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## **BROILER TIP . . .**

### **COUNTER HIGH FUEL BILLS BY REDUCING HEAT LOSSES**

The winter months pose numerous problems and stresses on poultry growers. The incidence of disease, weather-related problems, and economic pressures all seem to descend at one time. Rising fuel costs coupled with increased fuel consumption particularly can pose economic hardships on poultry growers during winter months. While the cost of gas is largely beyond our control, poultry growers can influence the amount of gas they need to properly heat and ventilate poultry houses. Winterizing, or preparing a house for cold weather conditions is an important step in improving profitability during the winter months. The following are several winterizing suggestions to help reduce the amount of gas needed to heat a poultry house:

1. Clean fan shutters, blades, housings, and screens regularly. Dust build-up increases the work load of the fan, reduces its efficiency and effective air movement. Make sure fan belts are tightened properly. Loose or worn belts decrease fan efficiency and output.
2. Drafts can rob a house of its temperature uniformity. Check windows and doors for a tight fit. Seal end and sidewall doors tightly. If needed, weather stripping and caulking should be applied to prevent drafts from triggering temperature-controlled heaters to fire more frequently.
3. Heat generated from the birds themselves can be used to maintain house temperatures by redirecting the warm "attic" air to the floor through the use of ceiling circulation fans. This mixing of the house air will prevent varying temperatures from floor to ceiling, or temperature stratification, and ultimately reduce fuel usage.
4. With curtain-sided houses, make sure the curtain sucks up tightly against the house when

#### **PUTTING KNOWLEDGE TO WORK**

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fans are on, an indication of house tightness. Use curtain pockets at the ends of the curtains to reduce drafts and heat loss.

5. Cover exhaust fans that will not be used during cold weather with plastic sheeting or a similar material to prevent cold air drafts and warm air leaks.

6. Old or damaged insulation will increase your heat loss. Check for breaks and open seams in ceiling and sidewall insulation. A hole in the ceiling insulation is a direct path to the outside for the warmest air in the house. Tape off or caulk open seams and cracks that will allow heat to escape.

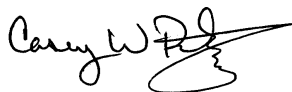
7. Check air inlets regularly to ensure proper working order and for a tight fit when closed. Make sure that the inlets open uniformly. If inlets on one end of the house open more than the other, house temperature and air quality can vary significantly from one end of the house to the other. Poorly functioning inlets may not open enough to provide adequate fresh air or open too far, dumping cold air on the birds. Chilled birds can easily become sick, requiring more fuel to elevate house temperatures to make them comfortable.

8. Inspect thermostats, sensors, ignitors, burner orifices and other temperature regulating equipment for accuracy and function. Faulty equipment can quickly cause a spike in your fuel consumption.

9. Monitor the effectiveness of poultry house ventilation and heating systems regularly with a static pressure meter. High static pressure indicates a tight poultry house that will result in more efficient operation of ventilation and heating systems.

10. Keep records of house temperatures with the use of an environmental controller. A record of daily temperature variations can help to pinpoint when changes or additional attention to house management or ventilation and heating systems is needed.

Rises in fuel costs, whether expected or not, can really put a crimp on a broiler house bottom line during the winter months. Implementing house management and maintenance strategies to prevent heat loss can help reduce fuel consumption and overall ventilation costs.



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\*\* Consult with your poultry company representative before making management changes \*\*