The 66th Greensboro District Junior Dairy Show was held the first week of August with 47 kids from 5 different counties showing 97 cows representing five major dairy breeds. The district show was held the day after the Guilford County Junior Dairy Show. As we always expect, we had record high summer temperatures the week of the shows, but thanks to a great new fan in the show barn, most everyone was able to find a relatively cool spot! Only one cow was certain there was a helicopter invasion under way—all others adapted well and behaved quite well for their junior handlers. Sponsors were extremely generous this year, donating well over $8000 to go towards support of the show and prizes for the participants. A huge thanks goes to Anna Amoriello who served as show treasurer for being such a convincing collector of donations!! Brittany Thompson won the Frank Ger ringer Outstanding Showmanship Award, which is presented in his memory by his sister, Anna. Brittany and Megan Mann are our two senior 4-Hers who will be aging out this year. They have both had amazing 4-H careers showing dairy cattle and participating in many other 4-H activities. Sad as we are to see these two outstanding young women age out of the 4-H program, we are happy to have 13 Cloverbuds rising up to step into the big shoes they are leaving behind. Congratulations to all our dairy show participants for their great showmanship and sportsmanship!!
IMPROVING YOUR FARM’S SECURITY/BIOSECURITY

(Taken from a document created by the Dairy Biosecurity Team)

PROCEDURES IMPORTANT TO IMPLEMENT RIGHT NOW (WITHOUT ANY FOOT AND MOUTH DISEASE OR OTHER FOREIGN ANIMAL DISEASE THREAT)

WHY? To protect against theft, vandalism, animal rights assaults, domestic terrorists, “time wasters”, contagious diseases, other security reasons.

- Make the changes necessary to limit access to the farmstead to only one entrance, and have the entrance gated or able to be closed in some manner.

- Post a STOP sign at the farmstead’s entrance that instructs people to call the phone number indicated for permission to enter or for an appointment BEFORE coming onto the farm. Inform all farm employees of this policy. Develop a list of who you will allow to enter when you are not there, providing they leave a message that they entered your dairy (health inspector, semen delivery, dairy supply truck, meter readers, etc). Develop a list of who can enter without leaving any notice (milk truck, feed delivery trucks, etc.). Notify the people on your two lists of your procedures for entering your farm.

- Require ALL visitors to wear disposable plastic boots or washable boots while at your farm, and have them leave the disposable boots or wash their boots before leaving your farm. Inform all farm employees of this policy.

- Install a foot-bath for farm employees to use.

- Keep a record of all visitors to the farm, date visited, and reason for visit.

- Test/culture for diseases/mastitis all purchased animals before they are brought onto the farm, and isolate those animals for two weeks, if at all possible.

PROCEDURES IMPORTANT TO PLAN NOW FOR FUTURE IMPLEMENTATION! (WILL IMPLEMENT WHEN THERE IS AN FMD OR OTHER FAD OUTBREAK.)

- Develop a plan for a establishing a wash/disinfecting station at the main entrance to the farmstead. Plan should include equipment to be used, logistics of providing water supply, who will do the washing/disinfecting of vehicles coming onto or leaving the farm, source of disinfectant, etc. (see the “yellow document” for more information)

- Develop a plan for how farm employees will be able to shower and change clothes when they arrive at the farmstead and before leaving the farmstead.

- Develop a plan for which vehicles, tractors and implements will be designated for use ONLY on the farm (no road travel or use at another farm site(s)).

- Develop a plan for how animals will be moved away from close proximity to roads and public access.

  Review the procedures outlined in the “yellow document” with all farm employees, and implement them when required.

**If you have not received a copy of the above mention “yellow document” please call the Extension office for your copy**
Feed Ingredient Evaluation

Information taken from a fact sheet by T. Wright, Dairy Nutritionist with the Ontario Ministry of Agriculture, Food and Rural Affairs

When considering feeds from a specific class, you can make economic decisions on a cost per kilogram of nutrient. For example, to choose between 48% and 44% soybean meal calculate the cost per unit of crude protein (CP) from each source and choose the one providing protein at the least cost. For example, 48% soybean meal (SBM) costs $380/ton. The cost per unit of protein is ($380/480) or $0.79/kg. Similarly, if the cost of 44% SBM is $360/tonne, then the cost of protein is (360/440) or $0.82/kg. The same situation holds among the energy feeds based on their Total Digestible Nutrient (TDN) or Net Energy (NE) values. Petersen's equations were developed to compare the value of various feedstuffs with corn and soybean meal, as the sources of protein and energy. The use of these equations provides a fast and easy cost comparison for alternative feeds. Factors used in Petersen's equations can be calculated as follows (use "as fed" values):

\[
A = \frac{[(TDN \text{ corn} \times CP \text{ of test feed}) - (CP \text{ of corn} \times TDN \text{ of test feed})]}{[(TDN \text{ corn} \times CP \text{ of SBM}) - (CP \text{ of corn} \times TDN \text{ of SBM})]}
\]

\[
B = \frac{[(CP \text{ of test feed}) - (CP \text{ of SBM} \times A)]}{CP \text{ of corn}}
\]

Petersen's equations are used to calculate the comparative value of a feed as follows:

\[\text{$ value per ton of test feed = (A \times$ price per T SBM) + (B \times$ price per T of corn)}\]

Corn (energy feed) and 48% soybean meal (protein feed) are commonly used as the base feeds in Petersen's equations. However, any other energy or protein feed can be substituted. The value of a test feed is based on its level of TDN and CP in comparison to the costs and nutritive value of the base feeds, in this case, corn and soybean meal.

To use the ratio equations to determine the value of an alternative feed:

- multiply the price of soybean meal by the soy ratio (A)
- multiply the price of corn by the corn ratio (B)
- add or subtract these two results as indicated
- the result is the maximum value of the test feed as a source of energy and protein.

For example, if the price of corn is $180/ton and the price of soybean meal (48%) is $400/ton, then the nutrient value of barley is (A x $400 + (B x $180) = $224. Barley available at a price of less than $224/ton is a good value when corn costs $180/ton and soybean meal $400/ton. A change in the price of either corn or soybean meal will affect the economic value of bakery waste. When feed prices are volatile, update Petersen's equations regularly to determine if an alternative feed source is a better buy.

When feed prices skyrocket, it is always smart to shop around for the best deals. Even though most feeds are priced according to their comparative value to corn and bean meal, there are occasionally good buys to be found.

If you are fortunate to be sitting in front of your computer as you contemplate the comparative price value of a feed ingredient, the Ontario Ministry of Agriculture, Food and Rural Affairs has provided a simple calculator to that can be found at:

http://www.omafra.gov.on.ca/english/livestock/dairy/herd/food/equation.html
The North Carolina Holstein Association raised funds to send the largest crowd of junior members to the National Holstein Convention in Wisconsin that has ever been sent. The group of 21 youth and adults went to Wisconsin Dells June 22-27. The group raised enough money to purchase plane tickets for all the youth attending!!

Erin Morgan participated in the Public Speaking Contest, Cole Strickland & Evan Gunter participated in the Fitting Contest and Evan won 3rd place. The Junior Quiz Bowl Team consisted of Sidney Davis, Mickey Jo Grubb, Sarah Thomas, Evan Gunter, Courtney Elliott, (Team Captain) and Sheela Wright, Coach. The Senior Quiz Bowl Team included Cole Strickland, Brittany Thompson, Logan Thomas, Erin Morgan, (Team Captain) and Leslie Gentry, Coach.

Joe Allen and Darrell Wright were the delegates to the adult meeting for NC. Others attending were LuAnn Allen, Kay Coltrane, Margie Grubb, Karen and Ty Elliott, Shirley Jarrell and Joyce Fagg.

Special thanks to all who made the trip possible!!

### Upcoming Events

**September**
- 19—Cooperative Extension Day at the Chatham County Fair
- 20—Milking Booth and Homemade Ice Cream Churn-off at the Chatham County Fair
- 23-24—Waste Operator’s Initial Certification Training, 9am-3pm, Iredell County Extension Center, contact Ken Vaughn at 704-878-3165
- 25—Chatham County Farm and Industry Tour

**October**
- 3-12—Dixie Classic Fair, dairy show Oct 6-7
- 9-10—Mid Atlantic Dairy Grazing Conference and Organic Field Day, Shenandoah Valley, VA
- 17-26—NC State Fair, dairy show Oct 24-26

**DON’T FORGET—I CAN HELP YOU WITH CALIBRATION OF YOUR WASTE APPLICATION EQUIPMENT IF YOU ARE REQUIRED TO CALIBRATE THIS YEAR**

For more information visit our Website: http://chatham.ces.ncsu.edu