



# Cheeps & Chirps

..... Points for Poultry Profitability

VOLUME 2, ISSUE 1

FEBRUARY 2009

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## 2009 Producer Educational Conference

The Kentucky Poultry Federation will host the fifth annual Grower Educational Conference on Saturday, March 21, 2009 at the Sloan Convention Center in Bowling Green, Kentucky.

The conference will feature informational speakers designed to help poultry growers stay at the top of their game.

Also, attendees will enjoy a Tradeshow giving participants the opportunity to see some of the latest technologies relating to the poultry industry and to financing options for their poultry farms. Lunch will also be provided to conference attendees.

Topics to be presented include water quality, managing built up litter systems,

update on the poultry energy project, CAFO regulations, California Proposition 2 animal welfare regulations and four areas of financial peace.

Registration is free, but pre-registration is requested so that we may plan for your attendance.

## 2009 Kentucky Poultry Federation Membership drive

December began the 2009 membership drive for the Kentucky Poultry Federation (KPF) where you can either renew or become a new member of the KPF and support Kentucky's poultry industry.

The Kentucky Poultry Federation is **YOUR VOICE** when it comes to issues that involve the poultry industry; by becoming a member you can utilize that voice and help build a stronger Federation.

New this year, every new or renewing member will receive a member packet which includes an ink pen, post-it notes and a shopper bag.

If you are interested in becoming a member you can download a Membership Application at [www.kypoultry.org](http://www.kypoultry.org).

Dues to the Federation are payable on a calendar-year basis. Membership applications are due by Friday, February 20, 2009.

The Kentucky Poultry Federation has added **NEW** membership benefits.

⇒ The KPF has teamed up with American Income Life to give all members a \$2,000 Accidental Death and Dismemberment Coverage;

⇒ A Partners Discount Card that will save you 20-60% on vision, hearing, chiropractic care, prescription drugs, and *optional* dental discounts available.

A portion of your dues provides you with a lobbyist in Frankfort; this allows for aggressive involvement in

legislative action in regards to the security of the poultry industry.

As a member you will also receive subscriptions to the **POULTRY TIMES** and **THE FARMER'S PRIDE**. Our quarterly newsletter, **THE SUNNYSIDE**, is published in **THE FARMER'S PRIDE**.

Each year three growers are awarded with the Kentucky Family Farm Environmental Excellence Awards. Each grower receives \$500 and an all expense paid trip to Louisville. In addition, these growers' applications are sent to US Poultry & Egg Association for the national competition.

Also, each grower should be receiving this quarterly newsletter entitled **CHEEPS & CHIRPS**.

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## 2009 Membership drive . . . . .

**FDA = Food and Drug Association**  
**USDA = United States Department of Agriculture**

**EPA = Environmental Protection Agency**  
**CAFO = Concentrated Animal Feeding Operation**

**CERCLA = Comprehensive Emergency Response & Liability Act**

**EPCRA = Emergency Planning & Community Right to Know Act**

### CONTACT INFORMATION

#### SERC

Kentucky Disaster and Emergency Services  
 100 Minuteman Pkwy  
 Frankfort, KY  
 40601-6120  
 800-255-2587

#### LEPC

Contact information for your local emergency planning committee can be found at  
<http://kyem.ky.gov/NR/rdonlyres/AC54C057-1488-4839-A9BB-DA21944209F2/0/LEPChairsasof122009.xls>

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KPF also provides the growers an Educational Conference each March. The conference provides educational speakers, lunch and exhibits. For more information on the 2009 Conference, see the article on page 1.

The Kentucky Poultry Federation always positively represents its members throughout the Commonwealth in a variety of ways. It is your funds that enable these public relation opportunities to enhance Kentucky's poultry industry.

The Kentucky Poultry Federation awards three out-

standing students related to Kentucky's poultry industry \$1,000 scholarships each.

The scholarship program was created to benefit the children and grandchildren of our poultry complexes' producers and employees, along with also assisting one other student who is pursuing a career in agriculture.

Funds for the Kentucky Poultry Federation Scholarship Fund are raised through our Annual Silent Auction that takes place annually at the Kentucky Poultry Festival.

Each applicant is judged on their standardized test

scores, GPA, extracurricular activities, awards and honors, and a 500 word essay.

Two of the scholarships are earmarked for a child or grandchild of a grower who is a member of the Federation.

The third scholarship is awarded to a student who is not necessarily involved in the poultry industry, but is pursuing a career in agriculture.

If you have questions or need additional information please contact Melissa Miller:  
 Phone: (859) 737-1048  
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## The ability to seal summer ventilation is important during cold weather

### Importance of a sealed barn

For a barn ventilation system to operate properly it is important that the air enters through inlet openings, not through unintended openings such as leaks. Cold weather drafts from leakage cause bird discomfort and in turn, the building's thermostat settings may be raised to compensate. Certainly this is not good for bird health or heating expenses.

A leaky barn will also have cold sections near the leaks, resulting in poor uniformity of inside temperature and variability in bird feed consumption and conversion efficiency.

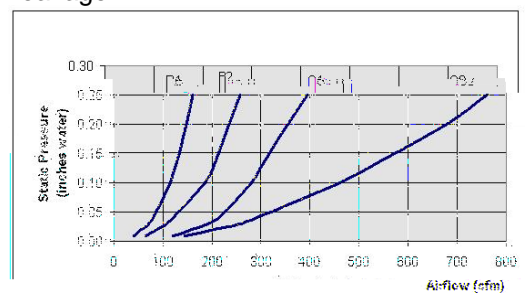
Shutters have been installed on fans so they will not serve as unintentional air inlets when not operating. Traditionally, shutters were often motorized in greenhouses but seldom in broiler houses. These motorized shutters positively close the shutter and prevent a backflow of air through the fan when it isn't running.

More recently, passive "butterfly dampers" are being provided on tunnel fans (see

Figure 3). These dampers open easily when the fan first turns on, and a spring system actively closes the damper when the fan shuts off.

Thus there are options to reduce leakage through fans. But that leaves the producer with the question - how effective are these backflow prevention devices and can we assume all designs are equally effective?

Figure 1—Shutter and damper backflow leakage



- B1 - Fiberglass butterfly damper
- B2 - Steel butterfly damper
- S1 - Plastic shutter #1
- S2 - Plastic shutter #2

## EPA's ruling on air emissions from animal facilities

Air emissions from animal facilities have been a hot topic for sometime. The release of ammonia is of particular concern to poultry producers. Ammonia is listed as a substance of concern under the CERCLA and EPCRA regulations.

Under both of these laws the release of ammonia in excess of 100 lbs/day is a reportable occurrence. These laws were designed to protect people and the environment from the release of substances to the environment. An example is commercial refrigeration. A broken line that produces a large release of ammonia in a relatively short time is reportable so that an appropriate emergency response can be initiated.

How these laws are applied to animal facilities has been the subject of much debate. In a new rule effective January 20, 2009, the US EPA significantly reduced the reporting burden place on agricultural facilities that have hazardous air releases originating from animal wastes. Animal facilities are exempt under CERCLA. Only the larger CAFOs need to report under EPCRA

The rule was issued in response to a poultry industry petition seeking an exemption from reporting ammonia releases from poultry ma-

nure. EPA broadened the exemption to cover all animal agriculture sectors, including pork and dairy industry, and included an exemption for hydrogen sulfide emissions in addition to ammonia.

The proposed exemptions are limited to releases of hazardous substances to the air where the source of those hazardous substances is animal waste at farms. Notifications must still be made if hazardous substances are released from a farm to the air from any source other than animal waste, as well as releases of any hazardous substances from farms to any other environmental media (i.e., soil, ground water, surface water) when the release of those hazardous substances is at or above its reportable quantity for 24 hours.

The SERC and LEPC must be contacted by phone if the release is an extremely, hazardous substance (EHS). No other agencies need to be notified. During the phone call, you will need to provide the following information:

- Identify the release as a Continuous Release Under EPCRA Section 302(b)(1). Be clear that this is a continuous release and not an episodic report (i.e., spill) and was generated from animal manure.
- Identify the name and location of the facility

responsible for the release and provide the corporation affiliation and address.

- Identify each hazardous substance released.
- Provide the name and telephone number of the person in charge of the facility.

An initial written report must be submitted to the SERC and LEPC within 30 days of the telephone contact. The information must be included in the written report is summarized in an EPA document entitled 'Reporting Requirements for Continuous Releases of Hazardous Substances' (EPA 540-R-97-047). A copy of this guidance document can be obtained at the DCA website located at <http://www.dca.ky.gov/complianceassistance/resources/>.

It is important to note that while poultry farms are exempt from reporting under the CERCLA reporting program regardless of the size of the operation, the reporting exemption for the EPCRA program is granted only to poultry farmers with dry systems whose operations house fewer than 125,000 broilers, 55,000 turkeys or 30,000 laying hens.

Written by Tony Pescatore and Jacquie Jacob  
University of Kentucky

## Sealing summer ventilation is important during cold weather . . .

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Figure 2 - Plastic shutter on test chamber

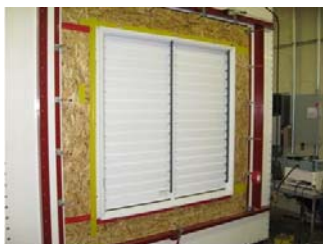
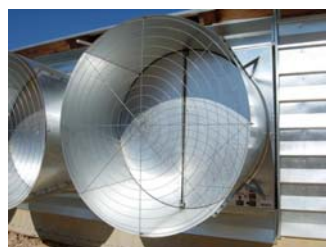


Figure 3 - An example of a butterfly damper on a tunnel fan



### Shutter leakage can be measured

With the recent support of the US Poultry and Egg Association to expand its measurement capabilities, this is the type of question the BESS Laboratory of the Department of Agricultural and Biological Engineering at the University of Illinois can help to answer.

Preliminary testing of both shutters (Figure 2) and butterfly dampers (Figure 3) indicates there is significant variation in their sealing ability. For example, in Figure 1 the results of leakage testing of four different back-flow prevention devices are shown. These devices include two types of plastic shutters, a galvanized steel butterfly damper and fiberglass butterfly damper.

Leakage at a common building operating pressure (0.10" Static Pressure) ranged from 114 cfm to 459 cfm

among these shutters – a range of nearly 4-fold!

This wide variation indicates leakage is a factor that needs to be considered in the fan purchasing decision. Among this group tested, **the butterfly dampers were the better performers.**

Fan leakage becomes critical when the barn has many tunnel ventilation fans (Figure 4).

Figure 4 - Building with many tunnel ventilation fans



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## Update on California's Proposition 2:

⇒ What is the debate all about?

⇒ Should the KY poultry industry be concerned?

On election day (November 4, 2008) many things occurred that impacted the nation. One voting result that may have gone unnoticed in Kentucky is the result of the California vote on Proposition 2.

In California issues can be placed on the ballot for a state-wide vote. One such issue was Proposition 2 which dealt with the housing of egg laying chickens, veal calves and pregnant sows.

Proposition 2 passed with ease. The highlights of the proposition are shown below.

You may ask yourself what does this have to do with me? Proposition 2 is the first successful legislative action that addressed the housing and care of chickens.

Four other states, Florida, Arizona, Oregon, and Colorado, have already outlawed the use of gestation crates for pregnant sows, and both Arizona and Colorado have also banned veal crates.

The success of Proposition 2 will in all likelihood increase efforts of the sponsoring organizations (HSUS and Farm Sanctuary) to change farm practices nationwide.

What is unique about the California vote is that California is a major egg production state (5th largest) with over 19 million laying hens producing more than 400 million dozens of eggs each year.

The impact on the California egg industry will be devastating. Egg producers will be required

to build new facilities or go out of business. How will the egg consumption in California be effected? Who will supply eggs to the 40 million people in California has yet to be determined.

*What can ALL of animal agriculture do to prevent additional legislative action in their states?*

- ⇒ Be informed on the issues.
- ⇒ Do the best job you can in managing your animals.
- ⇒ Make sure all farmers and employees are well trained in animal welfare.
- ⇒ Be proud of what you do.

Written by Jacquie Jacob and Tony Pescatore, University of Kentucky

### STANDARDS FOR CONFINING FARM ANIMALS. INITIATIVE STATUTE.

This initiative measure is submitted to the people in accordance with the provisions of Article II, Section 8, of the California Constitution.

This act shall be known and may be cited as the Prevention of Farm Animal Cruelty Act.

The purpose of this act is to prohibit the cruel confinement of farm animals in a manner that does not allow them to turn around freely, lie down, stand up, and fully extend their limbs.

Some highlights of the statute:

- Requires that calves raised for veal, egg-laying hens and pregnant pigs be confined only in ways that allow these animals to lie down, stand up, fully extend their limbs and turn around freely.
- Exceptions made for transportation, rodeos, fairs, 4-H programs, lawful slaughter, research and veterinary purposes.
- Provides misdemeanor penalties, including a fine not to exceed \$1,000 and/or imprisonment in jail for up to 180 days.
- Would come into effect January 1, 2015.

Definition—"Fully extend their limbs" means fully extending all limbs without touching the side of an enclosure or another animal, including in the case of egg-laying hens, fully spreading both wings without touching the side of an enclosure or other egg-laying hens.



# Misconceptions about the U.S. chicken meat industry

**Myth:** Hormones are used to make chickens grow bigger and faster, and therefore chicken meat contains hormones. In some cases these hormones have resulted in the early sexual maturity of girls.

**Truth:** FALSE

## **NO HORMONES ARE LEGAL NO HORMONES ARE FED**

The fast growth of today's broiler chicken is due to successful breeding programs as well as improvements in poultry nutrition and management. No hormones are fed or otherwise administered to poultry in the U.S.

In part, this myth stems from a television program in July 1985 which stated that hormonal abnormalities in young women in Puerto Rico were linked to the feeding of hormones, specifically oestrogen, to chickens. Without actually saying so, the story implied that feeding oestrogen hormones to chickens was common practice worldwide. The myth is perpetuated by the current labeling of chicken with the statement "raised without hormones". The hormone-free label can only be used in conjunction with the text "Federal regulations prohibit the use of hormones."

**Myth:** Chickens are raised with antibiotics and chicken meat contains harmful concentrations of antibiotic residues.

**Truth:** FALSE

## **ROUTINE MONITORING SHOWS VERY FEW RESIDUE VIOLATIONS**

Antibiotics are frequently used to enhance the health and productivity of broiler flocks. The use of antimicrobials is strictly regulated by the Food and Drug Association (FDA) and the USDA.

Poultry have a very low incidence of residue violations due to the strict control of husbandry and testing practices associated with the integration of the industry. To guard against the possibilities of misuse of antibiotics, by either ignorance or illegal activity, FDA requires the collection and analysis of samples. If a violation occurs (and they are rare in chicken production), corrective action is taken to prevent recurrence.

**Myth:** Overuse of antibiotics in food animal production, in this case poultry, will make the antibiotics less effective and could lead to antibiotic-resistance.

**Truth:** UNCLEAR

The evaluation of the impact of antibiotic use in animal agriculture on antibiotic resistance is complex and subject to speculation and polarization.

Antibiotics have been used in many ways since they were first discovered. The most well know uses are in human and companion animal medicine. Antibiotics are also used in agriculture—both animal and plant production. Antibiotics are used in the commercial production of fruit trees, potatoes, tobacco, ornamental plants and others. They are also used in fish and bee production.

There is ample evidence that the overuse and injudicious use of antimicrobials in human medicine is a major factor in the development of antibiotic resistance.

Because many consumers are worried about the potential for development of antibiotic resistance, many chicken producers are working to find new ways to reduce their use without compromising the quality of their animal care and products.

**Myth:** The poultry industry feeds arsenic, poison, resulting in arsenic residues in the chicken we eat.

**Truth:** FALSE

With headlines like 'Arsenic's use in chicken feed troubles health advocates' (Baltimore Sun, March 10, 2007) and 'Chicken feed may present arsenic danger' (Pittsburgh Post Gazette, March 8, 2007) it is not surprising that consumers are confused as to why producers would feed their chickens arsenic, a known poison.

The reality is that the poultry industry uses products which contain arsenic as a part of their chemical makeup and are known as arsenicals. Roxarsone, for example, is added to broiler diets to control coccidiosis and nitrosones are used for the treatment or prevention of blackhead in turkeys. Most of the consumed arsenic is in the organic form and is excreted unchanged in the manure.

While arsenic is often considered a poison it is an essential nutrient and in trace amounts is involved in methionine and amino acid metabolism. Arsenic is a natural metallic element found in low concentrations everywhere in the environment. Arsenic occurs naturally in the earth's surface at 1.5 to 2 ppm, mostly in the inorganic form. The arsenic content of soils ranges from 0.2 to 40 ppm. Arsenic is present in soil, water, air, and all living organisms. It is not unexpected, therefore, to find arsenic in foods.

Scientists and environmentalists have indicated that they will continue to evaluate the use of arsenicals in agriculture. With the negative overtones associated with the word arsenic, it is most likely that industry critics will continue to use this issue to attack the poultry industry.

Written by Jacquie Jacob  
University of Kentucky



*Quality and freshness are the standard of good chicken, but today's consumers are overwhelmed by words like antibiotics, hormones, and bird flu.*

**THE CHICKEN SUPPLY IN THE  
UNITED STATES REMAINS  
WHOLESOME AND SAFE.**



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## Sealing summer ventilation is important during cold weather . . .

*(Continued from page 3)*

### **The last stage(s) of summer fans can be sealed during winter**

The last stage of summer fans can be sealed off during the winter but make sure the mild weather stages are operational in case of warm periods.

An insulated cover in place of the shutter and a plastic cone cover were tested with leakage levels at 0.10" Static Pressure of 95 and 47 cfm respectively. The insulated shutter cover was tested without

foam weather stripping or sealant tape around the perimeter.

### **Consider backflow leakage when specifying fans**

Fan airflow (cfm) and Ventilation Efficiency Ratio (cfm/W) at building operating static pressure are important performance criteria. This data can be found for most commercially available fans at [www.bess.uiuc.edu](http://www.bess.uiuc.edu).

In addition to these traditional performance measures, also consider backflow leakage. In the past it was not typically a specified performance parameter, so most fan systems have not been

tested for backflow leakage. The large variation seen among the four backflow prevention devices (Figure 1) suggests that leakage should be added as a specified parameter when purchasing fans.

Written by  
Rich Gates & Steve Ford,  
University of Illinois  
Doug Overhults,  
University of Kentucky

## 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](mailto:Jacquie.jacob@uky.edu)