

North Carolina Poultry Industry Joint Area Newsletter

September, 2008

Inside This Issue

NCPF News.....	1
Farm Practices to Reduce Diseases.....	3
Developing a Farm Plan.....	4
Issues to Consider When Refinancing.....	5
Contact Information	6

Contact Us

North Carolina State University
Department of Poultry Science
234 D Scott Hall, Box 7608,
Raleigh, NC 27695-7608
Telephone: 919-515-5407
Fax: 919-515-7070
Website:
<http://www.ces.ncsu.edu/depts/poulsci/>

Issue Editor: Dan Campeau
Issue Layout: Susan Graham

Distributed in furtherance of the acts of Congress of May 8 and June 30, 1914. North Carolina State University and North Carolina A&T State University commit themselves to positive action to secure equal opportunity regardless of race, color, creed, national origin, religion, sex, age, or disability. In addition, the two Universities welcome all persons without regard to sexual orientation. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.

NCPF News August 2008



NCPF 2007-2008 President David Anderson presents an Excellence in Environmental Growing Award to finalists Rachel and John Etchison of Etchison Farms. Etchison Farms was nominated by Townsends, Inc. L-R: David Anderson, Rachel Etchison, John Etchison

The North Carolina Poultry Federation recently held its 41st Annual Membership Banquet and Awards Presentation at the Grandover Resort & Conference Center in Greensboro on August 7, with over 170 in attendance.

President David Anderson called the business meeting to order where the new 2008-09 Board of Directors were elected. They include David Anderson, Butterball; Scott Braswell, Braswell Foods; Kendall Casey, Perdue Farms-Rockingham; Tommy Furlough, Cal-Maine; Charles Glass, Tyson-Monroe; Alice Johnson, Butterball; Bob Johnson, House of Raeford; Cowan Johnson, Nash Johnson & Sons; Jerry Jouson, Butterball; Terry Maness, Perdue Farms; Darryl

Moore, NC Breeder Hatchery Association; Paul Nordin, Wayne Farms; Connie Ozment, Carolins By-Products; Walter Pelletier, Goldsboro Milling Co.; Dan Peugh, Allens Hatchery; Tommy Porter, Porter Farms; Scott Prestage, Prestage Farms; Charles Rigdon, Case Farms; Sam Robertson, Case Farms; Richard Simpson, Simpson Eggs; Ralph Upton, Pilgrim's Pride -Sanford; Kimber Ward, Mountaire Farms; Sam Whittington, Tyson Farms-Wilkesboro; Richard Williams, Townsends; Adam Willis, Pilgrim's Pride- Marshville; Debbie Worley, Worley Farms; Rocky Abell, Carolina Feed Industry Association.

The Allied Industry Award was presented to Milton Hancock who works for Aviagen, a primary broiler breeder company. Milton, a native of Arkansas, has been directly involved in the poultry industry for over 40 years. He currently lives in Statesville and covers, GA, TN, KY, and parts of NC.

Jerry Johnson, Director of purchasing for Butterball, LLC in Mt. Olive, NC took home the prestigious Distinguished Service Award. Jerry has chaired NCPF's Membership-Sponsorship Committee the

(Continued on page 2)

NC State University
A&T State University
**COOPERATIVE
EXTENSION**

Empowering People • Providing Solutions

NCPF News

(Continued from page 1)

past several years and has been associated with the poultry industry since 1969 where he began his career in the Shenandoah Valley of VA and later moved to NC to work for Carolina Turkeys. He's been in NC the past 21 years.

Our Annual Environmental Grower awards were presented to three outstanding farm families this year. The winners are selected based on their environmental stewardship management practices as well as other agricultural related activities on and off the farm. Farm aesthetics and good neighbor relations are also very important criteria along with any new innovative ideas applied to their farm and nutrient management plan, including wildlife management.



NCPF 2007-2008 President David Anderson presents an Excellence in Environmental Growing Award to winners Chad and Marion Milton of Chilton Farms. Chilton Farms was nominated by Tyson Foods (Wilkesboro). L-R: David Anderson, Chad Chilton, Marion Chilton, Frank Denny (Tyson Foods Wilkesboro)

Chilton Farms, Ararat, NC took away the top award winning \$1,000. Mr. M.H. Chilton and his son Chad, manage six breeder houses for Tyson Farms-Wilkes-

boro with 60,000 capacity. They farm over 1,000 ac. with several hundred brood cows. Their farm has been in continuous operation going back several generations of Chilton's.

The next two finalists were awarded \$500 each for their environmental excellence.



NCPF 2007-2008 President David Anderson presents an Excellence in Environmental Growing Award to finalists John and Linda Davis of Terrace Farms. Terrace Farms was nominated by Pilgrim's Pride (Marshville). L-R: David Anderson, Linda Davis, John Davis, Danny Sanders (Pilgrim's Pride Marshville)

Terrace Farms, in Lexington, NC owned and operated by Jim & Linda Davis run a four-house pullet operation with Pilgrim's Pride -Marshville. Total capacity is 104,000 pullets per year. They also farm 114 ac with 60 head of brood cows. The Davis family are third generation owners of what was once a large champion Guernsey dairy farm. Other awards include 2005 "Davidson County Farm Family" award and Pilgrim's 2007 "Environmental Excellence Award".

John & Rachel Etchison raise 130,000 organic broilers each year for Townsends on their Siler City farm. They've been farming 250 ac. in Chatham county since

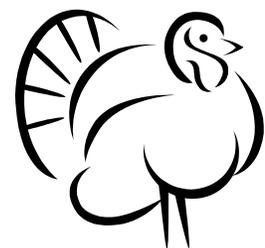
1987 and also maintain a 50-head brood cow operation. John is past chairman of Chatham County's Soil & Water Conservation District where he has served for the past 35 years (see photo page 1).

Jan Kelly, Executive Director North Carolina Egg Association, presented the "Golden Skillet" award to Dr. Brian Shelton, recently retired Director of NCSU-CALS Poultry Science Extension. This is the Egg Council's top award each year to honor those who have gone beyond the call of duty to help support the NC egg industry.

The evening entertainment, headlined by southern humorist, comedian and farmer, Jerry Carroll was enjoyed by all.

Officers of the Executive Board who will help lead the NCPF next year include: Charles Glass, President; Walter Pelletier, 1st VP; Kendall Casey, 2nd VP; Paul Nordin, Sect-Treas.; David Anderson, Immediate Past President.

Submitted by Bob Ford, Executive Director, North Carolina Poultry Federation.



Farm Practices to Reduce Incidence of Broiler Diseases Related to *Clostridium*s

Edgar O. Oviedo-Rondón, DVM, PhD., Dip. ACPV, Assistant Professor/Extension Specialist, *Department of Poultry Science, North Carolina State University*

*Clostridium*s are spore former bacteria that can be found anywhere. They are present in the soil, litter, feed, intestine and droppings of all animals, but they are more commonly isolated in large numbers in broiler houses from swabs of dirty walls, dirty fans, fly strips, dirt outside of the house entrance, and swabs of farm workers' boots. They proliferate in carcasses of mortality left inside the house, and especially in sludge of bad compost with anaerobic conditions.

Some specific types of *Clostridium*s involved in diseases that affect broilers are *Clostridium perfringens* and *Clostridium septicum*. It is the toxins produced by these bacteria, rather than the bacteria itself, that cause the diseases. Necrotic enteritis and gangrenous dermatitis are the most common diseases caused by *Clostridium*s in broilers. Necrotic enteritis and/or dysbacteriosis, which are intestinal diseases, can cause from flushing of the gut contents to the death of the broiler. Gangrenous dermatitis can cause from bloody lesions underneath the skin to the death of the broiler. Gangrenous dermatitis is also called gangrenous cellulitis, wing rot or red leg. These

diseases are more prevalent in some farms than in others within the same broiler complex, indicating that farm management practices are important to control the disease. The initial step to establish a control strategy is to create understanding among people involved in the corrective actions.

It is important to remember that all animals including broilers are always in contact with these *Clostridium*s and other bacteria related to these diseases, such as *E. coli* and *Staphylococcus aureus*. *Clostridium*s, in low numbers, are even normal inhabitants of all animal intestines. However, they can cause these diseases when the immune system of broilers is not working properly due to environmental stress like heat or cold, virus such as infectious bursal disease (IBD) or Marek's, and mycotoxins in the feed. All these immunosuppressive factors should be avoided to control *Clostridium*s. Review the vaccination programs and the immune status of the flock against IBD and Marek's disease when trying to control *Clostridium* related diseases. Cleaning and sanitation of feed bins and feed lines should be practiced to reduce proliferation of mold in the feed. Feed quality and feed consumption should be watched carefully to detect possible contamination of mycotoxins and reported immediately to the Tech Service Person.

Any factor that changes the normal intestinal function of broilers may change the balance of microorganisms in their guts and increase the numbers of *Clostridium*s and/or the production of their

α -toxins. Coccidiosis is one of the most frequent causes of proliferation of *Clostridium perfringens* and contributor to the necrotic enteritis disease. Although, coccidiosis is normally controlled either by use of ionophores, other feed additives, or by vaccination, it is always important to monitor the efficacy of these control methods. It is important to maintain the litter dry and try to keep relative humidity between 50 and 60%. If the relative humidity is above 70% first thing in the morning, the minimum ventilation setting is probably too low and should be increased. Problems in coccidiosis control detected on time by monitoring can be corrected before they cause significant broiler performance loss.

In the same way, *Clostridium*s and other pathogenic bacteria used to be controlled with some feed additives, but currently the use of these additives is less frequent in poultry feeds, and *Clostridium* related diseases more recurrent. Feed and/or water withdrawal, and drastic changes in feed composition or on house temperatures also affect the physiology of the intestines. These failures in management should be avoided even more in farms where *Clostridium* related diseases have been observed.

Gangrenous dermatitis incidence may also be increased when broilers have skin cuts and scratches. Avoid sudden loud noises, flashing lights, animals or people entering suddenly in the house causing flock hysteria and scratches

(Continued on page 4)

Farm Practices to Reduce Incidence of Broiler Diseases Related to *Clostridium*s

(Continued from page 3)

among birds. Use migration fences to avoid overcrowding in case of flock hysteria. Remove any protruding nails, wires or any sharp objects that can cause scratches. Watch the quality of the litter that you purchase to avoid sharp surfaces. Observe the normal feathering of your birds; if you detect any abnormalities in feathering notify the Tech Service Personnel. The company could take some corrective actions in these cases. Remember that hot house temperatures during the second and/or third week of age of the flock may reduce feathering of some broilers.

The previous actions can be taken daily at the farm to prevent *Clostridium* related problems. In case of detecting these diseases, there are some practices that have given positive results to reduce its dissemination in the present or future flocks.

For example, to reduce bacteria numbers in the litter use higher levels of litter acidifiers such as alum, aluminum sulfate, or sodium sulfate than the ones used commonly to control ammonia. Similar effect has been observed with application of salt to the litter. Total clean out of the house is recommended after recurrent outbreaks of *Clostridium* related diseases.

Iodine disinfectant can be used in the water to control *Clostridium*s. The formula recommended by some Veterinarians is 1 gallon of 1.75 percent solution of iodine disinfectant mixed with 6 gallons of water to make a stock solution. The stock solution is then given to the birds at a rate of 1 ounce per gallon of water consumed. The solution is provided to birds every other day for three times. The administration of organic acid blends in drinking water also reduces the numbers of *Clostridium*s and alleviates their negative effects during outbreaks of these diseases. Probiotics in feed or water have shown positive effects to exclude the proliferation of *Clostridium*s in broiler intestines.

Finally, one of the more important aspects on farm management to reduce *Clostridium* related diseases is to keep frequent collection of mortality, and in case of using composting for mortality disposal, keep adequate management of compost. Avoid recirculation of materials from the compost pit or bin to the houses through workers' boots, buckets or other materials used to handle mortality.

In conclusion, learning the factors that favor *Clostridium* proliferation and increase broiler susceptibility to these bacteria and their toxins can help to create better control strategies.

Contacts for the North Carolina Poultry Industry Newsletter

On-Campus Contact

Mike Wineland, Ph.D., Dept Extension Leader
Dept of Poultry Science, NCSU
www.ces.ncsu.edu/depts/poulsci/
email: mike_wineland@ncsu.edu
telephone: 919-515-5529

Field Faculty Contacts

Kathy Bunton, Area Specialized Agent,
Poultry

*Iredell, Wilkes and Alexander Counties
<http://iredell.ces.ncsu.edu>
email: kathy_bunton@ncsu.edu
telephone: 704-878-3154

Dan Campeau, Area Specialized Agent,
Poultry

*Chatham, Harnett, Lee, Moore and
Randolph Counties
<http://chatham.ces.ncsu.edu>
email: dan_campeau@ncsu.edu
telephone: 919-542-8202
cell: 919-548-9895

Richard Goforth, Area Specialized Agent,
Poultry

Anson, Cabarrus, Montgomery, Rich
mond, Scotland, Stanly and *Union
counties
<http://union.ces.ncsu.edu>
email: richard_goforth@ncsu.edu
telephone: 704-283-3743
cell: 704-363-2359

James Parsons, Area Specialized Agent,
Poultry

*Duplin, Sampson and Wayne Counties
<http://duplin.ces.ncsu.edu>
email: james_parsons@ncsu.edu
telephone: 910-296-2143

Developing a Farm Plan for a Mass Poultry Mortality

Becky Ceartas, *Rural Advancement Foundation International - USA*

For poultry growers, the dreaded sound of the poultry house alarm going off means lost income and days of work ahead. Growers can reduce the costs of mass poultry mortalities and protect themselves from future liability by creating a disposal plan in advance.

Heat, natural disaster, equipment failure, or disease can all cause unusually high poultry mortality. Farmers should create plans for each of these four situations, since the best option varies. Methods of disposal for mortalities due to avian influenza must be determined with the integrator and the state veterinarian at the time of the death.

North Carolina state law requires dead poultry be disposed of within 24 hours in a manner approved by the state veterinarian. There are six main options for disposing of a mass mortality. Each has advantages and disadvantages. For example, landfill burial and rendering may not be suitable for a mass mortality due to disease.

Burial is quick but is not recommended in the coastal plain and where the water table is high. It can contaminate soil and water. Burial sites must be at least three feet below the ground surface, three feet above the seasonable high water table, and 300 feet away from an existing stream or

public body of water. For assistance in determining the seasonal high water table, contact your local health department or local Soil and Water Conservation District office.

A record of the location of the approved site and the burial history, which includes the date, species, head count and age, must be kept by the owner and reported to the local health director. Burial sites should be disclosed if the land is later sold to avoid potential liability issues.

Landfill burial is less environmentally risky but can be very expensive and may not be allowed in all areas and with some diseases. Call your county landfill to see if it accepts mass quantities of dead chickens, how much the tipping fee is per ton, and if transportation is available.

Rendering applies heat to carcasses to convert them into useful commercial products. Rendering does not affect the land, but may be impractical and expensive for large numbers of birds. Call Becky Ceartas, 919-542-1396 ext. 209, to find the plant nearest to you. Call the rendering plant to find out the maximum number of birds they would take at a time, transportation fees, and any other costs and restrictions.

Composting is simple, inexpensive and biosecure. It produces a useful end-product. NCDA&CS is in the process of investigating the possibility of outdoor composting or in facilities normally not used for composting that might be used in times of emergency. Call Dr. Sarah Mason at

the State Veterinarian's office, 919-733-7601, to learn more.

Contained incineration efficiently eliminates poultry disease agents but can be expensive because of the high cost of fuel. Farmers with incinerators may be able to dispose of smaller mass mortalities by storing the dead birds on pallets in a refrigeration unit until they can be systematically incinerated. To find a refrigeration unit contact your integrator or trailer rental company.

A **gasification** unit is a contained system that uses high heat to vaporize animal carcasses. It is less harmful to the environment than incineration. It also requires a refrigeration unit to handle mass mortalities.

By planning ahead, farmers can deal with poultry mortality in a way that is less costly, best for their land and their families, and within the law. All plans should be reviewed with your integrator for suggestions and approval requirements particular to your integrator.

Note from Editor: Other great resources include NCSU Poultry Science Dept. at 919-515-2621 and your local county Cooperative Extension Centers.

Issues to Consider when Refinancing a Farm Loan

Scott Marlow, *The Rural Advancement Foundation International - USA*

This year many poultry farmers are facing major financial challenges including flock reductions and skyrocketing costs for propane and other inputs. With the reduction in mortgage interest rates, refinancing a farm ownership or operating loan can be an attractive option for reducing monthly costs. However, farmers need to be careful as they look at their refinancing options. This article is to help farmers understand some of the issues to keep in mind when considering refinancing.

As is always the case, farm financial decisions are complicated and unique for the individual farm, and farmers should seek the assistance of a qualified financial advisor before making the decision. Don't just take our word for it.

Refinancing can reduce the monthly costs of debt by decreasing the interest rate or lengthening the term of the loan. In some situations, farmers can also have the loan principle reduced to the current market value. Each of these has specific challenges.

The most attractive method is the reduction of the interest rate while maintaining the term of the loan. By refinancing, farmers can continue the same level of debt but reduce the overall costs. However, there are costs associated with the refinancing process,

and farmers need to make sure that the benefits outweigh the costs.

In order to make sure that the refinancing makes sense, divide the refinancing costs by the amount by which the monthly payments are reduced. The resulting number is the number of months the debt must be maintained in order for the refinancing to pay for itself. For instance, if costs for refinancing are \$12,000, and the monthly payment is reduced by \$600, then it will take 20 months for the refinancing to pay for itself.

Extending the term of the loan will also reduce the monthly payments. However, extending the term of the loan increases the total amount of interest paid over the life of the loan, which can be substantial. It is also important that in extending the loan the farmer has confidence in the long-term stability of the farming operation.

We all make changes when times get difficult. With increased costs and challenges in the poultry industry, farmers need to take a long look at the future of their operations before betting that they will be there to pay off a long-term debt. If debt refinancing can be used to make changes in the farming operation that will make it more financially viable into the future, it is a positive step. However, debt refinancing used to simply "buy time" for an unsound enterprise may end up being negative in the long run.

One important consideration when evaluating refinancing options is the amount of collateral required for a loan. On farm ownership and operating loans it is not unusual for the bank or the Farm Service Agency to require that assets valued at 150% of the value of the loan be put up as collateral. In refinancing situations, this amount can be expanded to include all available assets, and can be several times the value of the loan.

If additional collateral is required, the farmer should be aware that this has several potentially negative consequences. First, if the refinanced loan takes all available assets as collateral, then there are no remaining assets that can be used to obtain additional credit like an operating loan for the following year, a vehicle or equipment loan or an emergency loan in the event of a natural disaster.

In addition, should the farmer be forced to default on the loan, they can be required to forfeit assets with a value far greater than the existing loan principle. We have seen situations where farmers lost farms worth over \$500,000 based on \$60,000 of outstanding debt. The farmer should be very clear about the amount of collateral being assigned, and have the option of shopping around to get the best deal from different banks. But be careful not to apply for loans at too many banks. This can show up on your credit report and reduce your credit score.

While many farm loans are made through commercial banks, the USDA Farm Service Agency pro-

(Continued on page 7)

Issues to Consider when Refinancing a Farm Loan

(Continued from page 6)

vides both direct and guaranteed loans to farmers who are unable to obtain credit elsewhere. Many poultry farmers have FSA guaranteed loans. FSA guarantees provide the bank with the assurance that if the farmer is unable to pay back the loan, the bank will receive 90% of the unsecured loan value after liquidation. The FSA guarantee often allows a bank to make a loan that is riskier than they would otherwise. It is not a guarantee for the farmer, but should be taken as a sign that the lending institution considers your loan very risky.

The Farm Service Agency also provides direct loans, although these are becoming less common. FSA loans can be of assistance when the farmer is unable to get credit elsewhere, and can have interest rates that are lower than commercial banks, although in times when interest rates are low, this benefit is often small.

In some situations, farmers with a guaranteed or direct loan can petition their bank for a debt write down. Write down is essentially reducing the debt to the level that the farm can cash flow as long as it is above the current appraised value of the property. This can be especially important in situations where changes in an industry radically reduce the value of assets. However, debt write down is not common, and only takes place in extreme cases.

For more information on FSA lending, see your county Farm Service Agency office, or visit the FSA web site at www.fsa.usda.gov.

In any case, farmers should proceed with financing decisions with great caution. One long-term farm economic advisor that we work with is fond of saying that farmers should just substitute the word “dynamite” for credit, and proceed with the same level of caution. Refinancing can be an important long-term strategy to improve the economic health of a farm, but it can also lead to financial downfall. Getting the better result requires good planning and well-informed decisions.