George L. Pless Sr. and Sons Dairy, Inc. Receives Marvin E. Senger Distinguished Dairy Farmer Award for 2005

by Carl Pless
Cabarrus County Extension Agent

George L. Pless, Sr. & Sons Dairy Inc. is the 2005 recipient of the Marvin E. Senger Distinguished Dairy Farmer Award. George L Pless, Sr., sons, Jerry and John and grandsons, David Pless and Tim Sifford provide management and labor. Their herd consists of 220 milk cows and 195 calves and heifers. They grow silage, hay and some barley and corn grain and soybeans on 75 acres owned and 225 acres rented land. Heifers are raised on 85 acres owned and 56 acres rented pasture.

George and his father, Welker sold cream in the 40’s and early 50’s. George sold Manufacturing grade milk during the 50’s and 60’s. He built a double 2 walk-through, concrete feeding pad, some free stall housing and started shipping Grade A milk in 1966. Although he started with a mixed herd of Holstein and Guernsey, the herd is almost all Holstein today. Production records continually in use since the seventies show milk production has increased from 12,300 to slightly less than 22,000 at present. In 1992, a double 8 herringbone parlor, an additional free-stall and feeding barn and a waste storage facility that meets all current regulations were built. Lactating cows are fed a TMR. Commodities are used in formulated rations for heifers and cows. Ration costs are kept to a minimum by using corn and small grain silage, hay, whole cottonseed, hominy, and wet brewers grain. All soils are tested and the waste from the dairy is land applied to help grow the crops and to keep fertilizer use and cost to a minimum.

Calves receive respiratory, C&D and bangs vaccination at 4 months of age. The respiratory and C&D are repeated before breeding. Cows are vaccinated every 6 months according to advice given by the herd vet. A veterinary herd check is made at regular intervals.

Jerry is on the State Holstein Board and the NC Farm Bureau State Board where he has served as a delegate to the national convention. John is on the NC State Farm Bureau dairy advisory committee. John, Tim, and David have all participated in the Farm Bureau Young Farmers and Ranchers
Organization. David is on the Cabarrus County Extension Advisory Board. Each farm family member is an active member of the Rowan Holstein Club.

Pless Dairy was one of the first dairy farms in North Carolina to use dairy futures options to minimize the financial risk due to adverse price changes. They began by purchasing several put options when milk prices had moved up significantly in 1999. When prices fell quite rapidly, the dairy netted $18,000.00 from these put options. Jerry shared the Dairy's experience in the use of futures and futures options with other dairy farmers at several educational meetings including the North Carolina Dairy Conference and a Clemson Dairy Extension meeting in Columbia, SC which was video taped for use at producer meetings.

Pless Dairy has entered and displayed dairy cattle at the Cabarrus County Agricultural Fair in both the youth and open divisions for over 40 years. Jerry has served as Dairy Superintendent of the Cabarrus County Agricultural Fair for over 25 years. Pless Dairy regularly enters cattle in the Rowan County Fair, Rowan County Black and White Show and the Statesville Area District Junior Show. For the past several years, Jerry and David have taken a cow to the local Piedmont Farmers Market for children to see and participate in milking a cow. Attendance is always quite large at this Farmers Market promotional event.

Pless Dairy has for many decades welcomed children including school groups, 4-H clubs and scouts to visit and learn about dairy farming. FFA classes have used the dairy facilities and cattle for the dairy cattle judging contest. In recognition of their public relations efforts, the George L. Pless, Sr. family was recognized as Concord Rotary Farm Family of the Year during the 1985 Farm/City Week Celebrations. In 1996, Jerry and John received this award. Each member of the family is an active member of Cross of Christ Lutheran Church.

Jerry is a member of the Cabarrus Agribusiness Council. The Council's goals are to increase understanding of farming and agribusiness' contributions to the local economy and quality of life, among citizens, particularly children and community leaders. During the past several years, the Cabarrus Agribusiness Council has planned and conducted several Agribusiness and Environmental School Days. This past year over 3000 sixth grade children from all of Cabarrus County's public, private, church and home schools came to the Cabarrus Arena and Events Center over a period of three days during the County Fair to learn about soils, plants, animals, human interaction with the environment and agribusiness by visiting 38 different interactive, participatory learning stations. Jerry helped design and participated in the dairy station. Students learned about the life cycle of a dairy cow, saw the feedstuffs she consumes, milked a cow, churned butter and sampled fresh churned butter on bread with jelly. Mrs. George Pless assisted with serving the buttered jelly bread. This event helped the Cabarrus County Agricultural Fair to win the Youth Division Award from the North and South Carolina State Fair Association. Teachers, school administrators, County government and County Fair officials agree that the Agribusiness and Environmental School Days will continue to be an integral part of the Cabarrus County Agricultural Fair.

In 1760, Christopher Pless, George, Sr.'s Great, Great, Great, Great, Grandfather received a land grant from King George IV. He purchased additional adjoining land in what is now north central Cabarrus County. Pless Dairy is today located on and farms part of that land. It has been continuously owned and farmed by the Pless family. The farm has been named a Century Farm Family by the North Carolina Department of Agriculture.

The farm was on the Farm Business records system with NCSU for many years. Today the dairy works closely with an accountant to manage the daily business of the farm. The farm has participated in the NCSU Dairy Farm Financial Performance Project.

Congratulations to all members of the Pless family upon receiving this award.
North Carolina's newly elected Commissioner of Agriculture, Steve Troxler, spoke of his plans for the department during the luncheon at the 2005 54th Annual NC Dairy Conference.

The North Carolina Dairy Producers Association recognized three dairy producers at the 54th annual Dairy Conference as the top quality milk producers for 2004. Yearly average somatic cell and bacteria count information are considered in the selection process. The three producers were Randy Lewis from Snow Camp in the less than 100 cows category (SCC = 115,000, SPC = 2,658) Triple R Dairy from Waynesville in the 100-250 cows category (SCC = 110,000, SPC = 6,896), and Dean Ross Dairy from Waynesville in the over 250 cows category (SCC = 103,333, SPC = 3,258). All three producers were repeat winners from 2003. Congratulations to these dairy producers for the excellent job they are doing.

The NCDA&CS Agronomic Division's Plant/Waste/Solution Section analyzes about 800 dairy waste samples per year. This service is provided at a reasonable cost ($4 per sample) with quick (two working day turnaround) and reliable results. Waste analysis measures levels of essential plant nutrients—nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, zinc, copper and boron.

Plant-available nutrients are calculated based on the application method and waste code indicated on the sample information sheet. Appropriate codes for dairy waste are LSD (liquid slurry), SSD (surface-scraped or stockpiled), FCD (composted waste), ALD (anaerobic lagoon liquid), and ASD (anaerobic sludge). Proper waste codes, sampling technique and sample shipping/handling are imperative for reliable results and recommendations.

**Types of Waste**

**Liquid slurry (LSD)** — the mixture of liquid and solid waste from a manure storage basin, which averages 5–10% total solids. About 56% of dairy samples received are coded LSD, which is the correct code for most dairy liquid wastes. If a crust of waste material forms on the surface, thorough agitation is necessary in order to take a representative waste sample.

**Surface scraped or stockpiled (SSD)** — the "solid" wastes that are usually scraped from the feeding areas and the free stall barns, which can be stockpiled (dry stack). SSD accounts for about 20% of all dairy samples. The material is dried and analyzed. Calculated plant-available nutritional rates are reported on a wet basis (as the material was sampled).

**Composted waste (FCD)** — composted dairy waste, usually combined and turned with other materials and destined for use in potting media, amendments or other products.

**Anaerobic lagoon liquid (ALD)** — the liquid waste sampled from the manure/waste water volume of an anaerobic lagoon. Approximately 18% of the dairy samples received are coded ALD, and are probably coded incorrectly.
Although common in the swine industry, anaerobic lagoons are rare in the dairy industry due to the higher solid content of the manure. The dairy waste storage basin may look similar to an anaerobic lagoon, but the two function differently. This difference influences the resultant rates of plant-available nitrogen.

**Anaerobic lagoon sludge (ASD)** — the solid waste that settles to the lagoon bottom due to inadequate bacterial decomposition.

**Proper Sampling**

**Liquid slurry.** Premixing the slurry in a pit or storage basin prior to sampling is ideal. An eight- to ten-foot section of one-half- to three-quarter-inch PVC pipe can be used to collect samples. Insert the pipe into the pit, and then press a thumb over the end to create an air lock. Remove the pipe from the waste, place it over a container (i.e., clean, plastic bucket) and release the air lock. Do not rinse the sample into the container because dilution will distort results. However, if you plan to add water to the waste prior to application, then adding a proportionate amount of water to the sample is appropriate. Waste should be collected from several areas of the pit and mixed thoroughly. Transfer the thoroughly mixed slurry to a sample container (i.e., clean, beverage container) suitable for shipping. The container should be no more than two-thirds to three-fourths full to allow for expansion due to gas pressure.

**Surface-scraped, stockpiled and composted waste.** "Solid" waste is ideally stored on an impervious surface that is covered. Uncovered waste develops a weathered exterior that may not accurately represent the majority of the material. Rainfall moves water-soluble nutrients through the pile. Though composted waste is somewhat stabilized, mobile nutrients can leach. For stockpiled waste or compost, always sample to a depth of at least 18 inches at six or more locations. Thoroughly combine the collected material in a plastic container, and take a one-quart subsample for analysis. It is very important that the sample submitted represent the average moisture of the waste product. Refrigerate samples if they will be held for two or more days before shipping.

**Sample Timing and Waste Application**

Ideally, the storage basin should be sampled for liquid slurry a few weeks prior to anticipated application to allow adequate time to receive your report. Sampling, however, is often conducted as the agitated waste is being pumped for land application. Past waste analyses can provide general guidelines for land application, but a current analysis should always be used since nutrient concentrations can change due to feed ration, time of year, weather or duration of storage.

**Waste Delivery Options**

The NCDA&CS Agronomic Division recommends that you deliver your samples personally or use a service such as UPS, FedEx or DHL that will bring samples directly to our laboratory building in Raleigh. In select locations, the state courier service will pick up and deliver samples. You may also contact your local Cooperative Extension office, Soil and Water Conservation district office, or NCDA&CS regional agronomist to inquire about other delivery options. If you prefer to use the U.S. Postal Service, please be aware that delivery may take longer due to required handling by the N.C. Mail Service Center. The U.S. Postal Service also imposes additional shipping and packaging restrictions.

As stated earlier, plastic bottles containing liquid waste samples should be no more than two-thirds to three-fourths full. This prevents expansion and "explosion" during transit. A damaged sample is not good for you, the delivery service or the laboratory. It does not provide a representative sample for analysis. Finally, sample containers should be double-packaged (i.e., placed within two tied or sealed plastic bags) as a precautionary measure.

**Resources & Stewardship**

Waste analysis helps dairies use agricultural wastes responsibly, thereby protecting the environment and preserving water and soil resources. Good stewardship involves keeping detailed records of waste analyses and waste applications. Feel free to consult the staff of
professionals at NCDA&CS for nutrient management assistance.

**Franklin Teague Honored by the North Carolina Dairy Producers Association**

At the annual meeting of the NCDPA, Franklin Teague was presented the association’s Distinguished Service Award for his many years of service and contributions to the dairy industry.

Franklin was raised on a farm in Alamance County, and was responsible for starting a dairy on the home farm. He graduated from NCSU with a degree in Animal Husbandry, and then worked for two years as an Assistant County Agent in Davidson County. He married the Assistant Home Agent, Ruth Sockwell, and they have raised three sons and a daughter. Ruth’s father, George Sockwell, a prominent tobacco farmer in Guilford County, convinced them to come to Reedy Fork Farms and start a dairy operation. The dairy operation was Franklin’s main interest, and the dairy continues today with son George and his family in partnership with Franklin.

Franklin joined the Guilford County DHIA in 1952, and served as its secretary-treasurer for many years. In 1964 he helped organize both the North Carolina and the national DHIA organizations. He served as both vice president and president of the national organization, and remained on the national board until 1980.

Franklin began marketing milk with the Guilford Dairy Co-op in 1950, and served as its president from 1968-1975 when it merged with Dairymen Inc. Franklin represented the NC members of DI on the board from 1975-1980 as 1st vice president. From 1978-1985 he served as president of DI’s Southeast Division. He also served on the board of the National Milk Producers Association at this time.

Franklin has also been active through the years in the promotion of dairy products. He was elected to the board of directors of the American Dairy Association of NC in 1958, and served as its president from 1963-1970. During the same time he was elected to the national ADA board. From 1980-1990 he served on SUDIA’s board. In 1982 he was appointed to the National Dairy Promotion Board. He continues his promotion involvement today by serving on ADA of NC’s executive committee, and as a delegate to SUDIA’s annual meeting.

Franklin has received many honors through the years, including being the first recipient of the NCSU Department of Animal Science “Marvin E. Senger Outstanding Dairy Farmer Award” in 1974. The NCDPA Distinguished Service Award is further recognition of Franklin’s outstanding career and service to the dairy industry of NC and the nation. Congratulations, Franklin, for your years of service to the dairy industry.

(Norman Jordan, Jr., president of the NCDPA, presents the association’s Distinguished Service Award to Franklin and Ruth Teague.)

**Dairy Situation and Outlook for 2005**

**Dr. Geoff Benson**
Extension Economist, NCSU

**A Look Back at 2004**
2004 was certainly one for the record books with record high milk prices and strong prices for the year as a whole. This certainly helped dairymen recoup some of the losses they suffered because of low prices in 2003 and 2004. I expected 2004 prices would be a big
improvement over 2002 and 2003 but I must admit I didn't expect prices to set a record. I must also admit I am not sure why they did. Total milk production was pretty flat and increased only 0.1% over 2003 because a reduction in cow numbers almost offset higher production per cow. Sales through November 2004 were up but only by 0.4% over 2003, so the supply demand balanced tightened but not enough to explain these record prices. Perhaps it will become clearer as we get more information.

Federal Dairy Policy
Dairy policy will get a lot of attention in 2005 as efforts are made to extend the Milk Income Loss Payment program past its scheduled expiration date of September 30, 2005. Legislation has already been proposed and some alternative proposals have been developed. It is early days but the size of the federal deficit and competition for federal funding for other programs suggest a tough fight is in store. Since it began in December, 2001, the MILC program has accounted for the largest component of federal spending on dairy programs.

The dairy policy debate may be influenced by two recent government reports, one by USDA’s Economic Research Service and one by the US General Accountability Office. The ERS report says that federal dairy programs have had only a small effect on milk prices and, therefore, on dairy farm incomes. The analysis does not delve deeply into the MILC program but notes that these payments have only had a small impact on the structural adjustments occurring in the dairy industry. Also, in common with other price support measures, MILC payments tend to support higher levels of milk production which then puts downward pressure on milk prices. The main focus of the GAO report is the relationship among farm, wholesale and retail milk prices. However, it also includes a discussion of a wide variety of federal dairy programs and the general nature their impact on farm income, milk production, government costs, price volatility, economic efficiency and consumer prices. This discussion vividly illustrates that there are multiple policy goals and that no single policy or program can achieve all of them.

Outlook for 2005
The production outlook for 2005 represents a balance between several factors that favor higher milk production and some which would impede it. Factors favoring more production include low feed costs, the increased availability of Posilac, milk production per cow that seems to be returning to the long term trend, the momentum of cow numbers that were higher than year earlier levels in many months of 2004, and a dairy heifer inventory that is above year ago levels and in the normal range relative to the size of the dairy herd. Offsetting factors include Round 2 of the CWT voluntary supply management program and higher energy costs that are expected to persist through 2005. Higher energy costs have both a direct effect on farm costs and an indirect effect because most farm inputs have an energy component. One additional factor is the low culling rate observed in 2004 which is unlikely to be sustained, suggesting a return to more normal rates in 2005.

USDA projects the US average farm price for corn at $1.95 per bushel (midpoint) for the current marketing year. The average 48% soybean meal price is pegged at $157.50 per ton (midpoint). These prices translate into a milk-feed price ration that is high and expected to stimulate production.

The CWT herd reduction program is expected to remove approximately 51,000 cows early in 2005, or 0.55% of the national milk supply. 4,300 cows will come out of the southeast, including one North Carolina herd. CWT will also continue to subsidize cheese exports in an effort to support milk prices.

Continued sales growth is expected in 2005, based on an expectation of continued economic growth. Cheese likely will continue to carry most of the load, with small increases in butter and flat fluid milk sales. In recent months the export market has absorbed the domestic surplus of nonfat dried milk and raised prices. This is expected to continue during the first part of the year.

The average US All Milk price was just over $16.00 per 100 lb. in 2004, substantially above the long run average. The Federal Order 5
minimum blend price in the base zone was $1.00 more than this, on average, and the average mailbox price for 2004 is estimated at $16.25.

USDA’s latest forecast for 2005 is for milk production to increase by 2.1% to 174.1 bil. lb. The midpoint forecast for the US All Milk price is $14.40 per 100 lb., which is $1.60 below 2004. The midpoint Class III forecast is $12.95. The current Class III futures market presents a more optimistic picture and suggests a Class I mover close to $13.80 per 100 lb. This implies a US All Milk price around $15.25, $0.85 more than USDA’s forecast and a $0.75 drop from 2004. If North Carolina prices track national prices as they have in the past, NC dairymen should see prices that are $1.60 to $0.75 lower than in 2004. Monthly prices will remain above the MILC payment trigger and no payments are expected under the current program.

These projections are based on “normal” weather and milk production this spring will be critical. Given the tight supply-demand balance, an abnormally large spring flush would likely send milk prices lower for the rest of the year but a smaller than expected amount of spring production would have the opposite effect and could send prices sharply higher. A repeat of 2004 prices is unlikely but so is the kind of price “crash” we have seen in the past. Overall, 2005 is shaping up to be a reasonably good year for prices.

A word of caution is in order, however. I see no reason to believe that there has been a fundamental change in the dairy economy and it would be prudent to continue to use sound financial management. This includes measuring and monitoring financial performance, including cost of production. Contact me if you would like to participate in the NC Dairy Farm financial Performance Project and, if not, take advantage of the summary information provided on my web page at http://www.ag-econ.ncsu.edu/faculty/benson/benson.html.

---

**2004 North Carolina State 4-H Dairy Quiz Bowl Team**

by Dr. Brinton Hopkins
NCSU Extension Dairy Specialist

The Dairy Quiz Bowl is a contest with dairy topic questions. One statewide contest is held each year. Teams compete with each other in giving oral answers to questions posed by a contest moderator. The teams receive credit for correct answers and in some cases, a penalty for not answering. A written exam is also part of the senior division contest at the state level. The winning senior division team competes at the North American 4-H Dairy Quiz Bowl Contest in Louisville, Kentucky.

Congratulations to our 2004 State 4-H Dairy Quiz Bowl Team. Team members were: Erin Morgan (Forsyth County), Brenda Crouse (Alleghany County), Travis Anderson (Iredell County), and Landon Hunter (Yadkin County). The team was coached by Nancy Keith, Area Specialized Dairy Agent and J.D. Brooks, dairy volunteer from Alleghany County. At the North American 4-H Dairy Quiz Bowl Contest, our North Carolina state team competed very well and finished among the top teams.

Team members from left to right: (seated) Nancy Keith, Area Specialized Dairy Agent (coach); J.D. Brooks, Dairy Volunteer - Alleghany County (coach); Team members: (seated) Erin Morgan, Forsyth County; (standing): Travis Anderson, Iredell County; Brenda Crouse, Alleghany County; and Landon Hunter, Yadkin County.
NCSU Extension
Area Specialized Agents

(Each of the area agents serve several counties. Their home county is listed after the phone number.)


NCSU Extension Dairy Specialists

**Dr. Geoff Benson** - 919/515-5184
- dairy farm management, marketing & policy

**Dr. Brinton Hopkins** - 919/515-7592
- nutrition, replacements, 4-H/Youth

**Dr. Don Pritchard** - 919/515-8805
- milking management, mastitis, special programs, newsletter editor

**Dr. Steve Washburn** - 919/515-7726
- reproduction and farm systems

**Dr. Lon Whitlow** - 919/515-7602
- nutrition & feeding management

NCSU Dairy Extension
Web Page Address


The North Carolina Dairy Foundation provided the financial support for printing and mailing this newsletter. Thank you.