Compact fluorescent light (CFL) bulbs are becoming more popular as an energy-saving tool. CFLs only require a fraction of the wattage to run and the bulb life is much longer than incandescent bulbs. Many producers have made the switch already and with the upcoming ban on the manufacture of incandescent bulbs (due to come into effect on January 1, 2014) the rest will soon have to follow.

Here are some things to consider:

* When you first look at a CFL light bulb there is an advertised lifetime with four years being common. Reading the fine print, however, you will discover that this is based on four hours a day. If you leave them on most of the day you will find that the life span is much shorter. The actual rated life for many CFLs is around 8,000 hours.

* It is common for dust to accumulate on the light bulbs reducing light levels by up to 40%. It is best to buy CFLs with a glass cover over the tubing. A regular blow down of the barn is recommended to prevent a loss in light intensity.

* If you are only controlling your lights as on or off most types of CFL bulbs will work. However, if you are using a dimmer you have to purchase dimmable bulbs. Your dimmers must be compatible with CFLs. A CFL will only dim down to 20% of output but has smooth dimming through the rest of the cycle. If a dimmable CFL is used at

(Continued on page 2)
50% or lower for an extended period of time the life of the bulb will be reduced. It is important, therefore, to install bulbs that can supply the required light intensity. Light intensity at catch time can be reduced by turning off rows of lights or unscrewing the bulbs.

* Most manufacturers recommend that you run the lights continuously for 100 hours as a ‘burn-in’ period. It is said to increase the overall life span on the bulbs.

* CFLs are more sensitive to any disturbance in the energy supply. If dimmed low, they may flicker when there is an increased demand for electricity, such as when the fans or feeders are turned on.

* Your CFLs may not dim if your burn-in period is too short, incandescent bulbs are mixed with CFLs on the same circuit, or CFLs with different wattages are mixed on the same dimming circuit.

* If your new CFL bulbs glow pink it could be due to too short of a burn-in period. Older CFL bulbs may glow pink if the heating element is burned out and the lamp is at the end of its useful life span.

**Source of information:**
canadianPOULTRYmag.com, December 2010

---

**KPF TEAMS UP WITH KENTUCKY ASSOCIATION OF FOOD BANKS**

First Lady Jane Beshear announced an official declaration that September was Hunger Action Month. In response to this declaration, the Kentucky Poultry Federation teamed up with the Kentucky Association of Food Banks to take action in support of hunger relief.

On Friday, September 30th, the KPF teamed up with Cal-Maine Foods, Inc. to donate 1,800 dozen fresh eggs to the Elizabethtown Food Bank that would then be distributed throughout the Commonwealth to a variety of other food banks. On Tuesday, October 18th, Keystone Foods, LLC was on hand at the Clinton County Community Center to pass out more than 600 pounds of chicken from their local processing facility.

(Continued on page 3)
Mr. Roger Thomas was awarded the “Friend of Poultry” award at the 13th annual Kentucky Poultry Festival. Mr. Thomas has supported and championed our industry, and all of Kentucky agriculture. Mr. Roger Thomas has served as Governor Steve Beshear’s chief agricultural advisor, and also serves as the CEO of the Kentucky Agricultural Development Board (ADB) and the Kentucky Agricultural Finance Corporation which seeks to invest in projects that stimulate rural economic development and increase net farm income for Kentucky’s farmers.

Under Mr. Thomas’s role as the CEO of the Ag Development Board the Kentucky Poultry Federation was awarded and completed two grants. The KPF has the only animal agriculture indemnity fund in Kentucky through the support of Kentucky’s poultry companies and matching dollars from the ADB. The ADB was visionary in helping see the need for an indemnity fund for our industry and animal agriculture. The ADB also funded an over $800,000 grant for Poultry Energy Research and Education that ran from January, 2007-December, 2010. During this time Mr. Thomas was essential in helping the ADB continue to see the need and the vision for such research, development and education in our industry. Through this grant we were able to touch, in some way, all our Kentucky poultry growers. Mr. Thomas leadership is also evident by the new finance program that returns dollars to commodity organizations from end user. The KPF has just recently received these types of dollars.

Previous to his appointment, Mr. Thomas served as Executive Director of the Kentucky Dairy Development Council. He was a true friend of agriculture during his time as a state legislator. He served as a state representative for the 21st district in the Kentucky General Assembly from 1996-2004. During his years of service he served on the Agriculture and Small Business Committee, serving as Chairman for four years.

Mr. Thomas was the primary sponsor of House Bill 611 in the 2000 General Assembly which created the Kentucky Agricultural Development Fund. The Ag Development fund has touched so many of our Kentucky rural communities and has awarded funds to many of our Kentucky poultry growers to upgrade their poultry houses. Many of the poultry litter storage facilities constructed on our poultry farms were funded through cost share dollars earmarked through his leadership.

KPF TEAMS UP WITH KY ASSOCIATION OF FOOD BANKS ...... continued

(Continued from page 2)

plant.

“Hunger in Kentucky is closer than most people think,” said Executive Director of the Kentucky Association of Food Banks Tamara Sandberg, “but so is the solution. We all have a role to play, and together we can end hunger in Kentucky.”

The Kentucky Association of Foods Banks is comprised of seven Feeding America food banks that reach all 120 counties of Kentucky and serve an estimated one in seven of all Kentuckians annually.

“We all have a role to play, and together we can end hunger in Kentucky.”
SCHOLARSHIPS AWARDED AT POULTRY FESTIVAL

The KPF awarded four student scholarships this year. The KPF scholarship fund was established to assist and encourage graduating high school students to continue their education. The scholarship program was created to benefit the children and grandchildren of our poultry complexes' producers and employees. Funds for the KPF scholarships are raised through our annual silent auction that takes place annually at the Kentucky Poultry Festival.

This year’s scholarship winners were Rebecca Knight, Hart Jones, Kelsey Colley and Jackson Massengale.

Rebecca Knight resides in Hopkinsville and will graduate from Christian County High School in May 2011 with a 3.75 GPA. She plans to attend Murray State University and major in Agriculture Education. She hopes to one day be teaching at a local high school and helping children bring out their full potential through agriculture classes.

Hart Jones resides in Calhoun where his father, DeWayne Jones, and grandfather, Joey Jones, both work for Tyson Foods. Hart graduated from McLean County High School in May 2010 and is currently attending Kentucky Wesleyan College with a 3.7 GPA. He is majoring in Psychology and plans to graduate in May 2014. After undergraduate, Hart plans to go on to graduate school and receive his Master’s in clinical psychology.

Kelsey Colley resides in Farmington where her father Stan is a grower for Pilgrim’s Pride. She attends Harding University in Arkansas where she is majoring in mathematics and plans to graduate in May 2015. After undergraduate school Kelsey would like to go on to graduate school and then become a mathematics professor.

Jackson Massengale resides in Monticello where his father is a contract grower with Cobb Vantress, Mr. Terry Massengale. Jackson attends Wayne County High School where he will graduate this Fall and he also is currently taking classes at Somerset Community College. After graduating Jackson will attend Western Kentucky University where he will major in engineering.
JOAN AND MARTIN HAYDEN RECEIVE THE KENTUCKY FAMILY FARM ENVIRONMENTAL AWARD DURING THE ANNUAL HALL OF FAME BANQUET

Joan and Martin Hayden own a 135 acre farm in Philpot. They began farming 27 years ago raising and selling beef cattle. In 1997 they decided to build four broiler houses with Perdue Farms Inc. This was a great addition to their farm because much of their land was stripped mined and was not good for crop land or pasture. Their farming operation consists of the broiler houses, 200 head cow calf, several horses, and growing and baling fescue hay.

Martin and Joan are both very active in their community. Martin is president of the Daviess County Cattlemen’s Association, District Director for the Kentucky Cattlemen’s Association, member of the local planning and zoning board and member of the Board of the Kentucky Beef Network. Joan is a member of the FSA committee, Daviess County District Extension Board, Kentucky Poultry Federation, National Cattlemen’s Association, nominating board for Kentucky at Farm Credit Service, and Daviess County 4-H Council and treasurer of the Daviess County Cattlemen’s Association.

The Hayden’s have had their nutrient management program in place since 1999. Litter is stored in a shed when it is not possible to spread the litter because of the weather. They perform soil sampling every two to three years to ensure that they are maintaining the proper amount of nutrients in the soil. When spreading litter on the fields they make sure they are keeping the specified distances from waterways determined by the local and state water quality boards. They have fenced their streams and creeks to keep livestock out of them. They reduce odor by maintaining the cleanliness and operating conditions of their broiler houses and equipment. They compost mortality daily.

Maryland broiler grower under attack

When a small plane flew over their property in Berlin, Maryland broiler growers Alan and Kristin Hudson had no idea that the sky was falling. The Hudson’s have a 200 acre farm where they grow corn, soybeans and hay and raise cattle and chickens. The farm has been in their family for four generations.

During that fly-over of the Hudson’s farm an environmental activist from the Waterkeepers Alliance saw what she believed to be a stock pile of poultry litter. Waterkeepers Alliance then sued the Hudson’s accusing them of violating the Maryland Clean Water act. It did not matter that the pile in question was actually biosolids obtained from nearby Ocean City as part of a successful environmental program to recycle municipal wastes for agricultural purposes. The Maryland Department of Environment found that the Hudson’s were in compliance and no other action was required other than to spread the biosolids in the Spring for the next crop’s growing season.

Waterkeepers Alliance is made up of more than 190 Waterkeeper organizations. They employ more than 400 full-time and 200 part-time activists, educators, scientists, and attorneys. Waterkeepers Alliance plans on replicating their litigation to other growers elsewhere.
Are your attic inlets closing?

Do your attic inlets close every time that your timer fans turn OFF? If they don’t, trouble may be lurking above your ceiling!

Many growers have installed attic inlets in their broiler houses over the past few years. They have generally proven to be an effective device for reducing heating fuel consumption because they provide a method to capture some solar heat from the attic.

Growers have also observed that barns with attic vents frequently have drier litter and, sometimes, lower levels of ammonia.

Attic inlets are designed to operate primarily when minimum ventilation is being provided by timer fans in the house. Inlets should open when the fans are ON and closed when the fans are OFF. Some inlets have counter-weighted blades that close by gravity. Other attic inlets may be mechanically operated by the ventilation controller through a winch and cable system. Still others may have springs or other devices to close the inlet openings when exhaust fans are not operating.

Regardless of the operating mechanism, problems can develop if the vents remain open when exhaust fans are OFF. A broiler house is usually full of warm moist air at times of minimum ventilation. Warm air inside the house naturally rises toward the ceiling and will migrate through an open attic vent (or any other ceiling opening) into the attic when exhaust fans are not running. However, the attic is often cold, especially at night. Once warm moist air gets into the cold attic space, bad things begin to happen and will become increasingly serious if the condition persists.

Excess moisture condenses in the attic on cold surfaces such as the trusses, top side of the ceiling insulation, and the underside of the metal roof. As condensation continues, water may drip back on the insulation, causing it to lose its insulating effectiveness. Even worse, metal components will begin to rust. Ammonia in the air accelerates that rusting process.

Perhaps the most serious corrosion problem is on the small metal plates that connect wood truss members together at the joints. The metal plates are an essential piece that provides structural strength in a wood truss. As the metal connector plates rust and deteriorate, a truss loses its load carrying capacity and becomes increasingly at risk of collapse under heavy loads. Connector plate corrosion can be a serious problem even if it is only localized in an area around one attic vent. It only takes a few (sometimes only one or two) compromised trusses to put an entire building at risk of collapse.

If you have installed attic inlets in your poultry house, chances are they are relatively new to you. Take some time to inspect your inlets and see that they are all operating properly as the timer controlled exhaust fans cycle on and off. Keep the closing mechanisms clean and make sure the vents close as tightly as possible when fans are OFF. This includes the time between flocks when fan operation is minimal. Observe the vents as daily chores are performed and promptly repair any that are not functioning properly. A quick check in the attic once in a while is also advisable. Look for any signs of condensation or corrosion that might indicate warm air is leaking back into the attic.

Reducing heating cost is a worthwhile goal but not at the expense of compromising the structural integrity of a poultry house.

Doug Overhults
Biosystems and Agricultural Engineering
University of Kentucky
Adjusting variable input heaters

It’s that time of year again – heating season! Cooler weather means more run time for the heaters and bigger gas bills for the check book. One way to trim those bills just a bit is to adjust the gas valve on heaters that have a variable gas input capability.

Many poultry houses have forced air heaters, or “box heaters” as growers often describe them. Several brands of those heaters have a variable gas input valve that can reduce gas flow down to about 2/3 of the maximum input rating. When the weather is not so cold, it is a good idea to adjust that variable gas input valve down to the minimum setting. Here’s why.

Heating systems are necessarily designed to supply the amount of heat needed during the coldest conditions. That means the system is oversized in moderate weather. Also, heaters are installed so that one heater heats a specific area of the house instead of its heat output being distributed throughout the whole house as it would be in our homes.

A heater that turns ON with maximum gas input in moderate weather will create a rapid temperature rise in the house, and the heater will turn OFF in a short period of time. Although a short run time may seem to be a good thing, the heater may not operate long enough to distribute and mix the heat over the full area that it is supposed to be heating. Furthermore, the temperature can rise so rapidly that it overshoots the controller set point and causes the exhaust fans to run extra time in order to cool the house back down to the set point. That extra run time is a real heat waster!

Adjusting the gas input valve to the minimum setting will lengthen the heater burn cycle and reduce the rate of temperature to rise without using more gas. Longer run times provide more time for heat distribution and mixing. The usual result is better temperature uniformity throughout the house and less chance of excess ventilation that wastes heat. Remember, the heater is putting out enough heat if it is cycling OFF. A longer run time with a lower gas input and fewer ON/OFF cycles is likely to be more efficient than a short run time with a high gas input and more ON/OFF cycles. Some growers who have recently insulated, closed, and tightened their houses may even find that the lower gas input setting is adequate for all but the most severe winter conditions.

Don’t forget to give all of the poultry house heaters a good service and maintenance check before it gets really cold. Check for leaks and replace cracked or damaged hoses. Give the heater a good cleaning, including the burner orifice and ignition assembly. Make sure there are no obstructions to the flow of combustion air. Replace damaged or corroded components. It is also a good idea to have your gas service technician conduct a pressure check at some of your heaters to make sure there is an adequate gas supply within the house. Gas pressure checks should be done with all heaters operating.

Doug Overhults
Biosystems and Agricultural Engineering
University of Kentucky

Three new free-trade agreements signed

The U.S. House of representatives and Senate recently passed legislation for free-trade agreements (FTA) with South Korea, Colombia, and Panama. The three FTAs, which Republican leader Mitch McConnell supported, are expected to increase U.S. exports by $12 billion/year and boost the U.S. economy. While the economy as a whole is expected to improve, some industries, such as the auto industry, may take a hit. The FTA legislation includes a Trade Adjustment Assistance program which provides health and unemployment benefits to workers who lose their jobs because of overseas competition.

The new FTAs were originally negotiated under the Bush administration. The FTA with Colombia was signed on November 22, 2006, with Panama on June 28, 2007, and with South Korea on June 30, 2007.

Under the U.S.-Colombia FTA more than half of U.S. agricultural exports to Colombia will become duty-free immediately and the remaining tariffs will be eliminated within 15 years. Columbia will eliminate its price banding system which affects key U.S. exports including poultry. Similar reductions or eliminations of tariffs are (Continued on page 8)
Three new Free-trade agreements signed ....... continued

(Continued from page 7)

part of the U.S.-Panama FTA. Panama’s tariffs on poultry currently range from 5-260%. Some will drop immediately to zero, and others will be phased out within 15 years.

The U.S.-Korea agreement is not yet in effect. It needs to be ratified by the South Korean government. The agreement would also eliminate tariffs and tariff-rate quotas on consumer and industrial products. For agricultural products the agreement would immediately eliminate or phase out tariffs and quotas on a broad range of products.

Recently implemented trade agreements have benefited Kentucky. For example, the U.S.-Singapore trade agreement, which came into effect in 2004, increased Kentucky’s exports to Singapore by 216%.

The U.S. already has FTAs with Australia, Bahrain, Canada, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Jordan, Mexico, Morocco, Nicaragua, Oman, Peru and Singapore.

For more information on Free Trade Agreements go to:

http://trade.gov/mas/ian/tradeagreements/tg_ian_001974.asp

What do you want to read about?

We want to know what you want to read about.
Please e-mail topics of interest to Jacquie.jacob@uky.edu