment and profit teams, hosting field days, seminars and partnering with NCDA&CS and Dairy Advantage on various projects in addition to major projects focusing on dairy research and processing facilities.

There is tremendous growth potential for North Carolina's dairy industry. Our farmers currently produce roughly half of the fluid milk that is consumed in our state, and population continues to increase. Buy-local initiatives have also stimulated value-added on-farm processing opportunities. In 2011 the number of inspected farmstead cheese makers grew by 10%. State leaders can also support growth of the dairy industry by streamlining the permitting processes.

Grants to build infrastructure, bio-mass digesters, grain storage and other structures will be crucial. These rural development grants can also help North Carolina remain competitive in recruiting new dairies to our state. For example, adding a 400 cow dairy operation may add up to 40 new jobs and contribute roughly \$5,600,000 annually to the local economy. Each dairy cow provides \$14,000 of annual economic impact. North Carolina Rural Development Center programs such as the capital access grants that help dairy operations that are struggling to find short-term financing, and microenterprise loans that can help small cheese makers as they begin or expand operations are poised to assist in expanding our states dairy industry. Expansion and funding of programs such as these are vital to the growth of the North Carolina dairy industry.

While there are many challenges, opportunities are also available to strengthen and grow dairies in North Carolina. Our dairy farmers are optimistic about the future, and are working hard to produce milk, ice cream, cheese, butter and other dairy products. Now is the time to foster an environment for growth in North Carolina's dairy industry. The close working relationship between all aspects of the dairy industry, NCDA&CS, N. C. State University, N.C. Farm Bureau and Dairy Advantage are strengthening and ensuring that the dairy industry remains viable in our state.

Session Law 2006-139
Senate Bill 1156

An Act to Establish the North Carolina Dairy Stabilization and Growth Fund to Provide Critical Support for the North Carolina Dairy Industry

Session Law 2006-139 SECTION 2. The Commissioner of Agriculture shall file a report no later than 31 March of each year with the Chairs of the House of Representatives and Senate Appropriations Subcommittees on Natural and Economic Resources, the Chair of the House of Representatives Agriculture Committee, and the Chair of the Senate Committee on Agriculture, Environment, and Natural Resources which shall include the following:

- (1) The short- and long-term problems associated with maintaining a viable dairy industry in the State.
- (2) Ways to sustain the existing dairy industry in the State.
- (3) Opportunities to expand the dairy industry, including attracting both new dairy producers and new processors to the State.
- (4) The contribution of dairy farms to the maintenance of prime agricultural land and the quality of life in the State.
- (5) An analysis of the effectiveness of the Dairy Stabilization and Growth Program in achieving the goals of maintaining a local supply of fresh milk for processing and consumption, facilitating the entry of young farmers into the dairy industry, and preserving green space along the urban fringe.
- (6) Other factors that impact the dairy industry in the State.